

# Report on Government Services 2001

Volume 1:  
*Education, Health, Justice*

*Steering Committee  
for the Review of  
Commonwealth/State  
Service Provision*

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**Suggestions:**

*The Steering Committee welcomes suggestions on the performance indicators contained in this Report. Please direct your suggestions to the Productivity Commission Secretariat at the above address.*

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# Foreword

The Review of Commonwealth/State Service Provision was established by heads of government in 1993 to develop objective and consistent data on the performance of services that are central to the wellbeing of Australians. The collaborative efforts of more than 80 government agencies from the Commonwealth, States and Territories have contributed to this, the sixth *Report on Government Services*.

The services covered by the Review – spanning education, health, justice, community services and housing – are all important determinants of Australians' living standards and represent a substantial share of government expenditure and GDP.

The Review's approach continues to be an iterative one, reporting the best available information (with caveats) and improving it over time. The very process of reporting imperfect or incomplete performance data has itself created opportunities and pressures for improvement. Feedback from those who use the data has been an important part of this. The ultimate objective is to be able to provide robust and consistent data that are comparable across all jurisdictions.

The Review has sought to improve the quality of its reporting by undertaking additional research and consultancies. This year, research on asset management and a client survey on courts administration have been initiated; and a consultancy report on the satisfaction of clients of disability services was released in July.

Improving the performance indicator frameworks, and the quality of individual indicators, remains an ongoing imperative of the Review. This year the health chapters have been significantly expanded and improved, particularly in the areas of hospital quality, breast cancer management and mental health, while in other areas, such as housing, the indicator framework has been redrawn to reflect more accurately the objectives within current Commonwealth/State housing agreements. Progress, however, remains variable. For example, there has been little progress in the reporting of national outcomes data in the Schools chapter; and gaps remain in the reporting of data in the Children's Services chapter.

Better information on the ability of mainstream services to meet the needs of Indigenous Australians remains a priority for the Review. This has been reinforced

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by the Council of Australian Government's strategies to address disadvantage suffered by Indigenous Australians and to evaluate these strategies by producing better data on service provision to Indigenous Australians.

Producing a Report of this scope in a timely way each year depends on the cooperation and support of many participants. The Review's twelve working groups constitute the 'engine room' of this project and the Steering Committee relies on the assistance and advice from the service agencies represented on these groups. In addition, the Review draws on a Secretariat from the Productivity Commission, and bodies such as the Australian Bureau of Statistics, and the Australian Institute of Health and Welfare, amongst others. The working groups and the Secretariat also work closely with a range of other groups involved in government performance measurement.

I would like to thank everyone involved for their continuing contribution to this important joint undertaking.

Gary Banks  
Chairman

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This Report is in two volumes: *Volume 1* contains Part A (introduction), Part B (Education), Part C (Health) and Part D (Justice); *Volume 2* contains Part E (Emergency Management), Part F (Community Services), Part G (Housing), Descriptive statistics appendix and CD-ROM attachment.

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# Acronyms and Abbreviations

AADWA	Aboriginal Affairs Department of Western Australia
ABS	Australian Bureau of Statistics
ACE	Adult and community education
ACAT	Aged Care Assessment Team
ACHS	Australian Council on Healthcare Standards
ACIR	Australian Child Immunisation Register
ACT	Australian Capital Territory
AGPAL	Australian General Practice Accreditation Limited
AHC	Annual hours of curriculum
AIHW	Australian Institute of Health and Welfare
AN-DRG	Australian National Diagnosis Related Group
ANTA	Australian National Training Authority
AR-DRG	Australian Revised Diagnosis Related Group
ATSB	Australian Transport Safety Bureau
ATSI	Aboriginal and Torres Strait Islander
ATSIC	Aboriginal and Torres Strait Islander Commission
Aust	Australia
AVETMISS	Australian Vocational Education and Training Management Information Statistical Standard
BEACH	Bettering the Evaluation and Care of Health Study
CACP	Community Aged Care Package
CAD	Computer aided dispatch
CCCCS	Commonwealth Census of Child Care Services
CCIS	Community Care Information System
CD-ROM	Compact Disc Read Only Memory

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CHAS	Community Health Accreditation Scheme
COAG	Council of Australian Governments
CRA	Commonwealth Rent assistance
CRS	Commonwealth Rehabilitation Service
CSDA	Commonwealth/State Disability Agreement
CSHA	Commonwealth/State Housing Agreement
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSMAC	Community Services Ministers' Advisory Council (formally Standing Committee on Community Services and Income Security Administrators (SCCSISA))
DETYA	Department of Education, Training and Youth Affairs
DFACS	Department of Family and Community Services
DGPP	Divisions of General Practice Program
DHAC	Department of Health and Aged Care
DHFS	Department of Health and Family Services
DHS	Department of Human Services (Victoria)
DRG	Diagnosis Related Group
DVA	Department of Veterans' Affairs
EACH	Extended Aged Care at Home pilot
ESB	English speaking background
FaCS	Commonwealth Department of Family and Community Services
FTE	Full time equivalent
GDP	Gross domestic product
GP	General practitioner
GST	Goods and services tax
HACC	Home and Community Care
HRSCEET	House of Representatives Standing Committee on Employment, Education and Training
IC	Industry Commission

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ICD-9-CM	International classification of Diseases, 9 <sup>th</sup> revision, Clinical Modification
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10 <sup>th</sup> Revision, Australian Modification
ICIDH	International Classification of Impairments, Disabilities and Handicaps
IFRAC	Inpatient Fraction
LAC	Looking after Children
LBOTE	Language backgrounds other than English
LOTE	Languages other than English
MAB/MIAC	Management Advisory Board and its Management Improvement Advisory Committee
MAP	Multi-level Assessment Program
MBS	Medicare Benefits Schedule
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
MDS	Minimum Data Set
MH-CASC	Mental Health Classification and Service Costs project
MLCR	Module Load Completion Rate
NCIRS	National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases
NCVER	National Centre for Vocational Education Research
NEPMT	National Education Performance Monitoring Taskforce
NESB	Non-English speaking background
NHCDC	National Hospital Cost Data Collection
NHMBWG	National Health Ministers Benchmarking Working Group
NHMRC	National Health and Medical Research Council
NHTP	Nursing home type patients
NMDS	National Minimum Data Set
NMHS	National Mental Health Strategy
NSW	New South Wales

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NT	Northern Territory
OECD	Organisation for economic Cooperation and Development
OMP	Other Medical Practitioner
PBS	Pharmaceutical Benefits Scheme
PDF	Postscript Document Format
PERIN	Penalty Enforcement and Registration of Infringement Notice
PIP	Practice Incentives Program
QACS	Queensland Ambulatory Casemix Classification Scheme
Qld	Queensland
RACGP	Royal Australian College of General Practitioners
Report	The Report on Government Service
Review	The Review of Commonwealth/State Service Provision
RSC	Resident Classification Scheme
SA	South Australia
SAAP	Supported Accommodation Assistance Program
SCRCSPP	Steering Committee for the Review of Commonwealth/State Service Provision
SLA	Statistical Local Area
SMART	SAAP Management and Reporting Tool
SRCSSP	Secretariat for the Review of Commonwealth/State Service Provision
TAFE	Technical and further education
Tas	Tasmania
URTI	Upper respiratory tract infection
VACS	Victorian Ambulatory Classification System
VET	Vocational education and training
Vic	Victoria
WA	Western Australia
WHO	World Health Organization

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# Glossary

<b>Descriptors</b>	Statistics included in the Report that relate to the size of the service system, its client mix and the environment within which government services are delivered. They are provided to highlight and make more transparent the differences among jurisdictions.
<b>Effectiveness</b>	A reflection of how well the outputs of a service achieve the stated objectives of that service
<b>Efficiency</b>	A reflection of how well organisations use their resources to produce services
<b>Unit costs</b>	An indicator of efficiency, as used throughout this Report
<b>Inputs</b>	The resources (including land, labour and capital) used by a service area in providing the service
<b>Process</b>	The way in which a service is produced or delivered
<b>Output</b>	The service provided by a service area — for example, a treated case is an output of a public acute care hospital
<b>Outcome</b>	The impact of the service on the status of individuals or a group. A service provider can influence an outcome but external factors can also apply. A desirable outcome for a school, for example, would be to add to the ability of the students to participate in and interact with society throughout their lives. Similarly, a desirable outcome for a hospital would be to improve the health status of an individual receiving a hospital service.

Definitions of the indicators and terminology used in each chapter can be found in the relevant attachments.

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## Terms of reference

The Review, to be conducted by a joint Commonwealth/State and Territory Government working party, is to undertake the following:

- establish the collection and publication of data that will enable ongoing comparisons of the efficiency and effectiveness of Commonwealth and State Government services, including intra-government services. This will involve:
  - establishing performance indicators for different services which would assist comparisons of efficiency and effectiveness. The measures should, to the maximum extent possible, focus on the cost effectiveness of service delivery, as distinct from policy considerations that determine the quality and level of services; and
  - collecting and publishing data that are consistent with these measures. The Review should also address the procedures for the ongoing collection and publication of benchmark data; and
- compile and assess service provision reforms that have been implemented or are under consideration by Commonwealth and State Governments.

The Review will cover all major types of reform, including those involving the separation of policy development from service provision. Case studies of particular reforms could be provided where appropriate.

The Review will need to keep abreast of developments in other relevant reviews and working parties, including the Commonwealth/State Government working party (initiated by the Council of Australian Governments), investigating Commonwealth/State Government roles and responsibilities.



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# 1 The approach to performance measurement

## 1.1 Aims of the Review

Australian governments established the Review of Commonwealth/State Service Provision (the Review) to provide information on the effectiveness and efficiency of Commonwealth, State and Territory government services (see terms of reference, p. XVII).

There are two functions of the Review:

- to provide ongoing comparisons of the performance of government services (the function of this Report); and
- to report on service provision reforms that governments have implemented or are under consideration.

Over time, the Report has become an important tool for government. It has been used for strategic budget and policy planning, and for policy evaluation. Some users have found the Report instrumental in assessing the resource needs and resource performance of departments. Others have used the Report for identifying other jurisdictions with whom to share information on services.

For governments, the work of the review can be an incentive to improve performance by fostering improvements in government services through:

- helping jurisdictions identify where there is scope for improvement and from whom they may learn;
- fostering yardstick competition, by promoting greater debate about comparative performance; and
- enhancing measurement approaches and techniques in relation to aspects of performance such as unit costs and service quality.

A Steering Committee comprising senior representatives from the central agencies of Commonwealth, State and Territory governments was established to manage the

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Review with the assistance of a secretariat provided by the Productivity Commission.

The Steering Committee defines performance as how well a service meets its objectives, recognising the influence of external factors. This sixth *Report on Government Services* contains performance information on 12 key service areas (see box 1.1). These government services have two features:

- their key objectives are common or similar across jurisdictions; and
- they make an important contribution to the economy and/or community.

**Box 1.1 Services covered in the 2000 Report**

<b>Education and training</b>	— School education (chapter 3) — Vocational education and training (chapter 4)
<b>Health</b>	— Public hospitals (chapter 5) — General practice (chapter 6) — Breast cancer control and mental health (chapter 7)
<b>Justice</b>	— Police (chapter 8) — Court administration (chapter 9) — Corrective services (chapter 10)
<b>Emergency services</b>	— Emergency management (chapter 11)
<b>Community services</b>	— Aged care (chapter 12) — Services for people with a disability (chapter 13) — Children's services (chapter 14) — Protection and support services (chapter 15)
<b>Housing</b>	— Public and community housing, and Commonwealth Rent Assistance (chapter 16)

Publishing performance comparisons across services in a single annual report has a number of benefits, namely:

- data are drawn from a range of sources;
- a common method is used across services, which is convenient and useful for people interested in more than one service area;
- there are opportunities to share insights into approaches to performance assessment across services;

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- progress in performance reporting in any one service area is demonstrated to reinforce what is possible and to encourage improved reporting by other services;
  - there is the capacity to address efficiently issues that arise across all service areas (for example, how to measure timeliness, how to assess other aspects of quality and how to cost superannuation); and
  - there is a response to issues with links between service areas (for example, recidivism and justice services).

A number of the services covered by the Review are also subject to other comparative performance measurement across jurisdictions. Advantages of the approach taken by the Review are that there is a focus on non-technical information making it accessible to nonspecialists, and that the Report is produced on a timely and regular basis.

This Report examines performance of the service elements for which government is responsible and accountable. The focus of the Review is to report performance information on the effectiveness and efficiency of government expenditure, linked to the purchase or supply of specific services rather than to general government income support. Thus, the Report covers aged care (but not the aged pension), disability services (but not disability pensions) and children's services (but not family payments), although some descriptive information on income support is provided in some cases. An exception to this is the reporting of performance information on Commonwealth Rent Assistance (chapter 16).

According to survey data, many Report readers use a number of chapters of the Report. About 30 per cent of readers from line agencies use two or more chapters, and more than half of readers from central agencies use five or more chapters (SRCSSP 1998). Moreover, service agencies may improve their own reporting by applying insights gained from the Review into performance measurement of other services.

## **1.2 The roles of government in delivering services**

Government sponsored social services have a significant effect on wealth and income equality. According to Harding (1995), for the 30 per cent of Australians with the lowest income, the benefits from government spending on health, education and public housing amount to at least one third of their final income (after housing costs are deducted). Families with children and the elderly derive the greatest benefits, primarily from education and health outlays.

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## Why governments deliver services

Governments deliver services for a number of reasons and all services included in this Report affect the community in some way. Some services form an important part of the nation's social welfare system (for example, public housing) and some are provided to people with specific needs (for example, aged care and disability services), while other services are typically used by each person in the community at some stage during their life (for example, school education, police and emergency services). The information provided in this Report assists governments in ensuring that resources are distributed efficiently and appropriately throughout the economy.

The services included in this Report are largely concerned with:

- providing public goods (box 1.2). This includes:
  - creating a legal framework that determines the rules for ownership of property and the operation of markets (for example, enforcing property rights, checking abuses of power and upholding the rule of law). This arrangement reduces transaction costs in a society (Messick 1999), and encompasses the work of the courts in;
  - maintaining law and order, including the work of police and corrective services; and
  - managing adverse events, including the work of emergency services such as fire and flood control, and some aspects of the health system; and
- enabling the consumption of particular goods and services seen by governments as having particular merits or reflecting significant spillover effects in society. Examples of these services include health, ambulance services, community services and housing.

### Box 1.2    **Public goods**

Public goods are those where one person's consumption of the good doesn't reduce anyone else's consumption of the good. The second characteristic is that it is not possible to exclude individuals from consuming them. These goods tend not to be produced in private markets because people have an incentive to free-ride (that is, consume the good without paying for it). Therefore it may be efficient for governments to produce a public good.

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## How governments deliver services

Government services are delivered to the community by:

- providing the services directly (a ‘provider’ role);
- managing and funding external providers of the services through grants or the purchase of services (a ‘purchaser’ role);
- subsidising users (through vouchers or cash payments) who then purchase services from external providers;
- creating community service obligations on public and private providers;
- reducing tax obligations in particular circumstances (known as tax expenditures); or
- using a mix of these delivery methods.

Funding from government may not meet the full cost of delivering a service to the community, and not-for-profit organisations or users may also contribute funding and other resources (see box 1.3).

### Box 1.3 **Cost to government and to non-government organisations**

The Report seeks, where possible, to provide information about the cost of services to government. Some argue that if non-government groups such as charities also contribute resources for the services covered by the Report, then these costs should be taken into account.

The purpose of this Report is to provide information to assist government decision making. The relevant cost information depends on the type of assessment that needs to be made to support a decision. When government directly delivers services it may wish to assess the internal management of the service; on other occasions it may wish to assess the decision to directly deliver or purchase the service, or even the decision of from whom to purchase (or part fund or subsidise) the service.

Sometimes a charitable organisation will offer to deliver a service at a lower price to government than an equivalent government provider, even though the charity uses at least as many resources as the government provider. The charitable organisation may be able to charge less because it operates the service as an adjunct to another activity, or because it has access to resources such as donations, church buildings or volunteers. If all inputs were costed at ‘normal’ market rates, a not-for-profit provider may be as costly as (and in some instances, more costly than) a government agency.

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### Box 1.3 (continued)

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If a government delivers services directly, it is accountable for all resources used (and this Report tries to include all costs). If a government decides to purchase, part fund or subsidise services, it should aim to maximise the benefit to the community from this use of government funds. When focusing on government decision making in the role of direct service provider, the Report aims to compare the full cost of government service delivery in each State and Territory. This allows governments to compare the internal management of their services with that of their counterparts in other jurisdictions.

The Report also compares the cost to government of services delivered by non-government and government service providers; this information allows governments to assess their purchase decisions. This Report has not sought to facilitate comparisons between the internal management of government providers and non-government providers. As a result, it has not attempted to compare the full cost of delivery by non-government organisations with the full cost of delivery by government service providers. Consequently, for services delivered by non-government agencies, this Report emphasises the costs to government, along with outputs, outcomes and service quality.

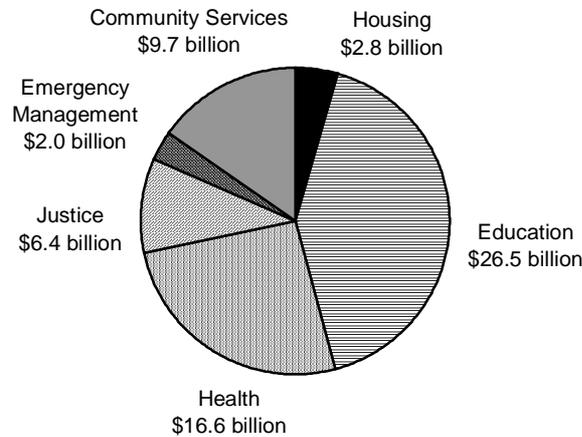
## Funding government services

The services covered in the Report absorb a significant level of government expenditure. They accounted for approximately \$64 billion in 1999-2000 (figure 1.1), representing around 29 per cent of government expenditure in that year (equivalent to about 10 per cent of gross domestic product).

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Figure 1.1 **Estimated government recurrent and capital expenditure on services covered by the Report, 1999-2000<sup>a, b, c, d</sup>**

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<sup>a</sup> 1999-2000 data were not available for all services: the Report uses 1998-99 data for school education, public hospitals, general practice services; 1998 data for vocational education and training; and 1997-98 data for mental health management and community services. <sup>b</sup> Capital expenditure data were not available for all services; only recurrent expenditure data were available for public hospitals, courts, corrections, fire and ambulance services, and aged care and protection and support services. There may also be some double counting where both expenditure data (including depreciation) and capital expenditure are included. <sup>c</sup> These figures are not directly comparable to those reported in SCRCSSP (2000) because some service areas have used different data sources. <sup>d</sup> Health expenditure includes data for public hospitals, general practice, some breast cancer screening services and community residential care for mental health services.

Sources: Relevant chapters.

### 1.3 Why measure comparative performance?

There are a number of reasons for measuring the comparative performance of government services:

- to improve accountability;
- to encourage ongoing performance improvements; and
- to encourage efficient service provision.

#### Helping improve performance

Comparative performance information can help jurisdictions identify potential benchmarks, strengthen incentives to improve performance, and inform governments about the effectiveness of their existing set of services (for example, the effectiveness of a mix of prevention and early detection services compared to the effectiveness of treatment services for breast cancer management).

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Traditionally, much of the effort to improve the effectiveness of government services has focused on increasing the level of resources. This focus overlooks another important means of enhancing services — finding better ways to use existing resources and encouraging productivity growth. Productivity growth has had an important influence on living standards in Australia, accounting for the majority of the increase in real average income per person over the past three decades (IC 1997). Innovation (the introduction of new products or processes) can be important to productivity growth in all sectors, including government services.

Providing performance information across jurisdictions can encourage innovation (and thus performance improvement) by identifying jurisdictions from which others may learn. Those involved in producing this Report and others in the Report's primary target audience (directors and/or managers responsible for budget preparation, strategic planning and policy planning in central and line agencies) were surveyed in July 1998. The survey revealed that 61 per cent of line agency users and 80 per cent of central agency users considered the Report to be 'important' or 'very important' for identifying other jurisdictions with which to share information on services (SRCSSP 1998).

Reporting comparative performance can foster yardstick competition by promoting debate about comparative performance. Performance reporting is an important step in benchmarking (box 1.4). Reporting on comparative performance can also help governments assess whether the community is receiving the best set of services, and whether these services are being provided to those most in need, so as to achieve the best outcomes for the community. The 1998 survey of the Report's users found that over three quarters rated the information in the Report as 'important' or 'very important' for strategic and policy planning, and policy evaluation.

Comparative performance information can promote a process of learning from the diversity of experience, particularly as governments implement different policy approaches. Governments have considered a range of general policy approaches when deciding how to deliver services in recent years. These approaches include:

- moving from historical or input based funding to output based funding (for example, casemix funding in public hospitals in Victoria);
- separating the purchaser and provider roles for government organisations (for example, separation of functions and corporatisation);
- outsourcing the provider roles (for example, competitive tendering for correctional services in Queensland);
- devolving and decentralising decision making on how to provide services by government service providers (for example, devolving decision making in Victorian government schools to local school communities);

- 
- examining alternative delivery mechanisms (for example, deinstitutionalisation in community services and offering direct consumer funding and choice in disability services in WA);
  - examining interactions between services; and
  - implementing user charging (for example, pricing court reporting services for Commonwealth courts).<sup>1</sup>

#### **Box 1.4 Benchmarking**

Benchmarking service delivery is an ongoing systematic process to search for and encourage the introduction of best practice in the use of scarce resources, so as to deliver more efficient and effective services.

There are three main forms of benchmarking: results benchmarking (comparing performances within and between organisations using performance indicators of effectiveness and efficiency); process benchmarking (analysing activities and tasks that turn resource inputs and outputs into outcomes); and best practice standards (establishing goals and standards to which organisations can aspire).

Benchmarking typically involves a number of steps. Whatever the chosen approach or focus, the steps usually include:

- deciding why, when and what to benchmark;
- analysing plans and performance (reviewing objectives and identifying performance indicators and own performance);
- establishing benchmarking partners;
- obtaining the data and analysing differences;
- identifying best practices and the most useful improvements;
- implementing improvements in practice; and
- assessing improvements and re-benchmarking (MAB/MIAC 1996).

The performance information in the *Report on Government Services* can contribute to many of the above steps in a results benchmarking cycle, including by identifying better approaches adopted by agencies' peers and thus implementing best practice.

Comparisons that draw on reliable performance information can help governments better understand the strengths and weaknesses of each approach, and the circumstances in which each may best work.

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<sup>1</sup> The implementation issues associated with these types of reforms are examined in SCRCSSP (1997) and SCRCSSP (1998).

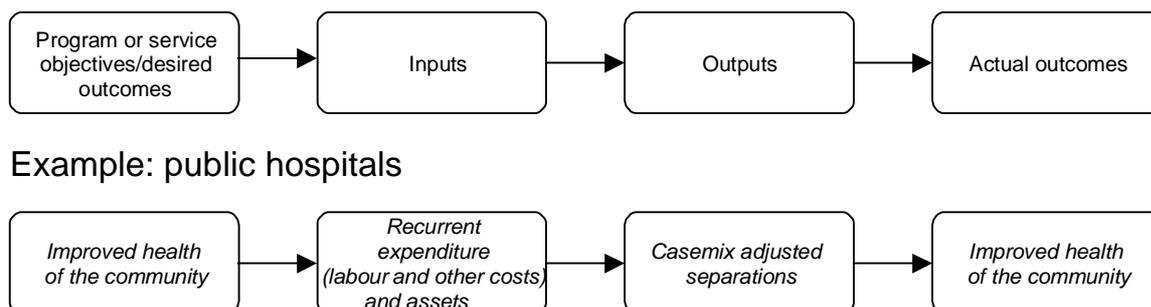
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## 1.3 Approach to reporting performance of services

A number of the objectives (or desired outcomes) for each government funded service are similar across jurisdictions, although the priority that jurisdictions give to each objective may differ. The Steering Committee's approach to performance reporting is to focus on the extent to which each shared objective for a service has been met.

The basic relationship between objectives, inputs, outputs and outcomes is as follows. Governments have a number of objectives/desired outcomes for the community. To achieve these objectives or desired outcomes, governments fund service providers and products and/or provide services. Service providers transform these funds/resources (inputs) into services (outputs) and the outputs contribute to the achievement of a government's actual outcomes (figure 1.2).

Figure 1.2 **Service process**



Source: Adapted from Commonwealth Department of Finance (1994).

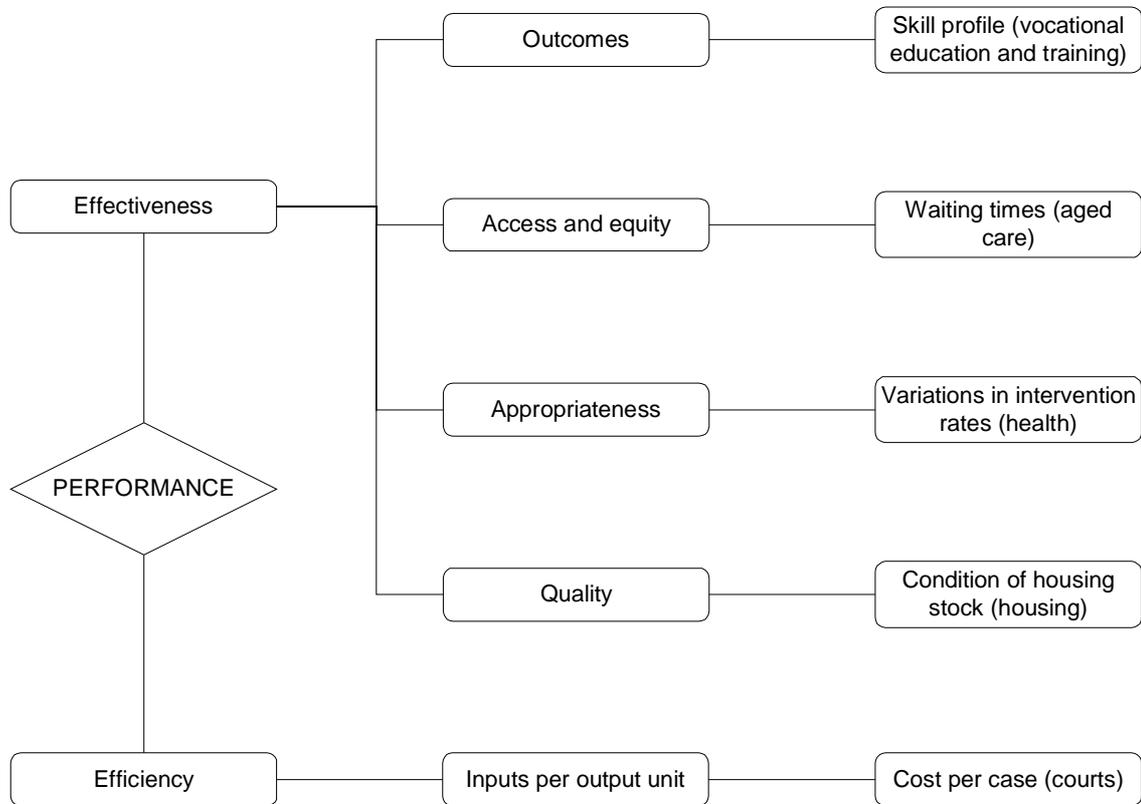
The Steering Committee has developed a general framework for performance indicators (figure 1.3).<sup>2</sup> Within the framework, performance is assessed in terms of effectiveness and efficiency. Effectiveness relates to how well a service achieves its desired outcomes and efficiency relates to how well governments use their resources to produce units of services. Effectiveness indicators in this Report cover:

- overall outcomes;
- access and equity;
- appropriateness; and
- quality.

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<sup>2</sup> The performance indicator framework for schools, used for the first time this year, is a departure from the general framework.

Figure 1.3 A general framework and examples of performance indicators



The generally used indicator of efficiency is the level of government inputs per unit of output.

Service provision can involve a tradeoff between effectiveness and efficiency.<sup>3</sup> A change in service delivery may increase the level of resources per unit of output (a decrease in measured efficiency) but lead to better outcomes. For example, a standard unit of service may be more costly to produce but more effective in meeting each client’s specific needs. Thus, performance assessment should consider both efficiency and effectiveness indicators.

Each chapter of the Report includes descriptive information about services and the context of their delivery, recent policy developments, a discussion of future directions in performance reporting and comments from each jurisdiction.

<sup>3</sup> The Review has adopted the effectiveness and efficiency terms common to the program evaluation literature.

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## Outcomes

Outcomes refer to the consequences of a service. They should reflect the objectives of a service, so it is important to measure performance relative to objectives. Outputs are the services delivered by or on behalf of government for clients.

Some indicators could be described as both outcome and output indicators. In corrective services, for example, the secure housing of prisoners is a prison output but also an outcome indicator (linked to the objective of containment and supervision). If there is an established link between the indicator and the objective, then the indicator has validity as a performance indicator regardless of whether it is output or outcome related.

Outcomes may be short term (intermediate) or longer term (final). Short term outcomes are usually more closely linked to the services, whereas longer term outcomes can be affected by other factors — for example, a police random breath testing program may achieve the intermediate outcome of fewer drunk drivers, but the final outcome of reduced road deaths will also be affected by other factors such as the quality of cars and roads. Another example is in child protection where:

Long term outcome measures ... are vital for showing what happens in children's lives, but they have considerable weaknesses as a stand-alone measure of the effectiveness of child welfare services since many factors help shape the circumstances of a child's life. (Gain and Young 1998, p. 3).

The approach in this Report is to:

- use both short term (or intermediate) and long term (or final) outcome indicators; and
- explain that the service is only one contributing factor and, where possible, point to data on other possible factors (for example, appendix A contains detailed statistics and short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this Report).

## Access and equity

Achieving access to services is an important reason for governments to fund services. The objective may be to ensure access to a service by everyone in the community (for example, to school education and police services) or access by a particular target group (for example, to housing services for those having difficulties accessing housing in the private sector).

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Access has three main dimensions: preventing discrimination, undue delay or cost. This Report focuses on:

- service provision to those who may have special difficulties accessing services; and
- service timeliness and affordability.

### *Groups with special difficulties*

A number of criteria can be used to classify those who may have special difficulties in accessing government services. These include:

- language or literacy proficiency;
- gender;
- age;
- physical or mental capacity;
- race or ethnicity; and
- geographic location.

In May 1997, the Prime Minister (with the support of the Premiers and Chief Ministers) requested that the Review give particular attention to the performance of mainstream services in relation to Indigenous Australians. Chapter 2 provides more detail on the progress in this area.

Information on access by groups with special difficulties can be useful for two reasons. First, information on the extent to which people from groups with special difficulties are able to access services can help determine whether special strategies are needed to address access barriers. Second, if government has already implemented such strategies, then their effectiveness can be assessed.

Identifying service recipients as members of groups with special difficulties poses challenges, particularly when relying on client self identification. If members of such groups are required to identify themselves, the accuracy of the data will partly depend on how a group perceives the advantages (or disadvantages) of identification and whether these perceptions change over time. Varying definitions of these groups in data collections across jurisdictions and service areas may also create comparability problems.

The Report often uses the proportion of each target group in the broader community as a proxy indicator of the group's need for a particular service. This simple assumption is clearly sensible for some services (for example, schools), but it

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should be treated with caution for other services (for example, aged care). Another option is to collect more direct indicators of need (for example, the Supported Accommodation Assistance Program collects data on the characteristics of those seeking assistance).

Where geographic location is used to identify groups with access difficulties, access is normally compared for metropolitan, rural and remote areas. These geographic classifications are based on population density and distances to large population centres (DPIE and DSHS 1994). Such comparison by location has been criticised because it is an imperfect indicator of the time and cost of reaching the point of service. Further, it does not consider the client's capacity to bear the cost of receiving the service (Griffith 1998). To improve the model, service centre locations would need to be reclassified according to the services they provide and the client's cost of receiving the service.

### *Timeliness and affordability*

Timeliness and affordability can also be important access issues for those in the community who rely on publicly funded services. Timeliness indicators used to measure access in this Report include waiting times (for example, in public hospitals and for aged care services). Affordability indicators relate to the proportion of income spent on particular services (for example, out-of-pocket expenses in children's services).

## **Appropriateness**

Appropriateness indicators measure how well service delivery directly meets client needs. An appropriateness indicator for the Supported Accommodation Assistance Program, for example, is the proportion of clients receiving the services they are judged to need. Appropriateness indicators also seek to identify the extent, if any, of underservicing or overservicing (Renwick and Sadkowsky 1991).

Some services have developed measurable standards of service need against which the current levels of service can be assessed. The 'overcrowding' measure in housing, for example, measures the appropriateness of the size of the dwelling relative to the size of the tenant household.

Other services have few measurable standards of service need; for example, the appropriate number of particular medical treatments for particular populations is not known. However, data on differences in service levels can indicate where further work could identify possible underservicing or overservicing.

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## Quality

The Review highlights indicators of service quality because they are important to performance assessment and policy formulation. Information about quality is particularly important for performance assessment when there is a strong emphasis on increasing efficiency (as indicated by lower unit costs). Moreover, there is usually more than one way to deliver a service, and each alternative has different implications for cost and quality. Information about service quality is needed to ensure that governments fairly consider all useful delivery alternatives.

One definition of quality is fitness for the purpose. A comprehensive assessment of fitness for purpose requires a range of indicators. Ideally, such indicators directly capture the achievement of outcomes — that is, whether the service achieves the objectives of government. Assessment may also involve seeking the views of clients and others with a legitimate interest in service quality.

Data generated for quality control can often be a useful source of information about likely outcomes. Information about the incidence of complaints or adverse outcomes (such as the number of escapes from prison), for example, is often used as an indicator of outcome quality.

Another test of fitness for purpose is the extent to which aspects of the service delivery process — such as inputs, processes and outputs — conform to specifications; for example, the level of accreditation of public hospitals and facilities for aged care.

The framework of indicators for this Report treats quality as one aspect of effectiveness and distinguishes it from outcomes, access and appropriateness (figure 1.3). However, this distinction is somewhat artificial because other aspects of service provision — except efficiency (unit costs), quantity of outputs (throughput) and access (targeting) — also have the potential to contribute to a meaningful picture of quality.

No perfect indicator of service quality exists; each has its own strengths and weaknesses. Selecting an indicator requires trading off desirable characteristics (such as timeliness, cost and validity) against each other. The approach here is to consider the use of acceptable (albeit imperfect) quality indicators that are already in use or available in Australia or internationally. Adopting these indicators can lower development costs and, equally importantly, reduce delays in the implementation of quality indicators.

Although the Steering Committee values time series data as a means of evaluating developments in service delivery, performance indicators will sometimes change

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from one Report to another when better or more appropriate ones are developed (for example, indicators for housing in this Report).

## **Efficiency**

Efficiency relates to how well organisations use their resources to produce units of services. This Report mostly focuses on achieving better value for the broader community from the use of government resources, so government funding per unit of service is typically used as the efficiency indicator — for example, recurrent funding per annual curriculum hour for vocational education and training. However, such an efficiency indicator should not be interpreted as encompassing a service's full cost to society.

Where possible, full unit costs are used as the indicator of efficiency. However, where there are shortcomings in the data, other indicators of efficiency (including partial productivity ratios such as staff level per student in government schools and assets per prisoner in corrective services) are used.

Comparisons of unit cost of a service are a more meaningful input to public policy when they use the full cost to government, accurately accounting for all resources consumed in providing the service. Problems can occur when some costs of providing services are overlooked or treated inconsistently (for example, superannuation or overheads). The Steering Committee believes that, where full cost information is not available in the short term, data should at least be calculated consistently across jurisdictions. Further, treatment should be fully transparent.

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## 2 Recent developments in the Review

### 2.1 Expanded and improved reporting in 2000

This is the sixth *Report on Government Services* produced by the Review. Reporting is an iterative process and each year the Review endeavours to build on developments of previous years. Improvements in 2000 occurred in:

- *the refinement of existing performance indicators* — the quality (accuracy and timeliness) of data has improved in hospitals (with improvements to both efficiency indicators), police services (with revised definitions for the service delivery areas and new traffic accident hospitalisations data), emergency management (with revised definitions for efficiency indicators), and protection and support (with continued improvements to efficiency data);
- *new performance indicators in existing frameworks* — for the first time, the general practice chapter reports on the accreditation of general practitioners as an indicator of quality.
- *the revision and addition of performance indicator frameworks* — new performance indicator frameworks were introduced for maternity services (as part of the hospitals chapter) and some data items were reported this year. Revisions were made to the framework for school education (which included the reporting of nationally comparable learning outcome data for reading for year 3 students for the first time). A number of new performance indicators and revisions to earlier indicators were reported for public housing, community housing and corrective services; and
- *quality of descriptive data and contextual information* — the health preface and the chapters on public hospitals, general practitioners, health management, emergency management and aged care now contain a range of descriptive statistics that provide useful contextual information on the operation of their services.

The effort to improve reporting has benefits for other public policy initiatives. The focus on identifying and monitoring outputs and outcomes, for example, aligns with moves by governments to output based funding. Service charters also routinely identify these types of performance indicators.

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## 2.2 Guiding principles

The Review has been conducted for over seven years. Measuring each dimension of performance and collecting data are not straightforward tasks. The Steering Committee's approach to performance reporting has been iterative, making incremental and manageable improvements over each of the six Reports published.

The aim of the Review is to provide objective government performance information to facilitate informed judgments and sound public policy action. The Steering Committee relies on guiding principles to achieve this aim, including:

- *an outcomes focus* — as outlined in chapter 1, performance indicators should focus on the outcomes of government services, reflecting whether service objectives have been met;
- *comprehensiveness* — as outlined in chapter 1, the performance indicator framework should be as comprehensive as possible, assessing performance against all important objectives;
- *comparability* — that is, data should be comparable across jurisdictions wherever possible. Reporting comparable data across jurisdictions has a higher priority than using a better indicator that allows no comparison. Where data are not yet comparable, time series analysis is particularly important for yardstick comparison. Data for many services have been published in each of the six Reports so time series comparisons have been made where possible to add another dimension to performance comparisons; and
- *progressive data availability* — that is, the ultimate aim is comparable data for all jurisdictions. However, progress differs across jurisdictions, so data are presented for those jurisdictions that can currently report (rather than not reported until available for all jurisdictions).

## 2.3 Progress on key data issues

The Review has identified key data issues that bear on the Report: the comparability of data; full costing of government services; reporting of data for particular target population groups; and accounting for the goods and services tax (GST).

### Comparability of data

To facilitate informed policy making, the Steering Committee adopted the principle that data, where feasible, should be reported on a comparable basis across service areas and jurisdictions. Effectiveness indicators in each service area have generally

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been grouped under the four broad headings: overall outcomes, access and equity, appropriateness and quality (see chapter 1). Some service areas have not explicitly adopted these headings in their frameworks. Emergency management, for example, has grouped indicators under the headings of prevention, preparedness, response and recovery. Similarly, breast cancer management has used the headings of prevention, intervention and overall performance.

Table 2.1 summarises the Review’s progress in reporting comparable performance indicators for efficiency and each of the four headings of effectiveness. (Client views are also reported, where they are collected as proxies for effectiveness indicators). Where services (such as breast cancer management and emergency management) have adopted their own headings, the service’s performance indicators have been allocated to the most suitable broad heading. Response times, for example, are a ‘response’ performance indicator in emergency management, but in table 2.1 they are reported as a ‘quality’ performance indicator.

Table 2.1 does not assess the quality of the indicator (for example, whether it is necessarily the most appropriate indicator). It merely indicates the first year when at least one indicator under each broad heading was reported across all jurisdictions on a comparable basis. To be counted as satisfying the Review’s reporting requirements, data must be sourced from a regularly published report or data collection, not from a one-off collection.

Table 2.1 also illustrates differences in the pace of improvements in reporting across services. Services across the board have experienced the need to report on an accrual basis (except in the NT) to measure outputs and demonstrate the maintenance of quality in purchaser/provider and contracting arrangements. Some service areas, however, are still unable to provide comparable data for a number of performance indicators. The housing chapter, for example, still does not report nationally comparable data on community housing for any performance indicators four years after its inclusion in the Review.

**Table 2.1 First reporting of at least one comparable indicator<sup>a, b</sup>**

Framework service	First coverage of service	When at least one nationally comparable indicator was first reported <sup>c</sup>					
		Overall outcomes	Access and equity	Appropriateness	Quality	Client views	Efficiency
<b>Education</b>							
School education	1995	1995	2001	na	na	na	1995
VET	1995	1995	1995	1995	1995	1995	1997
<b>Health</b>							
Public hospitals	1995	na	1995	1995	1995	na	1995
General practice	1999	1999	1999	2000	2000	na	2000
Breast cancer	1998	2000	2000	na	2000	na	2001
Mental health	1999	1999	na	1999	2000	na	1999
<b>Justice</b>							
Police services	1995	1995	1999	na	1995	1997	1997
Courts administration	1995	na	1995	na	1995	na	1995
Corrective services	1995	1995	1998	na	1995	na	1995
<b>Emergency management</b>							
Fire services	1998	1999	na	na	na	2000	2001
Ambulance services	1998	na	na	na	na	2000	2001
<b>Community services</b>							
Aged care services	1997	na	1999	2000	2000	2000	2000
Services for people with a disability	1997	1997	1997	1997	2000	2000	na
Children's services	1997	na	1997	na	na	na	na
Child protection and out-of-home care	1995	na	na	na	1997	na	na
Supported Accommodation	1995	1998	na	1999	1998	na	na
<b>Housing assistance</b>							
Public housing	1995	1995	1995	1995	1997	1997	1997
Community housing	1997	na	na	na	na	na	na
Commonwealth Rent Assistance	1999	2000	2000	2000	2000	2000	2000

<sup>a</sup> In the *Report on Government Services*. <sup>b</sup> Not all frameworks in this Report necessarily follow the general framework set out in chapter 1. However, all service types should be reporting on indicators that cover these general areas. Where this framework is not followed, an estimate has been made as to whether any indicators have been reported in these areas. <sup>c</sup> Refers to year in which Report was published, not year of data. **na** Not available.

Sources: SCRCSSP (1995, 1997b, 1998b, 1999c and 2000).

## Costing of services

In addition to the Review's objective that costs for the funding or delivery of services be measured and reported on a comparable basis, a further objective is that these costs reflect the full costs to government. The latter principle seeks to improve the comparability of cost estimates across jurisdictions, public and private service providers, and services.

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The Review has identified three priority areas for improving the comparability of unit costs:

- including superannuation on an accrual basis;
- accounting for differences in the treatment of payroll tax; and
- including the full range of capital costs.

Other issues also potentially affect the comparability of cost estimates. Where possible, the Review has sought to apply the same principles to:

- reporting accrued benefits to employees (such as recreation and long-service leave);
- apportioning overhead department costs, where relevant; and
- reporting non-government sourced revenue.

Recent reforms to treasury and finance department accounting guidelines in most jurisdictions require government agencies to adopt accrual accounting methods in their financial reporting frameworks rather than cash accounting. Accrual accounting is based on the principle that the agency recognises revenue and expenses when they are earned and incurred. Cash accounting, in contrast, recognises revenue and expenses when they are collected and paid. Not all agencies and jurisdictions, however, have adopted or fully implemented accrual accounting. The NT Government decided to remain with cash accounting, while some jurisdictions are in transition.

Accrual accounting has assisted the Review in meeting its full costing principle, but this has reduced the comparability of some time series data. Government finance statistics data published by the Australian Bureau of Statistics (ABS) for 1998-99 are based on accrual methods, but are not consistent with earlier data collected on cash accounting methods. Caution should be exercised when comparing 1998-99 financial data collected for this Report with earlier data.

Table 2.2 provides an overview of the Review's progress in reporting on an accrual basis, meeting the principle of reporting full cost to government and adjusting for differences in payroll tax.

The treatment of *superannuation* is a significant issue when measuring the unit cost for many services because it often makes up a major component of overall costs and can be treated differently across services and jurisdictions. The Review researched the current treatment of superannuation costs and developed approaches to improve its treatment (SCRCSSP 1998c). The Review is helping services to improve the consistency of treatment of superannuation in cost estimates. The extent to which

individual agencies consistently report actuarial estimates of superannuation costs depends on jurisdictions' implementation of accrual accounting systems.

**Table 2.2 Progress of unit cost comparability in the 2001 Report**

Framework/service	What is the accounting regime? <sup>a</sup>	Full cost to government			
		Is depreciation included?	Is the user cost of capital included?	Is superannuation included on an accrual basis?	Is payroll tax treated in a consistent manner?
<b>Education</b>					
School education	Transition	✓	✓	✓	✓
VET	Accrual	✓	✓	✓	✓
<b>Health</b>					
Public hospitals	Accrual	✓	✓	✓	✓
General practice <sup>b</sup>	Accrual	..	..	..	..
Breast cancer	Accrual	na	na	na	x
Mental health	Accrual	x	x	x	x
<b>Justice</b>					
Police services	Accrual	✓	✓	✓	✓
Courts administration	Accrual	✓	✓	✓	✓
Corrective services	Accrual	✓	?	✓	✓
<b>Emergency management</b>					
Fire services	Accrual	✓	✓	✓	x
Ambulance services	Accrual	✓	✓	✓	x
<b>Community services</b>					
Aged care <sup>c</sup>	Accrual	..	..	..	..
Services to people with a disability	Accrual	✓	x	✓	✓
Children's services	Transition	x	x	na	na
Child protection and out-of-home care <sup>c</sup>	Na	na	x	na	x
Supported accommodation and assistance <sup>c</sup>	Accrual	..	..	..	..
<b>Housing assistance</b>					
Public housing	Accrual	✓	✓	na	✓
Community housing	Transition	x	x	x	x
Commonwealth Rent Assistance <sup>b</sup>	Accrual	..	..	..	..

✓ Majority of jurisdictions have included this item or reported it separately, or have included it on an accrual basis. x Majority of jurisdictions have not included or reported this item, or not included it on an accrual basis.

<sup>a</sup> **Accrual:** majority of jurisdictions reported in accrual terms for the data in the 2001 Report. **Cash:** majority of jurisdictions reported in cash terms for the data in the 2001 Report. **Transition:** majority of jurisdictions did not report on either a pure cash or accrual basis. <sup>b</sup> Costs comprise mostly Commonwealth transfer payments to private service providers or households. <sup>c</sup> Costs comprise mostly Commonwealth, State or Territory transfer payments to private service providers or households. na Not available. .. Not applicable.

Sources: Relevant chapters.

*Payroll tax* makes up a small but significant part of the reported cost of many government funded and delivered services. It is particularly significant for services with a high proportion of labour costs, and can be around 5 per cent of total service costs. Consequently differences in the treatment of payroll tax can affect the

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comparability of unit costs across jurisdictions and services. Differences occur in payroll tax exemptions, marginal tax rates and tax-free thresholds, and clawback arrangements. Accounting for the effect of payroll tax on unit costs can be important for improving the comparability of the unit costs of private and public service providers.

A Steering Committee paper (SCRCSSP 1999b) recommended two approaches for improving the comparability of cost data. The first is to include a hypothetical payroll tax amount in cost estimates for exempt services. The hypothetical amount is to be based on the payroll tax liability had the service not been exempt from payroll tax. This approach would be used when the majority of services are taxable, and is most appropriate where private sector providers are also subject to payroll tax. This has the benefit of improving comparability of data with private sector providers. This is the recommended strategy for reporting on vocational education and training, emergency management, and public and community housing services. It is also the strategy adopted for police services and courts administration, to ensure comparability with the corrective services sector.

The second approach involves deducting the payroll tax amount from the costs of those government services that are taxable. This approach would be used where the majority of services are tax exempt, and is most appropriate where private sector providers are either exempt from payroll tax or fall below the payroll tax-free threshold, or where there are no private providers. This is the recommended strategy for reporting on schools, health services, police, courts administration, aged care services, disability services, children's services, and protection and support services. (It is noted in individual chapters whether these two approaches were implemented for this Report.)

*Capital costs* in an accrual sense comprise two distinct cost elements — depreciation and the user cost of capital. The focus is on the capital used in a particular year rather than the cash expenditure incurred in its purchase (for example, the purchase costs of a new building). Depreciation is defined as the annual consumption of non-current physical assets used in providing government services. The user cost of capital is the opportunity cost of funds tied up in the capital used to deliver services (for example, rental properties in public housing).

It is important to incorporate capital costs fully in cost comparisons, wherever possible. Capital can be a significant component of service costs and is costed in full for contracted elements of service delivery. Unit costs estimated on the basis of cash based recurrent expenditures underestimate the underlying costs to governments. Including capital expenditures alone does not guarantee accurate or complete estimates of unit costs.

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To improve the comparability of unit costs, the Steering Committee decided that both depreciation and the user cost of capital should be included in unit costs estimates (although the user cost of capital for land is to be reported separately). The user cost of capital rate should be applied to all non-current physical assets, less any capital charges and interest on borrowings already reported by the agency (to avoid double counting). The user cost of capital rate would be based on a weighted average of rates nominated by jurisdictions (currently 8 per cent).

*Other costing issues* include the apportionment of costs that are shared across services (mainly overhead department costs) and the treatment of non-government sourced revenue. Full apportionment of departmental overheads is not necessarily consistent with the concept of marginal cost, but is consistent with the concept of full cost recovery. The practice of apportioning overhead costs varies across the services in the Report. Some services deduct their non-government sourced revenue from their estimates of unit costs where the revenues are relatively small (for example, as with police services). This provides an estimate of net cost to government. However, where revenue from non-government sources is significant (as with public hospitals, and fire and ambulance services), the net cost to government does not provide an adequate measure of cost efficiency. In these instances, it is appropriate to report both the gross cost (cost efficiency) and net costs to government.

## **People with special needs**

For some chapters, the Report contains data on the performance of agencies in addressing the needs of special needs groups. The chapters on breast cancer management, aged care services, services to people with a disability and children's services examine the performance of government services in addressing the needs of particular groups in society. The Review is also beginning to collect data on the performance of services for two groups across all chapters of the Report — Indigenous Australians and people living in communities outside the capital cities (that is, people living in other metropolitan areas, rural and remote communities).

### *Indigenous Australians*

In May 1997, the Prime Minister asked the Review to give particular attention to the performance of mainstream services in meeting the needs of Indigenous Australians. This request was reinforced by the Council of Australian Governments at its 3 November 2000 meeting where heads of government agreed that ministerial councils will develop action plans, performance reporting strategies and benchmarks to facilitate review of the progress made in this area.

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Improving reporting of Indigenous peoples' access to mainstream services is a priority for all areas of the Review. This is also an important priority for a number of ministerial councils and their related performance reporting activities. The Ministerial Council for Aboriginal and Torres Strait Islander Affairs will work cooperatively with the Review to encourage better reporting in this area.

More complete and consistent information on the access of Indigenous people to mainstream services can help improve policy by:

- helping progress towards the objective of ensuring that Indigenous Australians receive no less provision of services than other Australians;
- monitoring whether the provision of services is culturally appropriate and contributes to equitable outcomes for Indigenous Australians;
- influencing the development of improvements in programs and the allocation of resources; and
- underpinning a more whole-of-government approach to developing clear and agreed outcomes, methods for joint planning and compatible monitoring processes (AADWA 1999).

The Review collects data on services to Indigenous clients, although the extent of reporting varies across both services and jurisdictions. Table 2.3 provides a stocktake, indicating which services have reported at least one comparable performance indicator or descriptive data for all jurisdictions. It does not signify the quality of that data.

The important task of collecting data is complicated by the administrative nature of many data collections that do not distinguish between Indigenous and non-Indigenous clients. The method and level of identification of Indigenous people appear to vary across jurisdictions; overall, evidence suggests that not all Indigenous people seeking access to government services are recorded.

The ABS has established an ongoing program to develop and improve Indigenous data flowing from Commonwealth, State and Territory administrative systems. The Bureau is working with other agencies to ensure that Indigenous people are identified in relevant systems and that statistics are of adequate quality. Initial priority is being given to the improvement of births and deaths statistics in all States and Territories. Other priorities include hospitals, community services, education, housing, and law and justice statistics. The ABS is also working with other agencies to develop and support national Indigenous information plans, Indigenous performance indicators and Indigenous taskforces on a number of topics.

**Table 2.3 Reporting of at least one comparable data item on Indigenous Australians for the 2001 Report**

<i>Framework/service</i>	<i>Descriptive data</i>	<i>Overall outcomes</i>	<i>Access and equity</i>	<i>Appropriateness</i>	<i>Quality</i>	<i>Client views</i>	<i>Efficiency</i>
<b>Education</b>							
School education	✓	x	✓	x	x	x	x
VET	✓	x	✓	x	x	x	x
<b>Health</b>							
Public hospitals	✓	x	✓	x	x	x	x
General practice	x	x	x	x	x	x	x
Breast cancer	x	x	x	x	x	x	x
Mental health	x	✓	x	x	x	x	x
<b>Justice</b>							
Police services	x	✓	✓	x	x	x	x
Courts administration	x	x	x	x	x	x	x
Corrective services	✓	✓	x	x	x	x	x
<b>Emergency management</b>							
Fire services	x	x	x	x	x	x	x
Ambulance services	x	x	x	x	x	x	x
<b>Community services</b>							
Aged care services	x	x	✓	x	x	x	x
Services for people with a disability	x	x	✓	x	x	x	x
Children's services	✓	x	x	x	x	x	x
Child protection and out-of-home care	x	✓	✓	x	x	x	x
Supported accommodation	x	x	x	x	x	x	x
<b>Housing assistance</b>							
Public housing	x	x	x	x	x	x	x
Community housing	x	x	x	x	x	x	x
Commonwealth Rent Assistance	x	x	x	x	x	x	x

✓ Indicates that at least one nationally comparable data item is available. x Indicates that no nationally comparable data are available (although jurisdictions may report data specific to their jurisdiction).

Sources: Relevant chapters.

The ABS is also working towards improving the quality of Indigenous data from the 2001 Census of Population and Housing. In parallel, it is expanding its Household Survey Program to collect more regular Indigenous statistics, including regular Indigenous general social surveys, Indigenous sample supplementation in regular health surveys and annual Indigenous labour force estimates. The Review will draw on these initiatives in future Reports.

### *People living in rural and remote areas*

The Steering Committee has agreed to report data selectively on the performance of governments in delivering services to people in communities outside the capital

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cities. The Review undertook a stocktake of its data and examined existing classifications of ‘remoteness’ that are used in the Report. A number of service sectors report data on services delivered to rural and remote communities. The Rural Remote Metropolitan Areas classification (or a variant) is used in the majority of services in the Report, although some services are considering reporting future data using the Accessibility/Remoteness Index of Australia.

The ABS is currently revising its Australian Geographic Classification System for the 2001 Census of Population and Housing. The new classification system is expected to include measures of remoteness that are partly based on the Accessibility/Remoteness Index of Australia. The Review expects to draw on this initiative in future Reports.

Table 2.4 provides a stocktake, indicating which services and jurisdictions have collected at least one comparable data item for this Report. The table also shows whether the data available are descriptive information or a performance indicator.

## **The New Tax System**

A number of measures contained in The New Tax System will have an impact on government service provision, including the GST that commenced on 1 July 2000.

Under the GST, government agencies are treated in the same manner as other businesses in that government agencies have no GST exemptions on their purchases, and registered government agencies are able to claim input tax credits for the GST paid on inputs.

The 2001 Report will be the last ‘snapshot’ of performance before the introduction of The New Tax System. However, in 1999-2000 agencies may have incurred administrative expenses associated with GST compliance, and these will be reflected in service providers’ performance in 1999-2000 and therefore the performance indicators reported in the 2001 Report. It is anticipated that this effect will be at the margin because administration comprises a small element of costs in most cases. There are no other implications from The New Tax System for the 2001 Report.

The implications for the 2002 Report primarily concern the treatment of the GST for the data collected for the efficiency indicators — specifically, financial information on items such as ‘expenditure’, ‘cost’, ‘funding’ and ‘contributions’ will be affected. The Steering Committee has developed guidelines for data collection and reporting for the 2002 Report to ensure the treatment is consistent across jurisdictions.

**Table 2.4 Reporting of at least one comparable data item on rural and remote communities for the 2001 Report**

<i>Framework/service</i>	<i>Descriptive data</i>	<i>Overall outcomes</i>	<i>Access and equity</i>	<i>Appropriateness</i>	<i>Quality</i>	<i>Client views</i>	<i>Efficiency</i>
<b>Education</b>							
School education	x	x	x	X	x	x	✓
VET	x	✓	✓	x	x	x	x
<b>Health</b>							
Public hospitals	✓	x	x	x	x	x	x
General practice	x	x	✓	x	✓	x	x
Breast cancer	x	x	✓	x	x	x	x
Mental health	x	✓	x	x	x	x	x
<b>Justice</b>							
Police services	x	x	x	x	x	x	x
Courts administration	x	x	✓	x	x	x	x
Corrective services	x	x	x	x	x	x	x
<b>Emergency management</b>							
Fire services	x	x	x	x	x	x	x
Ambulance services	x	x	x	x	x	x	x
<b>Community services</b>							
Aged care services	✓	x	✓	x	x	x	x
Services for people with a disability	x	x	x	x	x	x	x
Children's services	x	x	x	x	x	x	x
Child protection and out-of-home care	x	x	x	x	x	x	x
Supported accommodation	x	x	x	x	x	x	x
<b>Housing assistance</b>							
Public housing	x	x	x	x	x	x	x
Community housing	x	x	x	x	x	x	x
Commonwealth Rent Assistance	x	x	x	x	x	x	x

✓ Indicates that at least one nationally comparable data item is available. x Indicates that no nationally comparable data are available (although jurisdictions may report data specific to their jurisdiction).

Sources: Relevant chapters.

## 2.4 Using the data in this Report

### Data quality

The aim of the Review is to provide ongoing comparisons of the performance of government services. To maximise the benefits to policy decision making, the Review seeks to ensure its data is of high quality — timely and accurate.

Data accuracy is the most important determinant of data comparability. For each service area, the performance indicator framework shows which data are provided

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on a comparable basis and which are not strictly comparable. Qualifications for data that are not strictly comparable are also noted within the text. Data may not be strictly comparable if:

- definitions or counting rules differ or are so broad that they result in different interpretations (for example, depreciation rules);
- the scope of measurement varies (for example, the waiting time for elective surgery); and
- benchmarks differ (for example, literacy standards).

These differences may result in biased estimates, but it is not always clear whether biases will necessarily be material. Even where they are significant, relatively simple adjustments may resolve the differences in many cases. As noted earlier, payroll tax exemption has an influence on the comparability of unit cost indicators, and the payroll tax amount can be readily calculated from payroll data. Differences in the marginal tax rates of payroll tax systems, conversely, are not likely to have a material impact on unit costs. Such differences are likely to be outweighed by other factors affecting comparisons.

Data contained in this Report vary in the extent to which they have been reviewed or validated; at a minimum, all data have been subject to peer review by the working group for each service (box 2.1).

Timeliness of data is an important consideration for policy decision making. There is little sense in basing policy decisions on old data in a world of rapid change. There is, however, a tradeoff between the accuracy of data and its timely availability: data that are provided in a timely fashion have fewer opportunities to undergo rigorous processes of validation.

The Review recognises the importance of both timely and accurate data. As such, the Review's process of iterative data collection is intended to manage these objectives. The Review publishes data that jurisdictions can provide, with necessary qualifications. This provides an opportunity for the Review to improve the data accuracy and comparability over time. This approach has increased scrutiny of the data and led to more timely improvements in data quality.

Improving the timeliness and accuracy of the data — a task that will involve significant time and effort over a number of years in some cases — requires a high level of cooperation among jurisdictions, and between the Review and participating agencies. Much of the work of the Review involves identifying sources of timely data and collecting specific information on which to base useful qualifications about that data.

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### Box 2.1     **Reviewing data quality**

This Report relies on largely administrative data. The performance information based on this data is reviewed in two ways:

- *peer review by service area working groups* — the Review process includes annual revisions to most data collection manuals and several circulations of chapters (including all jurisdictions' results); and
- *external review by data collection agencies* — this approach is used for most data on school education (which are reviewed by the Secretariat to the Ministerial Council on Education, Employment, Training and Youth Affairs and the ABS); most data on vocational education and training (which are reviewed by the National Centre for Vocational Education Research); some data for court administration, police and corrections (which are reviewed by the ABS); and most housing data, most effectiveness data for services for people with a disability, protection and support, and some health data (which are reviewed by the Australian Institute of Health and Welfare).

The Review's processes do not involve formal auditing of data, but some data supplied to the Review are also reported in annual reports, budget papers and annual reporting of joint Commonwealth, State and Territory programs. This information may be audited by the relevant Auditor General.

Some people have raised concerns about the risks of less than fully perfect or incomplete data being misused in decision making. Minimising this risk is a major focus during the preparation of this Report. Feedback from users around the country has yet to reveal specific examples of the misuse of data in policy decision making.

Users of the Report are an important source of feedback on issues relating to the improvement of performance reporting. The Steering Committee welcomes feedback, which can be forwarded to the Secretariat (see the contact details inside the front cover of the Report).

### **Effects of factors beyond the control of agencies**

The Report aims to present performance indicators that allow users to assess performance. Many government objectives involve tradeoffs, such as choosing whether to improve the average level of service or better target services to those most in need. The Review cannot know each government's priorities, tradeoffs or targets, which may change over time. Presenting performance indicators as a suite encourages users to assess performance on all indicators collectively, rather than on an individual indicator. Moreover, each user is left to judge the appropriate tradeoffs between objectives.

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Readers must also account for other important issues. The broader environment in which a service operates affects the performance of each service in each jurisdiction. There may be significant differences in clients, available inputs, prices and geography, and any comparison of performance across jurisdictions needs to consider these differences.

To help identify and account for environmental differences, the Report includes a descriptive statistical appendix (appendix A). This appendix provides a range of general descriptive information for each jurisdiction, including age profile, population distribution, income levels, education levels, tenure of dwellings and cultural heritage (such as aboriginality and ethnicity). It has two parts: a description of the main distinguishing characteristics of each jurisdiction and a set of source tables (which will help users to compare jurisdictional performances).

The Review does not adjust results provided by jurisdictions for differences that may affect service delivery. Rather, it leaves this task to users who can better make the necessary judgments, maybe having additional information about their jurisdiction's circumstances or priorities. The Commonwealth Grants Commission adopts a different approach, but this reflects its different role (see SCRCSSP 2000).

When comparing performance information across jurisdictions, users also need to consider the effect of differences in the quality of data collection methods and systems. Definitions of terms may also vary, such as the definitions of notification in child protection. Notes to tables or figures highlight differences in data collection methods or definitions.

The Review aims to provide a more comprehensive set of performance information than has been available in the past; however, given the complex nature of government services and the cost of collecting information, some important but secondary aspects of government services may not be reported. Reforms in government services may impose unmeasured costs on clients of those services (for example, when the closure of schools forces students to travel further to school). This highlights the importance of using performance indicators as part of a broader set of tools when assessing policy choices.

## **2.5 Related Review projects**

The Steering Committee has also undertaken research into other issues relevant to the performance of government services. This year, the Steering Committee published a consultancy report *National Satisfaction Survey of Clients of Disability Services* jointly with the National Disability Administrators (Equal and Donovan Research 2000).

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In previous years the Steering Committee published reports on:

- the use of activity surveys used by police services in Australia and New Zealand (SCRCSSP 1999a) as a means of drawing lessons for other areas of government that are considering activity measurement in output costing and internal management; and
- an examination of payroll tax (SCRCSSP 1999b) and superannuation (SCRCSSP 1998c) in the costing of government services.

Earlier research has involved case studies of issues and options in the implementation of government service reforms. The Steering Committee has published a case study report (SCRCSSP 1997a) that covers:

- purchasing community services in SA;
- using output based funding of public acute hospital care in Victoria; and
- implementing competitive tendering and contracting for Queensland prisons;

and one (SCRCSSP 1998a) that covers:

- devolving decision making in Victorian Government schools;
- using competitive tendering for NSW public hospital services;
- offering consumer funding and choice in WA disability services; and
- pricing court reporting services in Commonwealth courts.

The Steering Committee has also developed checklists on some common issues in implementing these reforms, such as:

- timing program implementation;
- decentralising decision making;
- measuring and assessing performance;
- measuring quality;
- directly linking funding to performance; and
- charging users (SCRCSSP 1998a).

The Steering Committee will continue to focus on research that is related to performance measurement and thus better linked to efforts to improve reporting for individual services.

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## B Education preface

Education is a lifelong activity, delivered both informally (for example, by family or at work) and formally by the education sector (for example, by schools, technical and further education institutes (TAFE) and universities). The education sector has a range of objectives, of which some are common across all levels of education (for example, to increase knowledge) and others are more specific to a particular level of education (for example, with vocational education and training (VET), to provide skills and learning directly related to work).

Formal education services are delivered through both government and non-government agencies. Government education agencies include government primary and secondary schools, technical and further education institutes and universities. Governments also fund services delivered by non-government providers in the school and vocational education and training sectors. This Report covers the performance of all these education services (except universities).<sup>1</sup> The effectiveness and efficiency of preschool programs, which provide a variety of educational and developmental experiences for children before full time schooling, are covered in children's services (see chapter 14) but learning outcomes are not reported.

### **Profile of education**

#### **Roles and responsibilities**

The roles and responsibilities of administering, funding and determining the objectives of school education encompass different levels of government and non-government school authorities. Government and non-government institutions are involved in the delivery of school education. State and Territory governments have constitutional responsibility for the provision of schooling to all children of school age. To this end they determine curricula, regulate school activities and

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<sup>1</sup> The education preface provides a sectorwide picture of education. The activities of universities may affect other sectors of education, so they are discussed generally in this preface but are not examined elsewhere in this Report.

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provide the majority of funding, and they are directly responsible for the administration of government schools.

Non-government schools operate under conditions determined by State and Territory government registration authorities. Commonwealth, State and Territory governments provide some funding to non-government schools.

The Commonwealth funds government and non-government schools through specific purpose payments. The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) — comprising Commonwealth, State and Territory education ministers — is the principal forum for developing national priorities and strategies for schooling.

The national VET system is a cooperative arrangement between Commonwealth, State and Territory governments; industry (represented by Industry Training Advisory Bodies); and private and public providers. The bodies that provide funds, advice and decisions are not necessarily the same. State and Territory governments play dual roles as both purchasers of VET services (from private providers and adult and community providers) and direct deliverers of services (through TAFE institutes and universities with TAFE divisions) in the publicly funded VET system. In addition, each State and Territory government is responsible for administering its training system, setting fees and determining exemption, concession and loan arrangements for students.

## **Funding**

Education is a major area of government expenditure and activity. Total operating expenses for all governments in 1998-99 were approximately \$31.5 billion, which is equivalent to 5.3 per cent of gross domestic product. The States and Territories (including local governments) provided \$21.2 billion of this total. The Commonwealth Government provided \$11.5 billion, including \$8.8 billion comprising grants to other levels of government, including to universities (ABS 2000a).

With the introduction of accrual accounting, there is no comparability in the education expenditure series between 1998-99 and earlier years. As a result, trend growth in education expenditure is calculated between 1992-93 and 1997-98.

Between 1992-93 and 1997-98, the average annual real growth rate of Commonwealth Government expenditure on education was 3.1 per cent. For State and Territory governments, the average annual real growth was 1.8 per cent with growth mainly occurring from 1995-96 (table B.1).

**Table B.1 Commonwealth, State and local government expenditure on education (1997-98 \$ million)<sup>a</sup>**

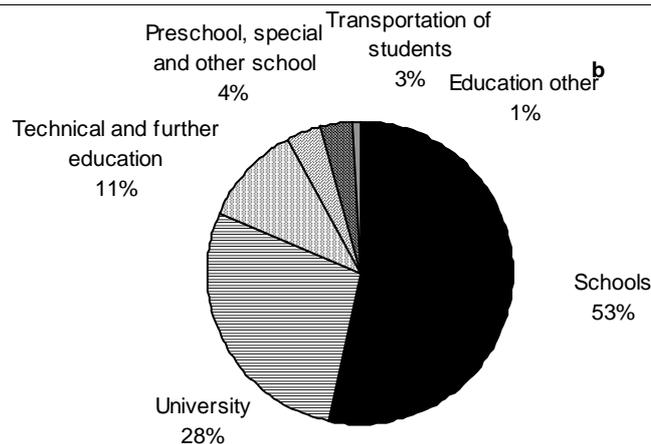
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	Average annual real growth (%)
Commonwealth <sup>a</sup>	9 218	9 743	10 264	10 365	10 523	10 730	3.1
State and Territory expenditure financed from own resources	12 934	12 621	12 694	13 112	13 878	14 128	1.8
Local government expenditure financed from own resources	21	18	18	22	26	28	5.9
Universities expenditure financed from own resources	210	109	203	-86	159	292	6.8
Less inter-sector taxes	70	79	80	89	89	95	6.3
<b>Total government</b>	<b>22 313</b>	<b>22 412</b>	<b>23 099</b>	<b>23 323</b>	<b>24 497</b>	<b>25 083</b>	<b>2.4</b>

<sup>a</sup> Includes general government final consumption expenditure, personal benefits payments, and grants (current and capital) to State and Territories, local governments, universities and non-profit organisations.

Source: ABS (1999b).

In 1998-99, schools accounted for the highest proportion of education expenditure (53 per cent), followed by universities (28 per cent) and technical and further education institutes (11 per cent). Expenditure on preschool, special and other schools accounted for 4 per cent (figure B.1).

**Figure B.1 Total government expenditure on education, 1998-99<sup>a</sup>**



<sup>a</sup> Based on accrual operating expenses for education, net acquisition of non-financial assets. <sup>b</sup> Includes tertiary other.

Source: ABS (2000a).

Excluding NSW and SA, the breakdown of State and Territory government expenditure across the education sector varied across jurisdictions in 1998-99. The

NT had the highest proportion of expenditure on preschool and special education, the WA had the highest expenditure on primary and secondary education (77.9 per cent), and the ACT had the highest proportion of expenditure on technical and further education (16.3 per cent) (table B.2).

**Table B.2 State, Territory and local government expenditure, 1998-99**

		<i>Units</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Total</i> <sup>a</sup>
Preschool and other special	%	na	5.5	8.8	6.2	na	5.7	8.8	10.9	4.8	
Primary and Secondary	%	na	74.1	77.1	77.9	na	67.2	72.2	70.4	74.9	
Technical and further	%	na	16.1	10.5	13.0	na	15.7	16.3	6.2	14.0	
University	%	na	0.6	0.6	0.0	na	0.3	1.3	3.2	0.4	
Other Tertiary	%	na	0.0	0.0	0.8	na	0.0	0.0	4.7	0.2	
Other <sup>b</sup>	%	na	3.6	3.0	2.2	na	10.9	1.1	4.9	4.0	
<b>Total</b>	<b>%</b>	<b>na</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>na</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	
<b>Total</b>	<b>\$m</b>	<b>na</b>	<b>5 058</b>	<b>3 929</b>	<b>2 218</b>	<b>na</b>	<b>598</b>	<b>453</b>	<b>405</b>	<b>21 627</b>	

<sup>a</sup> Includes NSW and SA. Education purpose data are not available from NSW and SA given to data quality concerns. Data are based on reported accrual operating expenses, net acquisition of non-financial assets. <sup>b</sup> Includes transportation of students and education services not elsewhere classified.

Source: ABS (2000).

## Size and scope

In 1999, approximately 5.7 million people aged 5–64 years participated in some form of education and training, mainly in school education (60 per cent). It is not possible to provide a profile of the participation rate of vocational educational and training students and higher education students in tertiary studies due to the blurring of the boundaries of these categories (ABS 1999c).

In 1999 approximately 3.2 million full time students were attending school (2.2 million in government schools and one million in non-government schools) (ABS 2000b). Approximately 270 000 students left school in that year to work, to attend university or vocational training, or to undertake combinations of work and education. Of these students, 29 per cent were early school leavers. Higher education institutions attracted around 94 000 school leavers in 1999, or 35 per cent of all school leavers. Technical and further education institutions attracted 63 000 school leavers (23 per cent) (table B.3).

**Table B.3 School leaver destinations, 1999<sup>a</sup>**

Type of institution attending in May 1999	Year 12 leavers			Early school leavers <sup>b</sup>			All school leavers			
	Unit	Male	Female	Total	Male	Female	Total	Male	Female	Total
Higher education	%	47.1	49.2	48.2	0.8	2.8	1.6	31.1	38.6	34.8
TAFE	%	22.6	18.1	20.2	33.9	27.0	31.2	26.5	20.1	23.3
Other study <sup>c</sup>	%	2.9	5.1	4.1	5.8	10.1	7.5	3.9	6.3	5.1
Not attending	%	27.4	27.6	27.5	59.5	60.2	59.7	38.5	35.0	36.8
<b>Total</b>	<b>'000</b>	<b>89.7</b>	<b>103.1</b>	<b>192.8</b>	<b>47.3</b>	<b>30.2</b>	<b>77.5</b>	<b>136.9</b>	<b>133.3</b>	<b>270.3</b>

<sup>a</sup> Those who left school in the previous year. <sup>b</sup> Those who leave school earlier than year 12. <sup>c</sup> Includes business colleges, industry skills centres and other educational institutions.

Source: ABS (1999a).

## Expanded options for students

One of the major objectives of schooling is to provide students with employment related skills, career options and skills for further education and training. In 1996, the Ministerial Council of the Australian National Training Authority (ANTA) agreed to allocate \$20 million of ANTA funds each year (for four years, commencing in 1997) to vocational education and training in schools. This program involves Commonwealth, State and Territory education and training departments and agencies and the nongovernment sectors working in partnership with industry, to bring about a major change in the programs that schools provide for students in their senior secondary years.

Approximately 116 991 students were enrolled in vocational education and training in schools programs in 1998 — a 24 per cent increase on the previous year's enrolments. Enrolments were highest in tourism and hospitality, and business and clerical programs. In 1998, approximately 50 per cent of students took up work placements as part of their course (MCEETYA 2000).

Within the Australian qualification framework, both the school sector and the vocational education and training sector offer certificate level qualifications (box B.1). Schools can thus provide dual award courses, which combine school and vocational education and training studies and recognise the achievement with an award from both sectors.

The number of students in post-school vocational programs increased by 7 per cent between 1998 and 1999 to reach over 1.65 million. The participation rate in vocational education and training for people aged 15–19 was 23 per cent and 18 per cent for people aged 20–24 (NCVER 2000).

Australia’s post-school sectors (vocational education and training, and higher education) have become more diverse in recent years. Both offer courses at the diploma and advanced diploma level, and an evolving system of credit transfers between vocational education and training providers and universities has facilitated the flow of students from one sector to the other (box B.1).

**Box B.1 Choices of educational setting<sup>a</sup>**

Both the school and the vocational education and training sectors offer courses at certificate levels 1 or 2 or higher. The vocational education and training and higher education sectors both offer diploma and advanced diploma courses.

**Australian Qualification Framework**

<i>School sector</i>	<i>Vocational education and training sector</i>	<i>Higher education Sector</i>
		Doctorate
		Masters degree
		Graduate diploma
		Graduate certificate
		Bachelor degree
	Advanced diploma	Advanced diploma
	Diploma	Diploma
Senior Secondary	Certificate IV	
Certificate Of Education	Certificate III	
	Certificate II	
	Certificate I	

<sup>a</sup> The Australian Qualification Framework Advisory Board members are currently discussing the relationship between the senior secondary certificate and vocational education and training qualifications.

Source: Australian Qualification Framework Advisory Board (1998).

**Participation in education and training**

Successive Australian governments have viewed education as a means to improve economic and social outcomes and equity across all sections of society. Thus, they have sought to increase rates of participation in education.

**Enrolment in a post-school education and training institution**

From 1996 through to 1999, the proportion of the population (aged 15–64 years) applying for enrolment in post-school education and training was fairly stable at around 20 per cent (of which less than 10 per cent deferred their studies). The proportion that applied to enrol but did not gain placements rose steadily from 1997, but in 1999 was still below the proportion of 1996. The majority of those unable to gain placements were seeking places in technical and further education (table B.4).

**Table B.4 Applications to enrol in a post-school education and training institution, 15–64 years of age, 1996–1999, ('000)<sup>a</sup>**

	1996	1997	1998	1999
All persons studying in May that year	2 128	2 132	2 143	2 258
Gained placement but deferred study	199	183	176	188
Unable to gain placement	106	75	84	92
<i>of which</i>				
Technical and further education	48	35	44	46
Other vocational education and training	14	13	4*	13
Total vocational education and training	62	48	48	59
Higher education	25	18	24	20
Other education institutions	19	9	12	13
Applied to enrol for that year	2 433	2 392	2 403	2 538
<b>Total population</b>	<b>12 042</b>	<b>12 187</b>	<b>12 341</b>	<b>12 483</b>

<sup>a</sup> Reasons for applicants not receiving a place in post-secondary education include: the course was full; the course was cancelled; they were not eligible/their entry score was too low; they applied too late; or other reasons. \* This estimate has a relative standard error of greater than 25 per cent, so care should be exercised when using it.

Source: ABS (1999a).

The proportion of the population (aged 15–64 years in each jurisdiction) applying for enrolment in post-school education and training ranged from 19 per cent in Tasmania to 28 per cent in the ACT in 1999. Of those who were unsuccessful in gaining placements, the majority had applied to technical and further education institutions (table B.5).

**Table B.5 Applications to enrol in a post-school education and training institution, 15–64 years of age, by State and Territory, 1999 ('000)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Applied to enrol in 1999	865.6	634.2	452.1	254.0	193.1	56.1	59.7	22.8
All persons studying in May 1999	786.4	567.2	394.6	219.2	166.1	49.6	53.9	20.2
Gained placement but deferred study	49.2	47.7	34.1	27.2	19.5	4.3	4.1	2.0
<i>TAFE</i>	18.1	11.5	12.1	8.6	8.0	1.7	0.5	0.2
<i>Study not for recognised qual*</i>	7.6	9.3	6.1	5.7	4.7	1.3	1.4	0.2
<b>Total VET</b>	<b>25.7</b>	<b>20.8</b>	<b>18.2</b>	<b>14.3</b>	<b>12.6</b>	<b>2.9</b>	<b>1.9</b>	<b>0.5</b>
Higher education*	13.9	18.7	10.2	7.6	3.2	0.8	1.8	1.6
Other education	30.9	8.2	5.7	5.2	3.6	0.5	0.4	0.0
Unable to gain placement	30.0	19.3	23.5	7.6	7.5	2.2	1.7	0.6
<i>TAFE</i>	16.9	7.1	12.0	4.2	3.8	1.3	0.6	—
<i>Study not for recognised qual*</i>	3.3	3.7	2.9	0.9	1.7	0.3	—	0.2
<b>Total VET</b>	<b>20.2</b>	<b>10.8</b>	<b>14.9</b>	<b>5.1</b>	<b>5.6</b>	<b>1.6</b>	<b>0.6</b>	<b>0.2</b>
Higher education*	3.4	6.4	5.8	1.7	1.2	0.3	0.8	0.4
Other education	6.4	2.1	2.7	0.9	0.7	0.3	0.3	—
Did not apply to enrol in 1999	3 349.3	2 496.7	1 849.7	988.6	779.4	246.6	151.8	83.0
<b>Total</b>	<b>4 214.9</b>	<b>3 130.9</b>	<b>2 301.8</b>	<b>1 242.6</b>	<b>972.5</b>	<b>302.6</b>	<b>211.5</b>	<b>105.7</b>

<sup>a</sup> Reasons for applicants not receiving a place in post-secondary education include: the course was full; the course was cancelled; they were not eligible/their entry score was too low; they applied too late; or other reasons. \* These estimates have a relative standard error of greater than 25 per cent, so care should be exercised when using them. — Estimates which are close to zero or have relative standard errors of 50 per cent have not been reported.

Source: ABS (1999d).

## Progress towards Finn targets

In 1991 'Finn targets' were set by vocational education and training ministers for the participation of young people in post-compulsory education and training (box B.2). The targets relate to national participation and qualification attainment for 19 and 22 year olds in schools, vocational education and training and higher education, and indicate overall outcomes for the education sector (figure B.2).

The ANTA has noted that progress towards the Finn target for 19 and 22 year olds is not in line with Finn targets, but it is improving. It projects, however, that if the current participation and attainment trends continue for 19 year olds and 22 year olds, the achievement of the Finn target for these age groups by 2001 will not be reached (ANTA 1999). Schools, universities, and the vocational education and training system all affect the rate of progress towards these targets.

### Box B.2 Finn targets

By 2001, 95 per cent of 19 year olds will:

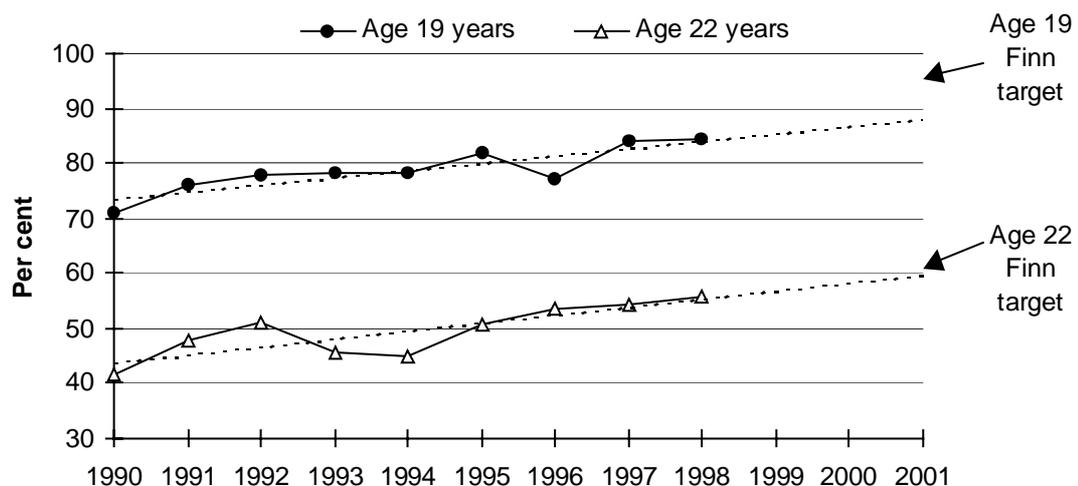
- be participating in, or have completed, year 12; or
- have completed years 10 or 11 and will be participating in, or have completed, some formally recognised education and training.

By 2001, 60 per cent of 22 year olds will:

- be participating in education or training programs that lead to level 3 awards; or
- have attained level 3 or above qualifications; or
- be participating in, or have completed, higher education studies such as diplomas and degrees.

Source: ANTA (1999).

Figure B.2 Participation and qualification attainment by 19 and 22 year olds in post-compulsory education<sup>a, b, c</sup>

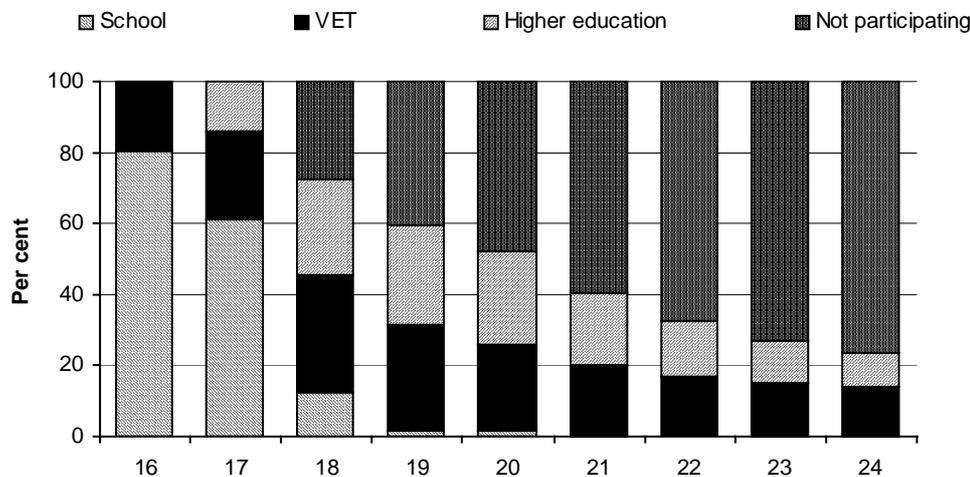


<sup>a</sup> Targets for the participation of young people in post-compulsory education and training are also known as Finn targets. <sup>b</sup> The dotted lines are yearly projections set by the Australian National Training Authority to meet the Finn targets (see box B.2) set for 19 and 22 year olds at year 2001. <sup>c</sup> The approach adopted to monitor Finn targets was revised in 1999. Some previous data used to measure attainment against the targets have been revised.

Source: ANTA (1999).

The majority of people aged up to 17 years who were participating in education and training in 1999 were at schools. The proportion of 18–24 year olds participating in vocational education and training and in university education was approximately the same. More 16–24 year olds are participating in vocational education and training than university education, with this higher level of participation concentrated most in the 16–18 year age group. The proportions not participating in education increased with age (figure B.3).

**Figure B.3 Participation in education and training by people aged 16–24 years, by sector, 1999<sup>a, b</sup>**



<sup>a</sup> In schools, the 20 year old cohort includes those aged over 20 years. <sup>b</sup> In higher education, the 16 year old cohort includes those aged under 16 years.

Source: ANTA (2000).

## Skill profile of Australia

Another important objective of education and training is to improve the skill base of the economy. In turn, this may facilitate higher productivity growth by enhancing the country's overall ability to adapt to technological change.

There were 4.4 million people aged 15–64 years (or 51 per cent of employed people aged 15–64 years) with recognised post-school qualifications in 1999 (ABS 1999d). Of this group, 27 per cent had a bachelor degree as their highest qualification, 27 per cent had a skilled vocational qualification, and 18 per cent had a basic vocational qualification. Generally, a greater proportion of those with post-school qualifications at May 1999 tended to be employed as managers, administrators, and professionals (61 per cent), while those without post-school qualifications tended to be employed as clerical, sales and service workers (table B.6).

**Table B.6 Educational attainment of employed persons aged 15–64 years, May 1999 ('000)<sup>a</sup>**

<i>Occupation in current job</i>	<i>Total with post-school qualifications</i>	<i>Total without post-school qualifications<sup>b</sup></i>	<i>Completion of highest level of secondary school</i>	<i>Non-completion of highest level of secondary school</i>	<i>Total<sup>c</sup></i>
Professional <sup>d</sup>	2 224	838	402	434	3 066
Trades people and related workers	750	387	119	267	1 140
Clerical, sales and service workers <sup>e</sup>	998	1 602	767	835	2 739
Intermediate production and transport workers	216	525	129	396	759
Labourers and related workers	198	577	160	416	823
<b>Total</b>	<b>4 387</b>	<b>3 929</b>	<b>1 578</b>	<b>2 347</b>	<b>8 527</b>

<sup>a</sup> As defined under the Australian Bureau of Statistics Classification of Qualifications (ABSCQ). <sup>b</sup> Includes persons who never attended school. <sup>c</sup> Includes persons still at school. <sup>d</sup> Includes managers, administrators, professional and associate professionals. <sup>e</sup> Includes advanced, intermediate and elementary clerical, sales and services workers.

Source: ABS (1999d).

## Literacy levels

The literacy level and general level of education (qualification) of a society are important determinants of growth and improved living standards. In 1996, the ABS conducted a national literacy survey to assess the literacy skills of people aged 15–74 (ABS 1996). The test ranked literacy skills on a scale from 1 to 5 (with higher numbers representing higher skill levels). Nationally, about half the adult respondents had a low level (that is, skill level 1 or 2) of literacy. However, the proportion of respondents in each skill level varied across jurisdictions; for example, the ACT reported the highest level (with 68 per cent of respondents at level 3 or higher) and Tasmania reported the lowest (with 48 per cent of respondents at level 3 or higher) (table B.7).

**Table B.7 Literacy skill level of persons aged 15–74 years, 1996 (per cent)<sup>a</sup>**

<i>Literacy skill level</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1	22	22	16	16	17	20	12	12 <sup>b</sup>	19
2	28	26	29	29	27	31	20	28	28
3	35	35	37	36	36	35	40	40	36
4–5	15	17	18	19	19	13	28	20	17

<sup>a</sup> The levels represent a continuum of how well people were able to interpret and use material printed in English for each of the three types of literacy (prose, document and quantitative material). Progression along the continuum is characterised by increased ability to process information (for example, to locate, match and generate information) and to draw correct inferences from the information being used. <sup>b</sup> Sampling variability was too high for comparisons for most practical purposes.

Source: ABS (1996).

## International comparison of education levels

The proportion of Australia's workforce (population aged 25–64 years) with a post-compulsory school qualification increased by 4 per cent (to 63 per cent) from the level reported in 1995 (59 per cent) (ANTA 2000). It is lower than the proportion in many other industrialised countries, such as France (66 per cent), Germany (86 per cent) and Denmark (71 per cent) (table B.8). The relative qualification level of a country's workforce does not directly reflect its relative skill base, because skills are acquired at different educational levels in different countries.

## Comparing unit costs across jurisdictions

Comparing unit costs of a particular service for a specified outcome across jurisdictions can help to identify whether States or Territories have the scope to improve their performance. However, special characteristics within jurisdictions mean it would be hard for all jurisdictions to attain the same level of unit costs, while achieving similar outcomes. One way of better understanding how special circumstances may affect costs is to compare the variations in the unit costs across jurisdictions for services that have some similarities in outcomes, such as government school education and vocational education and training (table B.9). The greater variation in the unit costs of vocational education and training than in those of schools raises interesting questions about the likely causes. Further analysis would be necessary to identify, for example, whether the effects of scale or dispersion are greater for vocational education and training than for schools, whether the mix of costly and inexpensive courses differs (although the ANTA has adjusted data on recurrent costs to allow for that difference), and whether the quality of the services or their efficiency differs more.

**Table B.8 Highest completed level of education — international comparisons, 1998 (per cent of labour force aged 25–64 years)<sup>a</sup>**

	Post-compulsory school				Total post-compulsory school
	Less than upper secondary	Upper secondary <sup>b</sup>	Non-university tertiary education <sup>c</sup>	University level education	
United States	11	51	9	29	89
Czech Republic	11	78	<sup>d</sup>	12	90
Germany	12	56	15	16	87
Norway	14	57	3	26	86
Switzerland	16	59	10	15	84
Canada	16	28	36	21	85
United Kingdom	14	59	9	17	85
Sweden	21	49	16	14	79
Denmark	17	54	22	6	82
Finland	26	41	18	15	74
Netherlands	28	43	<sup>d</sup>	28	71
France	33	43	11	12	66
New Zealand	23	41	22	14	77
<b>Australia</b>	<b>38</b>	<b>33</b>	<b>10</b>	<b>19</b>	<b>62</b>
Italy	47	36	6	12	54
Portugal	79	11	3	8	22
<b>Country mean<sup>e</sup></b>	<b>32</b>	<b>42</b>	<b>10</b>	<b>16</b>	<b>68</b>

<sup>a</sup> The differences in data definitions and variations in collection methods across countries should be noted when measuring the gap between Australia's skill base and that of other countries. <sup>b</sup> Includes vocational equivalents such as apprenticeships and traineeships. <sup>c</sup> Several definitional and data issues that may influence the ranking of countries include: the definition used for non-university tertiary (particularly for vocational education and training courses); the OECD education classification levels, which are based on UNESCO's International Standard Classification for Education (for example, primary education is defined as beginning at age 5, 6 or 7 years and lasting for four to six years); and variations in survey data (for example, Denmark's 24–64 year old group actually includes all ages). <sup>d</sup> Data not applicable or included within another column of this table. <sup>e</sup> The country mean includes the countries in the table plus Korea, Austria, Belgium, Greece, Ireland, Luxembourg, Spain, Poland and Turkey.

Source: ANTA (2000).

Unit cost differences across education sectors should be used for further analysis rather than interpreted in isolation from other performance indicators such as outcomes and outputs (see chapters 2 and 3). Further, comparing the performance of education sectors requires a cross-sectoral approach to measuring and classifying educational participation and attainment, and such a system does not yet exist in Australia.

The Australian Bureau of Statistics has been partly addressing this issue by reviewing its Classification of Qualifications and developing an Australian Standard Classification of Education that covers all education sectors and can be used in both administrative systems and surveys. This classification is expected to be finalised by early 2000 and introduced into the Australian Bureau of Statistics statistical

collections from 2001. In addition, the development of a conceptual framework for education and training statistics is planned following the establishment of a National Centre for Education and Training Statistics.

**Table B.9 Education institution unit costs, 1998-99**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Government primary schools										
In-school cost per full time student										
	\$	5200	5295	5636	5284	5270	5850	5309	7808	5379
Difference from lowest cost State										
	%	<b>a</b>	1.8	8.3	1.6	1.3	12.5	2.0	50.1	3.4
Government secondary schools										
In-school cost per full time student										
	\$	7233	6514	6814	8143	7902	7156	7135	11667	7148
Difference from lowest cost State										
	%	11.1	<b>a</b>	4.6	25.1	21.3	9.8	9.5	79.1	9.7
Vocational education and training <sup>b, c</sup>										
Cost per adjusted annual curriculum hours										
	\$	16.43	10.75	15.08	13.25	14.8	18.29	17.35	23.33	14.32
Difference from lowest cost State										
	%	52.84	<b>a</b>	40.28	23.26	37.67	70.14	61.40	117.02	33.21

<sup>a</sup> Lowest cost State. <sup>b</sup> Vocational education and training data are based on 1999 calendar year. <sup>c</sup> Includes payroll tax estimates for the ACT.

Sources: Chapters 3 and 4.

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## 3 School education

This chapter focuses on the performance — efficiency, effectiveness, access and equity — of government funded school education in Australia. While no direct comparison is made between government and non-government schools, performance indicators are reported for:

- government primary and secondary schools; and
- school education as a whole (government and non-government primary and secondary schools).

This year, the chapter has been enhanced to include:

- a discussion of recent policy developments, including developments in performance reporting;
- new data on nationally comparable learning outcomes for year 3 reading benchmark results;
- improved reporting on the performance of Indigenous students; and
- a revision of the framework of performance indicators for government schools, consistent with the *Adelaide Declaration by Education Ministers on the National Goals for Schooling in the 21st Century*. Nationally comparable performance indicators, along the lines of the revised performance indicator framework, are under development.

Following a discussion of the profile of school education in Australia in section 3.1, recent policy developments are discussed in section 3.2. These two sections provide the context for the assessment of performance indicators in the subsequent sections. Section 3.3 presents an overview of the existing framework of performance indicators for all schools. Section 3.4 describes the available information, while section 3.5 discusses future directions in the development and reporting of performance indicators for school education. The chapter concludes with jurisdictions' comments in section 3.6 and definitions of terms in section 3.7.

### *Supporting tables*

Supporting tables for chapter 3 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as

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\Publications\Reports\2001\Attach3A.xls and in Adobe PDF format as \Publications\Reports\2001\Attach3A.pdf.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 3A.3 is table 3 in the electronic files). They may be subject to revision. The most up-to-date versions of these files can be found on the Review's web page ([www.pc.gov.au/service/gsp/2001/](http://www.pc.gov.au/service/gsp/2001/)). Users without Internet access can contact the Secretariat to obtain up-to-date versions of these tables (see details inside the front cover of the Report).

## **3.1 Profile of school education**

### **Service overview**

Schools are the institutions within which organised school education takes place. Schools are differentiated by the type and level of education they provide, their ownership and management, and the characteristics of their student body.

The formal statistical definition of schools used for this chapter is:

... an establishment that satisfies all of the following criteria:

- its major activity is the provision of full time day primary, secondary or special school education or correspondence/distance education;
- it is headed by a principal (or equivalent) responsible for its internal operation; and
- it is possible for students to enrol and be active in a course of study for a minimum of four weeks (excluding breaks for school vacations) (ABS 1999).

Student performance can be affected by factors that may be partly or totally outside the influence of the school, including student commitment, family income and commitment to education, proximity of the school to other educational facilities and resources available to the school. It is beyond the scope of this Report to consider the effect of all factors, but this section provides some contextual background for the performance information presented later in the chapter. Further information is provided in appendix A.

### **Roles and responsibilities**

The State and Territory governments have constitutional responsibility to ensure the delivery of schooling to all children of school age. They determine curricula, regulate school activities and provide most of the funding. State and Territory

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governments are directly responsible for the administration of government schools and they provide the majority of government expenditure in this area. Non-government schools operate under conditions determined by State and Territory government registration authorities and receive significant Commonwealth, State and Territory government funding.

The Commonwealth funds government and non-government schools through specific purpose payments. The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) — comprising Commonwealth, State and Territory education ministers — is the principal forum for developing national priorities and strategies for schooling.

## **Funding**

State and Territory government expenditure on school education in 1998-99 was \$14 billion (table 3A.9) — the second largest area of expenditure after health<sup>1</sup> (\$17 billion). Government schools account for most of this expenditure, but State and Territory governments contribute to the funding of non-government schools and provide services used by both government and non-government schools. The Commonwealth Government also provides funding to both government schools and non-government schools.

Commonwealth, State and Territory governments spent \$14.4 billion on government schools in 1998-99, with the Commonwealth share totalling \$1.5 billion. In the same year, the Commonwealth Government spent \$2.5 billion on non-government schools, while expenditure by States and Territories was estimated at \$1.1 billion. Total government expenditure per full time student in government schools ranged from approximately \$6084 in Victoria to \$10 176 in the NT in 1998-99, while estimated government expenditure per full time student in all schools ranged from approximately \$5186 in Victoria to \$9134 in the NT (table 3A.9). Many factors may influence expenditure per full time student, as outlined in box 3.2.

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<sup>1</sup> Including expenditure on public hospitals, general practice, some breast screening services and community residential care for mental health services.

## Size and scope

### Structure

The structure of school education varies among States and Territories. These differences can influence the interpretation of data presented under common classifications. Formal schooling begins with six to seven years of primary school education followed by five to six years of secondary school education, depending on the State or Territory (figure 3.1).

All States and Territories divide school education into compulsory and non-compulsory components based on age not grade. School education is compulsory in all States and Territories for people between 6 and 15 years of age (and to 16 years of age in Tasmania).

**Figure 3.1 Structure of primary and secondary schooling, 1999**

<i>Level</i>	<i>NSW, Vic, Tas, ACT</i>	<i>SA, NT</i>	<i>WA, Qld</i>
Year 12	SECONDARY	SECONDARY	SECONDARY
Year 11			
Year 10			
Year 9			
Year 8			
Year 7	PRIMARY	PRIMARY	PRIMARY
Year 6			
Year 5			
Year 4			
Year 3			
Year 2			
Year 1			
Pre-year 1 <sup>a</sup>			

<sup>a</sup> Pre-year 1 is called 'kindergarten' in NSW and the ACT, 'preparatory' in Victoria and Tasmania, 'reception' in SA and 'transition' in the NT. Pre-year 1 is not included in the pattern of study in Queensland. Pre-year 1 is called 'pre-primary' in WA (where students attended on a four day week basis in 1999). From 2002, pre-primary students in WA will be attending five days a week, at which time students and staff will be included within the scope of MCEETYA's National School Statistics Collection.

Source: ABS (2000).

## Schools

At the beginning of August 1999, there were 9590 schools in Australia. The majority of schools were:

- government owned and managed — 73 per cent; and
- exclusively primary schools — 70 per cent (table 3.1).

**Table 3.1 Summary of school characteristics, August 1999**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
All schools (no.)									
Primary	2 186	1 684	1 228	663	577	172	94	106	6 710
Combined <sup>a</sup>	247	170	182	172	123	53	11	54	1 012
Secondary	539	372	258	137	101	46	29	17	1 499
Special schools <sup>b</sup>	115	93	52	66	23	10	5	5	369
<b>Total</b>	<b>3 087</b>	<b>2 319</b>	<b>1 720</b>	<b>1 038</b>	<b>824</b>	<b>281</b>	<b>139</b>	<b>182</b>	<b>9 590</b>
Proportion of government schools (%)									
Primary	75.3	73.6	80.7	77.2	79.7	81.4	72.3	85.8	76.7
Combined <sup>a</sup>	26.3	26.5	41.2	53.5	58.5	50.9	18.2	79.6	41.6
Secondary	72.2	71.8	71.3	70.8	75.2	87.0	79.3	70.6	72.6
Special schools <sup>b</sup>	70.4	84.9	96.2	97.0	87.0	90.0	80.0	100.0	84.6
All schools	70.7	70.3	75.6	73.7	76.2	76.9	69.8	83.0	72.7
Proportion of primary schools (%) <sup>c</sup>									
Government	75.5	76.0	76.2	66.9	73.2	64.8	70.1	60.3	73.9
Non-government	59.6	64.5	56.4	55.3	59.7	49.2	61.9	48.4	59.6
All schools	70.8	72.6	71.4	63.9	70.0	61.2	67.6	58.2	70.0

<sup>a</sup> Combined primary and secondary schools. <sup>b</sup> Special schools provide special instruction for students with a physical or mental disability and students with social problems. Regular schools are increasingly also offering special education programs. <sup>c</sup> Excludes combined primary and secondary schools.

Source: ABS (2000).

Settlement patterns (population dispersion), the age distribution of the population, and educational policy influence the distribution of schools by size and level in different jurisdictions. For school education as a whole, the NT and Queensland had the highest proportions of very small primary schools (those having 20 or fewer students) with 14 per cent and 10 per cent respectively; the NT and SA had the highest proportions of very small secondary schools with 6 per cent and 2 per cent respectively. At least 50 per cent of all secondary schools in all jurisdictions (except SA, Tasmania and the NT) were larger schools enrolling over 600 students (table 3A.14). A breakdown of government primary and secondary schools by size is reported in table 3A.14.

## Student body

There were 3.2 million full time students enrolled in primary and secondary schools in August 1999. The proportion of students enrolled in government schools was greater in primary schools (73 per cent) than in secondary schools (65 per cent) (table 3.2). Differences in schooling structures influence the interpretation of these enrolment patterns. Primary school education in SA and the NT, for example, includes an additional year of schooling. As a result, these jurisdictions would be expected to have a higher proportion of students enrolled in primary school education than that of other States and Territories. The proportion of students in government schools was lowest in Victoria and the ACT (table 3.2).

**Table 3.2 Full time student enrolments, August 1999**

	NSW	Vic	Qld <sup>a</sup>	WA	SA	Tas	ACT	NT	Aust
Total full time student enrolments at level of education ('000)									
Primary schools	623.6	447.0	359.0	191.4	159.6	46.8	32.3	25.6	1 885.4
Secondary schools	466.0	347.5	235.6	125.2	90.6	37.0	28.3	11.1	1 341.3
All schools	1 089.6	794.6	594.6	316.6	250.2	83.8	60.5	36.8	3 226.7
Proportion of full time students who were enrolled in government schools (%)									
Primary schools	73.0	69.4	76.2	75.6	73.1	77.6	67.0	80.5	73.1
Secondary schools	66.1	61.8	64.6	65.9	65.9	72.0	60.9	70.5	64.8
All schools	70.0	66.1	71.6	71.8	70.5	75.1	64.1	77.5	69.7
Proportion of full time students in all schools who were female (%)									
Primary schools	48.7	48.6	48.7	48.6	48.5	48.6	49.0	48.4	48.7
Secondary schools	49.8	50.1	49.7	49.7	50.0	50.3	49.0	50.2	49.9
All schools	49.2	49.3	49.1	49.0	49.1	49.3	49.0	49.0	49.2
Proportion of full time students who were enrolled in primary education (%)									
Government schools	59.6	59.1	64.3	63.7	66.2	57.7	55.7	72.4	61.3
Non-government schools	51.7	50.7	50.5	52.2	58.2	50.2	49.1	60.4	51.7
All schools	57.2	56.3	60.4	60.5	63.8	55.8	53.3	69.7	58.4

<sup>a</sup> Students enrolled in special schools are included in this table with special school students of primary age being included in the primary figures and those of secondary age being included in the secondary figures.

Source: ABS (2000).

Total full time student enrolments in schools in Australia have been relatively stable over the past five years — up by about 0.9 per cent each year between August 1995 and August 1999. Enrolments in individual jurisdictions have grown at different rates, with enrolments in Tasmania and the ACT declining in absolute terms for most categories (table 3A.4).

The proportion of students enrolled in non-government schools has increased in all States and Territories except Tasmania. Total non-government enrolments expanded annually by about 2.1 per cent each year between August 1995 and August 1999 — nearly five times greater than the average annual growth rate in government

schools. However, the expansion of enrolments in non-government schools is from a lower base than that for government schools.

Between August 1995 and August 1999, total enrolments increased by 117 313 students, of whom 77 492 were in non-government schools. In all jurisdictions, the proportion of students in government schools was higher in primary than secondary schools (table 3A.4).

The Australian Bureau of Statistics publishes data on part time students at only the secondary level. Part time courses are available to secondary students, including mature age students attending colleges and those studying year 11 or year 12 short courses (lasting 5–22 weeks). The proportion of secondary school students who were part time also varied across jurisdictions. South Australia, Tasmania and the NT had the highest proportion of part time government secondary school students in 1999 (table 3.3).

**Table 3.3 Part time secondary school students in government schools<sup>a</sup>**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Number of part time secondary school students in government schools <sup>b</sup>										
1995	no.	1 207	1 708	5 499	5 007	6 094	2 485	33	1 339	23 372
1997	no.	2 204	2 185	6 911	4 447	6 054	2 824	3	663	25 291
1999	no.	3 323	2 495	4 063	4 199	6 545	3 203	6	1 032	24 866
Proportion of part time secondary school students in government schools										
1995	%	0.4	0.8	3.8	6.1	9.8	8.4	0.2	15.4	2.7
1997	%	0.7	1.0	4.5	5.2	9.5	9.4	–	7.7	2.8
1999	%	1.1	1.1	2.6	4.8	9.9	10.7	–	11.6	2.8

<sup>a</sup> Absolute number of part time secondary students, not full time equivalent and proportion (part time) students as a proportion of all full time and part time secondary students (absolute numbers) in government schools). <sup>b</sup> Part time figures vary considerably among jurisdictions because each education authority has different policy and organisational arrangements. The number of part time courses available also varies considerably among jurisdictions. – Nil or rounded to zero.

Source: ABS (2000).

### *Special needs groups*

Certain groups of students have been identified as having special needs in education. These special needs groups include:

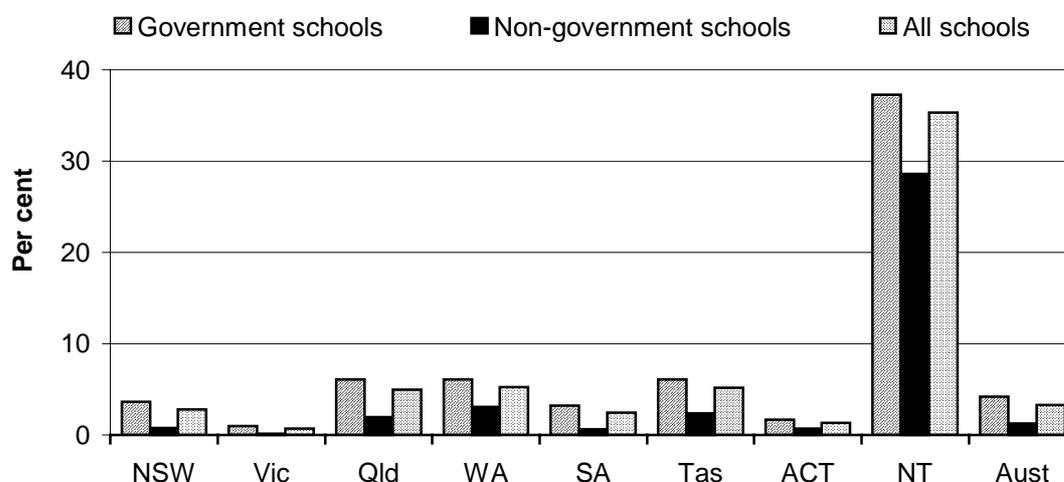
- students from families of low socioeconomic status;
- students who are geographically isolated;
- students from language backgrounds other than English (LBOTE);
- Indigenous students; and
- students with a disability.

In education, it is difficult to compare the proportions and the absolute numbers of students with special needs because some definitions of ‘special needs’ differ across States and Territories (see section 3.7 for examples). This chapter reports on the proportion (and the absolute number) of Indigenous students, the proportion of LBOTE students and students with disabilities.

### *Indigenous students*

Reflecting its population profile, the NT had the highest proportion of Indigenous students in 1999 (35.3 per cent). Other jurisdictions with relatively high proportions of Indigenous students were WA, Queensland and Tasmania (figure 3.2). In absolute terms, NSW had the largest number of Indigenous students (30 756), accounting for 28.8 per cent of all Indigenous students enrolled in Australian schools. Table 3A.10 provides information on Indigenous enrolments in other jurisdictions.

**Figure 3.2 Indigenous full time students, 1999**



Source: table 3A.10.

### *Students from language backgrounds other than English*

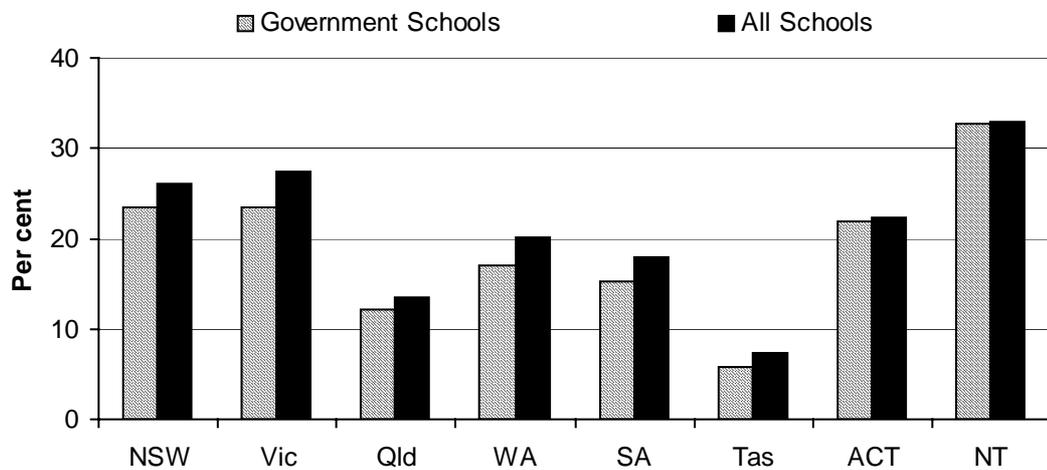
Using data drawn from the Australian Bureau of Statistics 1996 Census of Population and Housing (ABS 1996), the Commonwealth Government calculated the proportion of LBOTE students in each jurisdiction as part of the process of determining Commonwealth Literacy and Numeracy Program funding allocations. As data are based on the five yearly Population Census (latest in 1996), they have not been updated from the 1999 Report. The data reported in this section are based on the Commonwealth’s definition of LBOTE students, which includes Indigenous

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non-English speakers (see section 3.7 for possible variations to this definition for other indicators).

Across school education as a whole, the NT had the highest proportion of LBOTE students (33 per cent) in 1996 (which may reflect the inclusion of Indigenous students whose home language is not English in the Commonwealth's definition of LBOTE students). NSW and Victoria also had relatively high proportions of LBOTE students, while Tasmania had the lowest proportion (7 per cent) (figure 3.3).

**Figure 3.3 Students from a language background other than English, 1996**



Source: table 3A.11.

## 3.2 Policy developments

### Indigenous students

Launched in March 2000 by the Prime Minister, the National Indigenous English Literacy and Numeracy Strategy is aimed at improving education outcomes for Indigenous people. This strategy builds on the National Literacy and Numeracy Plan endorsed by the Commonwealth, State and Territory education ministers in March 1997.

The strategy acknowledges that extra resourcing and teaching effort are required for Indigenous students to improve their learning outcomes, and it aims to address six key elements:

- lifting school attendance rates to national levels;

- 
- addressing hearing impairments and other barriers to learning;
  - providing preschool opportunities;
  - training and retaining good teachers in areas with significant Indigenous student populations;
  - ensuring teachers use the most effective, culturally appropriate teaching methods; and
  - increasing accountability and performance measurement for schools and teachers.

### **National performance reporting**

In July 1996, Commonwealth, State and Territory education ministers agreed to develop national benchmarks for use in reporting student literacy and numeracy achievement levels. In March 1997, the ministers agreed to the National Literacy and Numeracy Plan, which included the development of national benchmarks. They also agreed to nationally comparable reporting against these benchmarks.

Benchmarks in literacy for years 3 and 5 were approved by ministers in April 1998 and published in October 1998. During 2000, ministers approved the numeracy benchmarks for years 3, 5 and 7, and literacy benchmarks for year 7, and agreed that systems should report nationally comparable data against these benchmarks.

Ministers also made key decisions on national performance indicators in other priority areas. They approved national measures for the participation and attainment of 15–19 year olds and 20–24 year olds, and agreed that information provided through Australia's participation in the Organisation for Economic Cooperation and Development Programme for International Student Assessment should, for now, provide measures of student performance in science at the end of compulsory schooling. They also endorsed the standards for identifying students' sex and Indigenous status for the purposes of national reporting.

### **3.3 Framework of performance indicators**

This chapter provides comparable indicators on the effectiveness and efficiency of government expenditure for all schools in Australia. The chapter does not compare the performance of government and non-government schools.<sup>2</sup>

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<sup>2</sup> Some data are presented on sources of government funding for non-government schools. However, caution should be exercised when examining data on efficiency of government and non-government schools as only a part of the funding for non-government school comes from

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Governments own and operate government schools and have a direct interest in the efficiency and effectiveness of their operation. In addition, governments are committed to providing access to education for all students (box 3.1). The reporting framework for schools (figure 3.4) is consistent with government goals for the school system. All indicators are defined in section 3.7.

**Box 3.1 National goals for school education in Australia, 1999**

The Ministerial Council on Education, Employment, Training and Youth Affairs endorsed in April 1999 the following set of national goals for school education.

**Preamble**

Australia's future depends upon each citizen having the necessary knowledge, understanding, skills and values for a productive and rewarding life in an educated, just and open society. High quality schooling is central to achieving this vision.

This statement of national goals for schooling provides broad directions to guide schools and education authorities in securing these outcomes for students.

It acknowledges the capacity of all young people to learn, and the role of schooling in developing that capacity. It also acknowledges the role of parents as the first educators of their children and the central role of teachers in the learning process.

Schooling provides a foundation for young Australians' intellectual, physical, social, moral, spiritual and aesthetic development. By providing a supportive and nurturing environment, schooling contributes to the development of students' sense of self-worth, enthusiasm for learning and optimism for the future.

Governments set the public policies that foster the pursuit of excellence, enable a diverse range of educational choices and aspirations, safeguard the entitlement of all young people to high quality schooling, promote the economic use of public resources, and uphold the contribution of schooling to a socially cohesive and culturally rich society.

Common and agreed goals for schooling establish a foundation for action among State and Territory governments with their constitutional responsibility for schooling, the Commonwealth, non-government school authorities and all those who seek the best possible educational outcomes for young Australians, to improve the quality of schooling nationally.

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government. The Commonwealth Government provides on average 37 per cent of the non-government school sector's funding, with the schools sourcing 45 per cent of their funds from private fees and fundraising, and the remaining 18 per cent being provided by State and Territory governments.

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### Box 3.1 (continued)

The achievement of these common and agreed national goals entails a commitment to collaboration for the purposes of:

- further strengthening schools as learning communities where teachers, students and their families work in partnership with business, industry and the wider community
- enhancing the status and quality of the teaching profession
- continuing to develop curriculum and related systems of assessment, accreditation and credentialling that promote quality and are nationally recognised and valued
- increasing public confidence in school education through explicit and defensible standards that guide improvement in students' levels of educational achievement and through which the effectiveness, efficiency and equity of schooling can be measured and evaluated.

These national goals provide a basis for investment in schooling to enable all young people to engage effectively with an increasingly complex world. This world will be characterised by advances in information and communication technologies, population diversity arising from international mobility and migration, and complex environmental and social challenges.

The achievement of the national goals for schooling will assist young people to contribute to Australia's social, cultural and economic development in local and global contexts. Their achievement will also assist young people to develop a disposition towards learning throughout their lives so that they can exercise their rights and responsibilities as citizens of Australia.

#### Goals

#### **1. Schooling should develop fully the talents and capacities of all students. In particular, when students leave schools they should:**

- 1.1 have the capacity for, and skills in, analysis and problem solving and the ability to communicate ideas and information, to plan and organise activities and to collaborate with others.
- 1.2 have qualities of self-confidence, optimism, high self-esteem, and a commitment to personal excellence as a basis for their potential life roles as family, community and workforce members.
- 1.3 have the capacity to exercise judgment and responsibility in matters of morality, ethics and social justice, and the capacity to make sense of their world, to think about how things got to be the way they are, to make rational and informed decisions about their own lives and to accept responsibility for their own actions.
- 1.4 be active and informed citizens with an understanding and appreciation of Australia's system of government and civic life.

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**Box 3.1 (continued)**

1.5 have employment related skills and an understanding of the work environment, career options and pathways as a foundation for, and positive attitudes towards, vocational education and training, further education, employment and life-long learning.

1.6 be confident, creative and productive users of new technologies, particularly information and communication technologies, and understand the impact of those technologies on society.

1.7 have an understanding of, and concern for, stewardship of the natural environment, and the knowledge and skills to contribute to ecologically sustainable development.

1.8 have the knowledge, skills and attitudes necessary to establish and maintain a healthy lifestyle, and for the creative and satisfying use of leisure time.

**2. In terms of curriculum, students should have:**

2.1 attained high standards of knowledge, skills and understanding through a comprehensive and balanced curriculum in the compulsory years of schooling encompassing the agreed eight key learning areas:

- the arts
- English
- health and physical education
- languages other than English
- mathematics
- science
- studies of society and environment
- technology

and the interrelationships between them.

2.2 attained the skills of numeracy and English literacy, such that every student should be numerate, able to read, write, spell and communicate at an appropriate level.

2.3 participated in programs of vocational learning during the compulsory years and have had access to vocational education and training programs as part of their senior secondary studies.

2.4 participated in programs and activities which foster and develop enterprise skills, including those skills which will allow them maximum flexibility and adaptability in the future.

**3. Schooling should be socially just, so that:**

3.1 students' outcomes from schooling are free from the effects of negative forms of discrimination based on sex, language, culture and ethnicity, religion or disability; and of differences arising from students' socioeconomic background or geographic location.

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**Box 3.1 (continued)**

- 3.2 the learning outcomes of educationally disadvantaged students improve and, over time, match those of other students.
- 3.3 Aboriginal and Torres Strait Islander students have equitable access to, and opportunities in, schooling so that their learning outcomes improve and, over time, match those of other students.
- 3.4 all students understand and acknowledge the value of Aboriginal and Torres Strait Islander cultures to Australian society and possess the knowledge, skills and understanding to contribute to, and benefit from, reconciliation between Indigenous and non-Indigenous Australians.
- 3.5 all students understand and acknowledge the value of cultural and linguistic diversity, and possess the knowledge, skills and understanding to contribute to, and benefit from, such diversity in the Australian community and internationally.
- 3.6 all students have access to the high quality education necessary to enable the completion of school education to year 12 or its vocational equivalent and that provides clear and recognised pathways to employment and further education and training.

*Source:* MCEETYA (1999b).

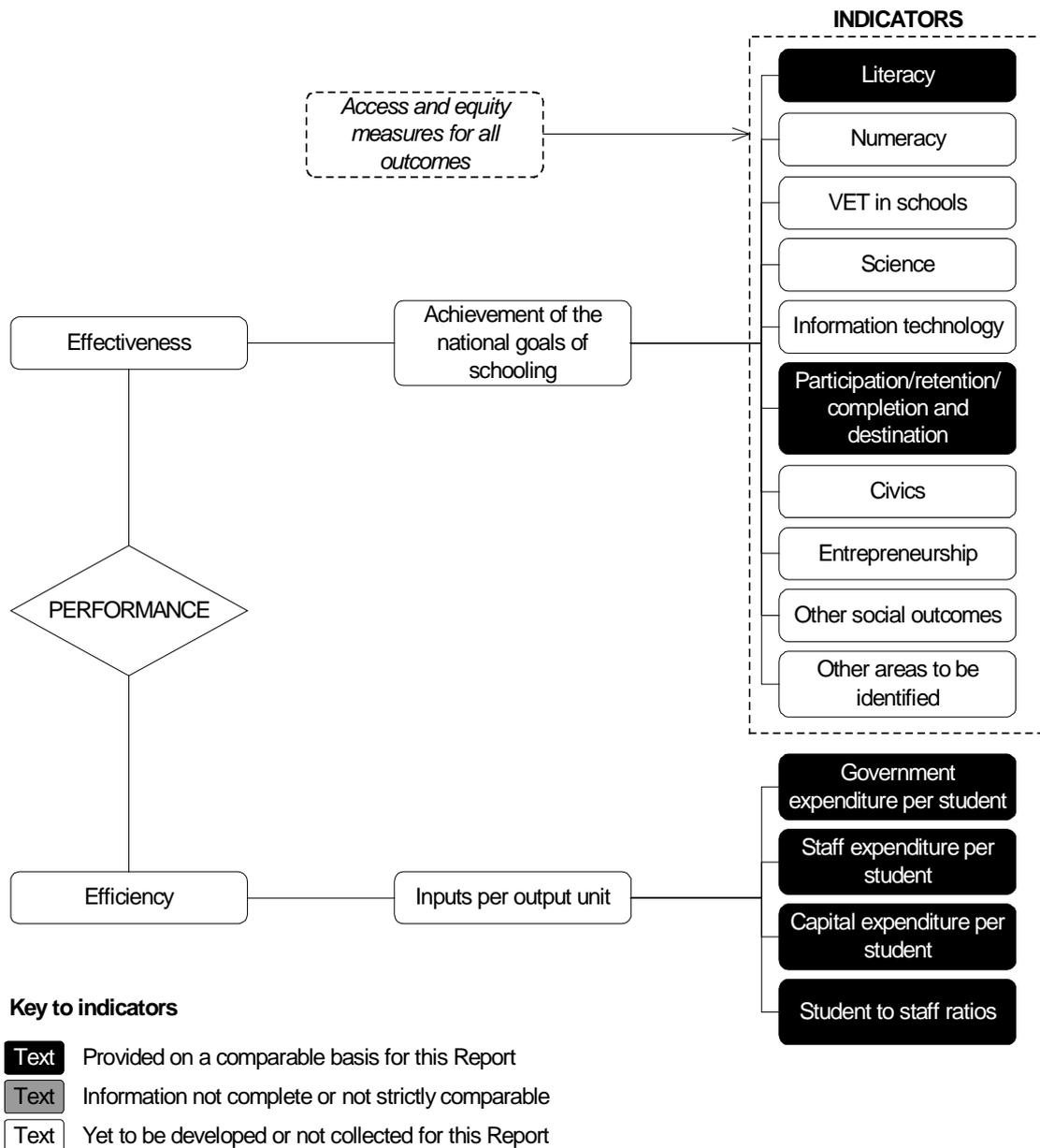
### **3.4 Key performance indicator results**

Different delivery contexts and locations affect the effectiveness and efficiency of school education services. Appendix A contains detailed statistics and short profiles on each State and Territory, which may help in interpreting the performance indicators presented in this chapter. A framework for performance indicators is at figure 3.4. This section reports on what jurisdictions currently collect and assess in terms of learning outcomes, while section 3.5 discusses future directions in reporting.

#### **Effectiveness**

Access and equity objectives of school education can be assessed by comparing outcomes for special needs groups to those for the mainstream student population through indicators such as completion rates, apparent retention rates, age participation rates and learning outcomes. Outcomes are compared for special needs groups for available indicators where possible.

Figure 3.4 Performance indicators for all schools



### Literacy

A literacy indicator is the proportion of students who reach a benchmark standard. A discussion of the development of benchmarks can be found in section 3.2. Table 3.4 shows the percentage of assessed year 3 students who achieved the reading benchmark in 1999 reported by gender, Indigenous status and LBOTE status. (For further information and caveats to table 3.4, see tables 3A.20, 3A.21 and 3A.22.)

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### *State and Territory-specific learning outcomes*

The reporting of test result data by jurisdictions provides some insight into how States and Territories measure learning outcomes, and may help an understanding of trends within jurisdictions over time. Previous Reports have included graphs showing jurisdiction-specific learning outcomes (mainly in literacy and numeracy). However, the general non-comparability of data across States and Territories reduces the usefulness of this information.

The 1999 Report included a table showing the jurisdiction-specific learning outcomes in the key learning areas, and the school years at which jurisdictions assessed students' performance. Jurisdictions are in the process of aligning jurisdiction-specific testing with MCEETYA's plans for developing benchmarks for nationally comparable learning outcomes for a range of indicators. As a result, some jurisdictions have stopped collecting the type of jurisdiction-specific learning outcomes data published in previous Reports.

Where updated information on jurisdiction-specific learning outcomes was provided, this has been reported in attachment 3A. It is envisaged that jurisdiction-specific learning outcomes will not be published in future if nationally comparable data are available.

### *Learning outcomes for special needs groups*

Nationally comparable data on year 3 literacy outcomes for Indigenous students are available for the 2001 Report (table 3.4). Learning outcomes for Indigenous students and LBOTE students are also reported for Victoria and Queensland in tables 3A.42–3A.45 and 3A.56.

**Table 3.4 Proportion of year 3 students who achieved the reading benchmark, 1999<sup>a</sup>**

<i>State/Territory</i>	<i>All students</i>	<i>Male students</i>	<i>Female students</i>	<i>Indigenous students<sup>d</sup></i>	<i>LBOTE students<sup>d</sup></i>
<i>1. Average age<sup>b</sup></i>					
<i>2. Years of schooling<sup>c</sup></i>					
NSW	%	%	%	%	%
1. 8 yrs, 9 mths	91.2	89.6	92.7	77.8	91.3
2. 3 yrs, 7 mths	± 2.2	± 2.6	± 1.8	± 4.8	± 2.3
Victoria	86.2	82.6	89.9	68.0	81.1
1. 8 yrs, 11 mths	± 2.2	± 2.9	± 2.0	± 5.4	± 3.0
2. 3 yrs, 7 mths					
Queensland <sup>e</sup>	82.4	79.9	86.3	66.7	81.8
1. 7 yrs 9 mths	± 2.0	± 2.3	± 2.4	± 3.7	± 2.8
2. 2 yrs, 8 mths					
WA	87.9	85.5	90.4	54.4	85.2
1. 7 yrs, 7 mths	± 1.9	± 2.2	± 1.6	± 3.9	± 2.1
2. 3 yrs, 7 mths					
SA <sup>e</sup>	83.2	81.5	84.9	64.0	na
1. 8 yrs, 6 mths	± 3.1	± 3.4	± 2.7	± 6.6	na
2. 3 yrs, 3 mths					
Tasmania	85.9	82.0	89.9	76.3	71.1
1. 9 yrs, 0 mths	± 2.4	± 2.8	± 2.0	± 3.2	± 3.6
2. 3 yrs, 7 mths					
ACT <sup>e</sup>	89.9	87.6	92.2	67.2	na
1. 8 yrs, 9 mths	± 1.5	± 2.0	± 1.1	± 1.1	na
2. 3 yrs, 6 mths					
NT	72.3	69.8	74.9	29.7	18.2
1. 8yrs, 8mths	± 1.6	± 1.7	± 1.2	± 1.6	± 0.7
2. 3yrs, 3mths					
Australia	86.9	84.9	89.7	66.1	na

<sup>a</sup> The achievement percentages reported in this table include 95 per cent confidence intervals (for example, 80 per cent ± 2.7 per cent). Results are population estimates for year 3 students in government and non-government schools (except in SA and the ACT where no non-government schools were assessed) who were assessed (that is, students who sat the tests and students who were formally exempted). In other jurisdictions, between 17.2 and 29 per cent of the students tested were from non-government schools. Details of test populations in all States and Territories are provided in table 3A.21. <sup>b</sup> The typical average age of students at the time of testing (expressed in years and months). <sup>c</sup> The typical average time students had spent in schooling at the time of testing (expressed in years and months). <sup>d</sup> The methods used to identify Indigenous students and LBOTE students varied across jurisdictions. Definitions can be found at section 3.7. <sup>e</sup> The student sample sizes exceeded 80 per cent in all States and Territories except SA (68 per cent), the ACT (61.8 per cent) and Queensland, which uses a rigorous, scientifically designed sampling approach where 8.8 per cent of year 3 students undertook the test. **na** Not available.

Source: MCEETYA (2000b) (see [www.curriculum.edu.au/mctyapdf/3648-report.pdf](http://www.curriculum.edu.au/mctyapdf/3648-report.pdf) for the full version of this report).

Table 3.5 identifies jurisdictions that monitor student performance in literacy and numeracy for five special needs groups, along with the school years in which these assessments are undertaken. The table also indicates which jurisdictions collect information on year 10 and year 12 achievement levels of students in the special

needs groups. At the year 10 level, information collected may include assessments of these students in key learning areas such as mathematics and English, and the proportion of students who achieved certificates at this junior secondary level. At the year 12 level, information collected may include the proportion of students in these groups who have achieved academic results that qualify them for entry to higher education.

**Table 3.5 School years by learning outcomes against which the performance of students in special needs groups is assessed, 1999**

	NSW <sup>a</sup>	Vic	Qld <sup>b</sup>	WA	SA	Tas <sup>c</sup>	ACT	NT <sup>d</sup>
<b>Literacy</b>								
Indigenous	3, 5, 7	3, 5	2, 3, 5, 7	3, 5, 7, 10	3, 5	3, 5, 7	3, 5, 7, 9	1, 3, 5
LBOTE	3, 5, 7	3, 5	2, 3, 5, 7	3, 5, 7, 10	3, 5	3, 5, 7	3, 5, 7, 9	3, 5
Low socioeconomic status	3, 5, 7	3, 5	2, 3, 5, 7		3, 5	3, 5, 7		
Remote	3, 5, 7	3, 5	2, 3, 5, 7		3, 5	3, 5, 7		3, 5
With a disability <sup>e</sup>			2, 3, 5, 7		3, 5	3, 5, 7		
<b>Numeracy</b>								
Indigenous	3, 5	3, 5	2, 3, 5, 7	3, 5, 7, 10	3, 5	3, 5, 7	3, 5, 7, 9	1, 3, 5
LBOTE	3, 5	3, 5	2, 3, 5, 7	3, 5, 7, 10	3, 5	3, 5, 7	3, 5, 7, 9	3, 5
Low socioeconomic status	3, 5	3, 5	2, 3, 5, 7		3, 5	3, 5, 7		
Remote	3, 5	3, 5	2, 3, 5, 7		3, 5	3, 5, 7		3, 5
With a disability			2, 3, 5, 7		3, 5	3, 5, 7		
<b>Year 10 learning outcomes</b>								
Indigenous	Yes		Yes	Yes		Yes		Yes
LBOTE	Yes		Yes	Yes				
Low socioeconomic status	Yes		Yes					
Remote	Yes		Yes					Yes
With a disability			Yes					Yes
<b>Year 12 learning outcomes</b>								
Indigenous	Yes	Yes	Yes		Yes	Yes		Yes
LBOTE	Yes	Yes	Yes		Yes	Yes	Yes	
Low socioeconomic status	Yes	Yes	Yes		Yes			
Remote	Yes	Yes	Yes		Yes			
With a disability			Yes		Yes			Yes

<sup>a</sup> Data are collected on Indigenous, LBOTE and low socioeconomic student participation in the Reading Recovery Program. In NSW year 7 numeracy tests were trialed in 2000 for introduction in 2001. <sup>b</sup> Data are collected on the proportion of Indigenous students in the Reading Recovery Program. <sup>c</sup> Testing for years 3, 5, and 7 is undertaken biennially. Testing for year 9 is under review. <sup>d</sup> Data are collected on the number of students with disabilities who received the Statement of Educational Achievement and its post-compulsory certificates. <sup>e</sup> Includes students with intellectual and/or physical disability.

Source: MCEETYA (2000a) and State and Territory education departments (unpublished).

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Queensland, SA and Tasmania all monitor literacy and numeracy outcomes for five special needs groups (Indigenous students, LBOTE students, students of low socioeconomic status, geographically isolated students and students with a disability). NSW and Victoria report performance information for all groups except students with a disability. For selected groups, NSW, Queensland, WA, Tasmania and the NT have performance indicators at the year 10 level, while NSW, SA, Tasmania, the ACT and the NT have some performance indicators at the year 12 level.

### *Participation, retention, completion and school leaver destination*

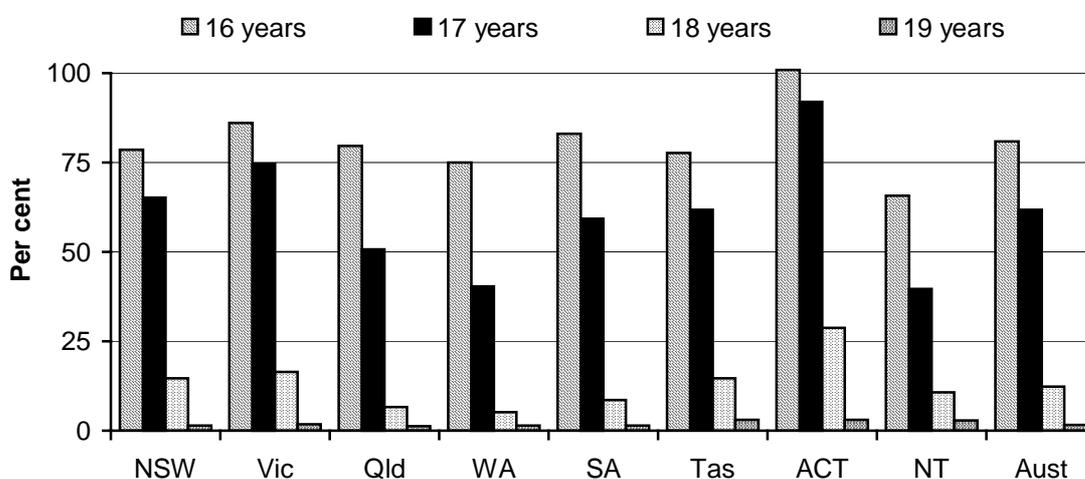
#### *Participation rate*

The participation rate of 15–19 year olds (for whom school attendance is no longer compulsory) measures the number of full time school students aged 15–19, as a proportion of the estimated resident population of the same age. Care should be exercised in interpreting participation rates in school education because rates are influenced by differences in year structures across jurisdictions and the interaction between schools and other education and training institutions. Further, the participation rates are influenced by differences in age/grade structures and the delivery of post-compulsory education and training options across the jurisdictions. Participation rates in the ACT in 1999, as in the past, were higher than those in other jurisdictions for all ages (exceeding 100 per cent for 16 year olds). This is a result of the enrolment in the ACT of NSW residents from surrounding areas.

Nationally, 50 per cent of 15–19 year olds were enrolled in schools in 1999. Actual participation rates varied by jurisdiction, age and gender. For example:

- the ACT had the highest overall participation rate of 15–19 year olds (63.0 per cent) followed by Victoria (54.3 per cent). The NT had the lowest overall participation rate (40.4 per cent);
- participation rates for females were typically 2–3 percentage points higher than those for males in all jurisdictions; and
- participation rates declined significantly as students exceeded the maximum compulsory school age (16 years for Tasmania and 15 years for other jurisdictions) (figure 3.5).

Figure 3.5 **School participation rates by age of students, all schools, August 1999<sup>a, b, c</sup>**



<sup>a</sup> Recognises the influence of participation in other forms of education and training, help interpretation of participation in schools, apparent retention and completion data. <sup>b</sup> Proportion of the population who were not of compulsory school age but were enrolled as full time students in August 1998. <sup>c</sup> School is compulsory for 16 year olds in Tasmania.

Source: table 3A.16.

### *Apparent retention rates*

The apparent retention rate is the percentage of full time students who continued to year 12 in 1999 from respective cohort groups at the commencement of their secondary schooling. Students commenced secondary schooling at year 7 in NSW, Victoria, Tasmania and the ACT, and in year 8 in Queensland, SA, WA and the NT.

Apparent retention rates are useful for monitoring student progression to the final year of secondary school but they are subject to many influences, including student perceptions of the benefits of schooling, the availability of employment and further educational opportunities as alternatives, and population movements. The data reported refer to only full time students, and do not account for students who are studying part time. The effect of this exclusion varies across jurisdictions (see table 3.3 for the proportions of part time students in each jurisdiction).

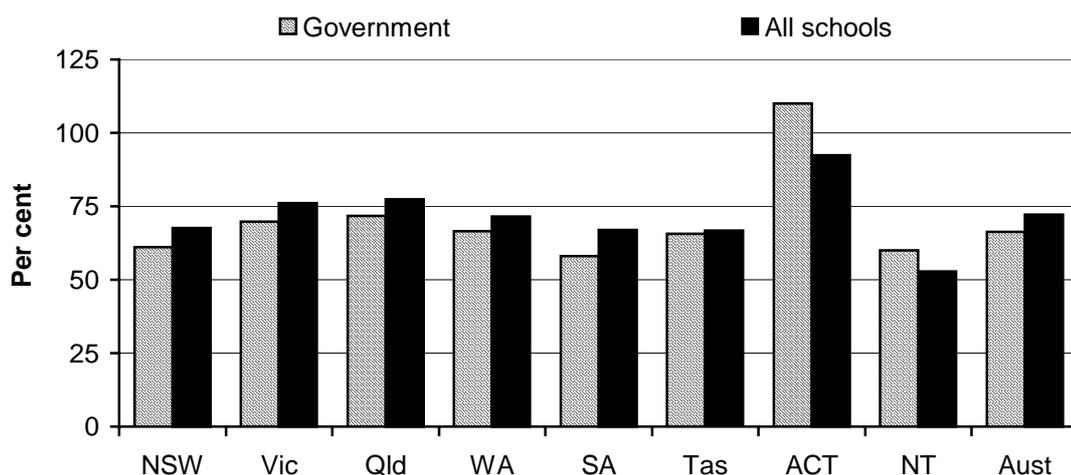
Care should be taken in interpreting apparent retention rates because a range of factors affect the calculation of the national rates — for example, students repeating a year of education and the effect of immigration and other net changes to the school population (such as the enrolment of full fee-paying overseas students). No adjustments are made for these effects. At the jurisdictional level, other factors affect apparent retention rates — for example, enrolment policies (which contribute

to different age/grade structures among jurisdictions), intersector transfers (between government and non-government schools), interstate movements of students, and varying enrolment patterns in schools/training and further education across jurisdictions. For these reasons, variations in apparent retention rates over time within jurisdictions may be more useful than comparisons across jurisdictions.

The Australian Bureau of Statistics publishes two separate measures of apparent retention rates: the first indicates student progression from years 7 and 8 to year 12, while the second indicates student progression from year 10 to year 12. Although both measures are presented in this chapter, apparent retention rates from year 10 to year 12 are the most stable, because the effect of factors such as inter-sector transfers and interstate movement are likely to have a greater influence from years 7 and 8 to year 10.

For school education as a whole, apparent retention rates to year 12 in 1999 ranged from 53 per cent in the NT to 93 per cent in the ACT. Nationally, 79 per cent of females continued to year 12, compared with 66 per cent of males. The apparent retention rates for government schools ranged from 58 per cent in SA (compared with 67 per cent for all schools) to 110 per cent in the ACT (compared with 93 per cent for all schools) (figure 3.6). One reason for the ACT rate for

Figure 3.6 **Apparent retention rates of full-time secondary students to year 12, 1999<sup>a, b</sup>**



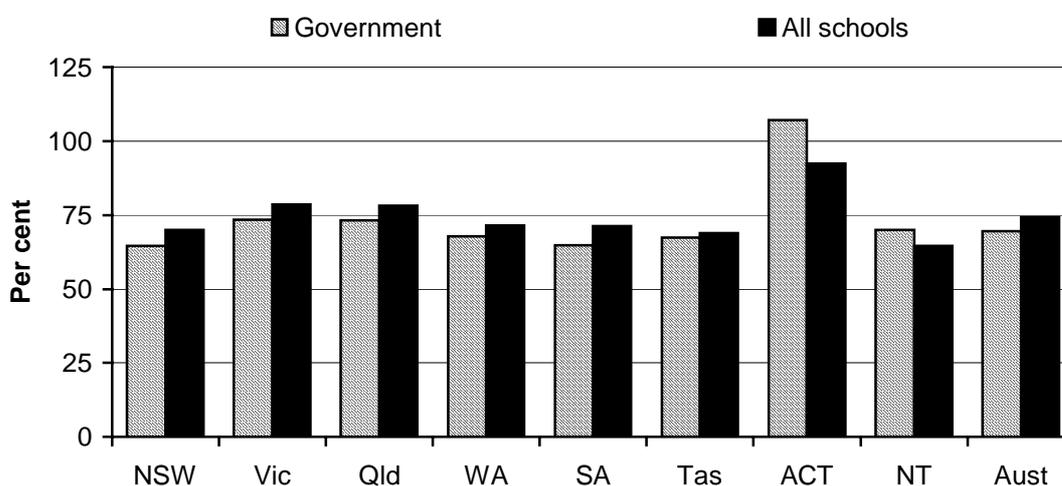
<sup>a</sup> To help understanding of participation in schools, and apparent retention and completion data. Recognises the role played by participation in all forms of education and training. <sup>b</sup> Retention rates can exceed 100 per cent because student transfers between government and non-government schools occurred after the base year.

Source: table 3A.17.

government schools exceeding 100 per cent is that a number of non-government schools do not enrol students beyond year 10 and students need to change schools to continue to years 11 and 12. This has the effect of reducing the rate for non-government schools and increasing the rate for government schools.

Apparent retention rates from year 10 to year 12 ranged from 65 per cent in the NT to 93 per cent in the ACT in all schools in 1999. The apparent retention rates for government schools ranged from 65 per cent in NSW and SA (compared with 70 per cent and 71 per cent respectively for all schools) to 107 per cent in the ACT (compared with 92.5 per cent for all schools) (figure 3.7).

Figure 3.7 **Apparent retention rates of full time secondary students from year 10 to year 12, 1999<sup>a, b</sup>**



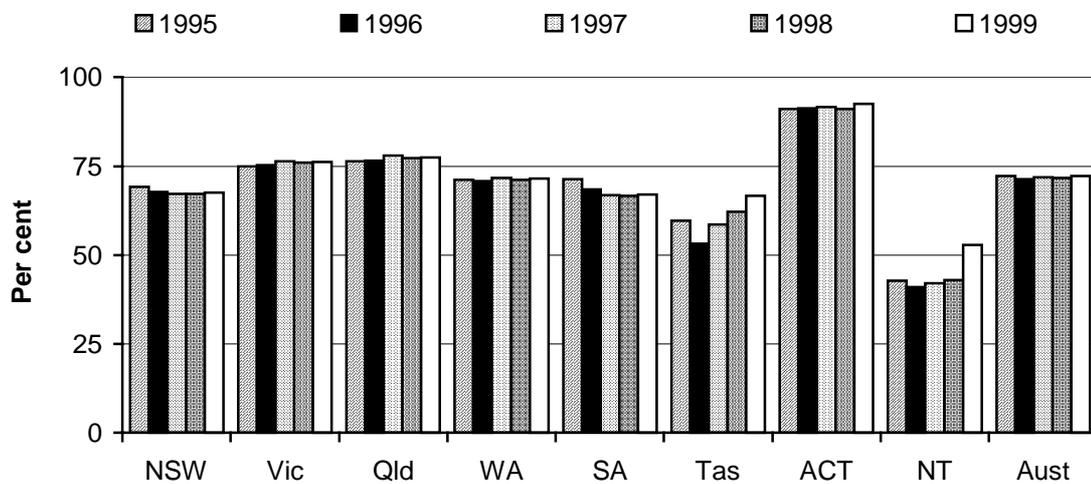
<sup>a</sup> To help an understanding of participation in schools and of apparent retention and completion data. Recognises the role played by participation in all forms of education and training. <sup>b</sup> Retention rates can exceed 100 per cent because student transfers between government and non-government schools occurred after the base year.

Sources: table 3A.18.

Between 1995 and 1999, apparent retention rates to year 12 in all schools increased in Tasmania and the NT, declined in NSW and SA, and remained fairly steady in all other jurisdictions (figure 3.8).

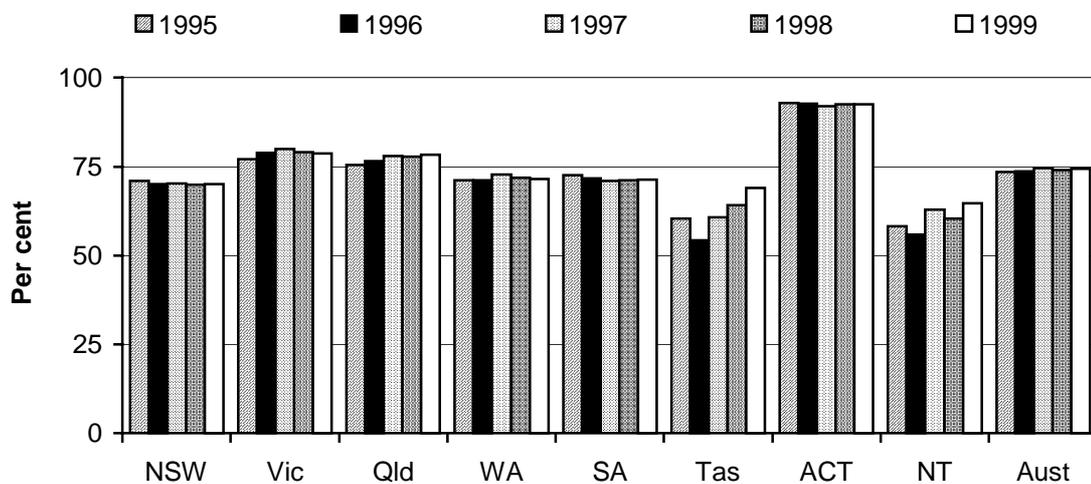
A similar trend was exhibited for apparent retention rates from year 10 to year 12 in all schools between 1995 and 1999 (figure 3.9).

**Figure 3.8 Apparent retention rates of full time secondary students to year 12, all schools**



Sources: table 3A.17 and ABS (2000b).

**Figure 3.9 Apparent retention rates of full time secondary students to from year 10 to year 12, all schools**



Sources: table 3A.18 and ABS (2000b).

### *Completion of secondary schooling*

The Commonwealth Government has developed a method for estimating the proportion of young Australians who complete year 12, disaggregated by locality, socioeconomic background and gender. Completion rates are estimated by calculating the number of students who obtain a year 12 certificate expressed as a percentage of the potential year 12 population. Completion rates are calculated on a

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different basis from retention rates and participation rates reported elsewhere, so they are not directly comparable.

The Commonwealth uses the completion rates in the absence of participation or retention data by socioeconomic background or geographic location. Completion rates are primarily used as indicators of trends. Small changes in population or completions can affect rates quite significantly, particularly for smaller States and the Territories. Also, there are variations in assessment, reporting and certification methods for year 12 across States and Territories. Given these differences, comparisons among jurisdictions need to be made with care.

The method developed by the former Department of Primary Industry and Energy is used to determine geographic isolation. This method provides for seven categories grouped into four locations (in table 3.9 — that is, capital city, other metropolitan, rural centres, and other rural and remote areas — and three locations in table 3.8 — urban, rural and remote. Urban (a combination of capital city and other metropolitan) includes Darwin, Townsville/Thuringowa and Queanbeyan. There are no rural or remote areas in the ACT and no rural centres in the NT.

Socioeconomic status has been determined according to the Index of Relative Socioeconomic Disadvantage developed by the Australian Bureau of Statistics. Low socioeconomic status is the average of the three lowest deciles and high socioeconomic status is the average of the top three deciles. The aggregation of all postcode locations into three categories — high, medium and low — means that there may be significant variation within the categories. Low deciles, for example, will include locations ranging from extreme disadvantage to moderate disadvantage.

Year 12 completion rates by socioeconomic background, location and gender are provided in tables 3.6, 3.7, 3.8 and 3.9. The data show there is a trend for urban students to have higher completion rates than those of non-urban students. Gender differences are also evident with the completion rates for females being consistently higher than those for males regardless of location or socioeconomic background. Further, the time series data reveal the gap between male and female completion rates has continued to grow.

Consistent with the lack of movement in the retention rate to year 12, table 3.6 shows little difference in total completion rates between 1994 and 1999. The completion rate was 68 per cent in 1994 and 67 per cent in 1999.

Table 3.6 also highlights differences in completion rates on the basis of socioeconomic background. Completion rates for students from a low socioeconomic background were below those for students from a high socioeconomic background. There was a 16 percentage point difference between

students from low and high socioeconomic backgrounds in 1999. The completion rates in both socioeconomic categories were higher for female students; female completion rates in the low socioeconomic category were only five percentage points behind males in the high socioeconomic category in 1999.

**Table 3.6 Year 12 estimated completion rate, by socioeconomic status and gender — time series (per cent)**

	<i>Socioeconomic status</i>								
	<i>Low deciles</i>			<i>High deciles</i>			<i>Total</i>		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
1994	55	66	60	74	85	79	63	74	68
1995	53	65	59	73	83	78	61	73	67
1996 <sup>a</sup>	50	62	56	71	82	76	59	71	65
1996 <sup>b</sup>	52	67	59	72	80	76	60	72	65
1997 <sup>c</sup>	51	66	58	71	80	75	58	71	64
1998 <sup>d</sup>	53	67	60	72	81	76	60	72	66
1999	53	68	61	73	83	77	61	74	67

<sup>a</sup> Calculated using socioeconomic status deciles derived from the 1991 Census. <sup>b</sup> Calculated using socioeconomic status deciles derived from the 1996 Census. <sup>c</sup> Revised data. <sup>d</sup> Final data.

Source: DETYA (unpublished).

Table 3.7 shows the 1999 completion rates on the basis of socioeconomic background by jurisdiction. The 1999 completion rates indicate substantial variation

**Table 3.7 Year 12 estimated completion rate, by socioeconomic status and gender, 1999 (per cent)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT<sup>a</sup></i>	<i>NT<sup>b</sup></i>	<i>Aust</i>
Low socioeconomic status deciles									
Male	54	53	61	42	49	58	..	17	53
Female	68	71	74	55	68	76	..	18	68
All students	61	62	67	49	58	67	..	17	61
High socioeconomic status deciles									
Male	72	70	77	73	73	88	76	na	73
Female	81	83	80	80	89	102	85	na	83
All students	76	76	79	77	81	95	80	na	77
Total									
Male	59	60	66	56	58	69	74	37	61
Female	71	77	75	68	76	83	82	47	74
All students	65	68	70	62	67	76	78	42	67

<sup>a</sup> On the basis of this index, the ACT has no low socioeconomic status deciles. <sup>b</sup> Small increases in the estimated resident population can cause significant fluctuations in the data. As a result, high socioeconomic status rates for the NT are unreliable and have been excluded. .. Not applicable.

Source: DETYA (unpublished).

across jurisdictions in the low socioeconomic status deciles, from 17 per cent in the NT to 67 per cent in Queensland and Tasmania. The completion rates for the high socioeconomic status deciles ranged from 76 per cent in NSW and Victoria to 95 per cent in Tasmania. In all jurisdictions, the completion rates for females were higher than those for males.

Table 3.8 shows the variation over time in completion rates for males and females in urban, rural and remote localities. The urban rate declined from 71 per cent in 1994 to 68 per cent in 1999; the rural rate of 64 per cent in 1994 remained the same in 1999; and the remote rate declined from 58 per cent in 1994 to 56 per cent in 1999. In all localities, the completion rates for females were higher than those for males. The gender difference has increased in all locations — a difference that is particularly noticeable in remote locations, which showed a 24 percentage point difference between male and female completion rates in 1999.

**Table 3.8 Year 12 estimated completion rates, by locality and gender — time series (per cent)**

	<i>Urban</i>			<i>Rural</i>			<i>Remote</i>			<i>Total</i>		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
1994	66	76	71	57	71	64	51	65	58	63	74	68
1995	64	75	69	54	70	62	46	59	52	61	73	67
1996	62	72	67	54	71	62	45	64	54	60	72	65
1997 <sup>a</sup>	61	71	66	54	70	62	43	62	51	58	71	64
1998 <sup>b</sup>	62	73	67	55	71	63	48	61	54	60	72	66
1999	63	74	68	57	73	64	45	69	56	61	74	67

<sup>a</sup> Revised data. <sup>b</sup> Final data.

Source: DETYA (unpublished).

Gender differences are also evident in table 3.9. In other rural and remote areas there was a 22 percentage point difference between male and female completion rates in 1999. In other metropolitan locations, there was an 8 percentage point gender difference.

### *School leaver destinations*

The education preface of this Report discusses the destinations of year 12 leavers and early school leavers in 1999 at the national level, and examines the proportions of male and female students attending other educational institutions in 1999 after leaving school in the previous year (table B3, which also shows the proportion of students who were not attending any educational institution).

Table 3.9 **Year 12 estimated completion rates, by locality and gender, 1999 (per cent)**

	NSW	Vic	Qld	WA <sup>a</sup>	SA <sup>a</sup>	Tas <sup>a</sup>	ACT <sup>b</sup>	NT <sup>c</sup>	Aust
Capital city									
Male	63	62	67	59	61	79	74	57	63
Female	74	77	76	69	77	92	82	64	75
All students	68	70	72	64	69	85	78	60	69
Other metropolitan									
Male	52	57	64	..	..	..	..	..	57
Female	61	70	68	..	..	..	..	..	65
All students	57	64	66	..	..	..	..	..	60
Rural centres									
Male	53	54	67	46	46	68	..	..	57
Female	64	73	73	62	61	76	..	..	69
All students	58	63	70	54	54	72	..	..	63
Other rural and remote areas									
Male	55	53	61	50	50	53	..	21	54
Female	75	79	81	67	81	78	..	34	76
All students	65	66	71	58	65	65	..	27	64
All areas									
Male	59	60	66	56	58	69	74	37	61
Female	71	77	75	68	76	83	82	48	74
All students	65	68	70	62	67	76	78	42	67

<sup>a</sup> There are no other metropolitan areas in this jurisdiction. <sup>b</sup> All of the ACT is defined as a Capital City. <sup>c</sup> There are no other metropolitan or rural Centres. .. Not applicable.

Source: DETYA (unpublished).

### *Social objectives of schooling*

In 1996, the Commonwealth Department of Education, Training and Youth Affairs, on behalf of MCEETYA, commissioned an investigation 'to define and describe aspects of the social objectives of schooling. The purpose of this investigation was to obtain baseline data on achievements against the selected social objectives and to investigate the role and influence of schools in this regard (Ainley *et al.* 1998, p. xiii). The 1999 Report (SCRCSSP 1999) included a summary of these results.

### **Efficiency**

Governments have an interest in achieving the best results from their expenditure on schooling, both as owners and operators of government schools, and as major providers for funds to the non-government school sector. It is an objective of the Review to report comparable estimates of costs. Ideally, such comparison should include the full range of costs to government. Where the full costs cannot be

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measured, cost should be estimated on a consistent basis. Significant effort has been made to improve the method for calculating the indicators in this Report and to document where there are differences. However, some concerns remain over the comparability of the results because jurisdictions use somewhat different methods of data collection. These differences are summarised in table 3.10.

### *Government recurrent expenditure per student*

Government recurrent expenditure per student may be influenced by a number of factors which are discussed in box 3.2.

#### **Box 3.2 Factors that may influence the level of expenditure per student**

Differences in the costs of educating students can be driven by:

- influences beyond the control of governments, such as a high proportion of geographically isolated population and/or a dispersed population;
- policy changes in education, such as tradeoffs between reducing costs and improving the quality of education, or between reducing costs and increasing the accessibility of education; and
- how well the education department and schools manage resources.

The Commonwealth Grants Commission, when calculating relativities between States and Territories to distribute Commonwealth general purpose grants, accounts for influences beyond a jurisdiction's control (called disabilities) that affect its cost of providing services and its capacity to raise revenue. In relation to education, the assessment includes 'service delivery scale' disability factors. These factors allow for the effects on relative cost differences among jurisdictions that have to service small and remote schools because they have a small and dispersed population. However, the Steering Committee for the Review of Commonwealth/State Service Provision does not make any cost adjustments based on any of the above factors. These factors may need to be considered when examining each jurisdiction's expenditure per student.

A proxy indicator of efficiency is the level of government inputs per unit of output (unit cost). In-school government expenditure per student in government primary schools ranged from \$5200 in NSW to \$7808 in the NT in 1998-99. In-school government expenditure per secondary student in government secondary schools ranged from \$6514 in Victoria to \$11 667 in the NT. Out-of-school departmental overheads per student in government schools ranged from \$265 in NSW to \$1305 in the NT (figure 3.10).

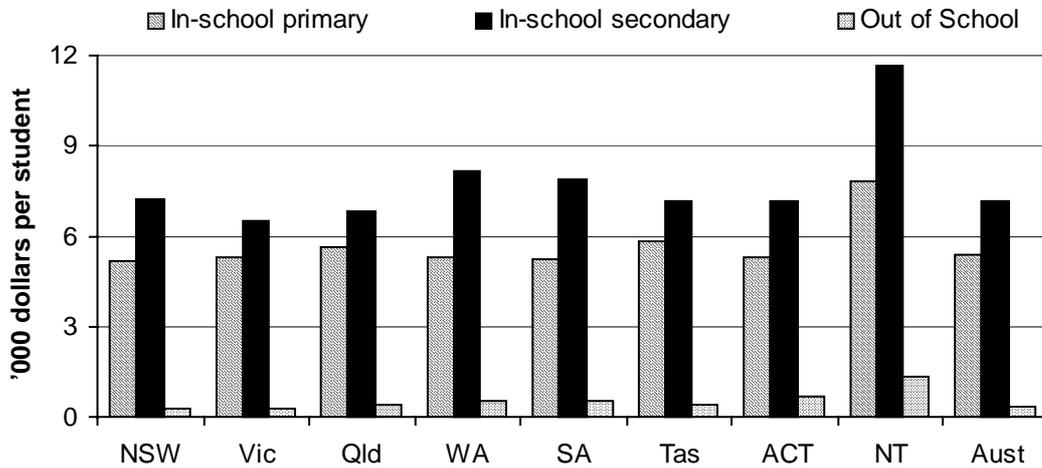
Table 3.10 Comparability of expenditure — items included, 1998-99

	<i>Commonwealth</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Superannuation	na	✓	✓	✓	✓	✓	✓	✓	na
<i>basis of estimate</i>	na	na	cash	na	accrual	na	na	na	na
Workers compensation	na	✓	✓	na	✓	✓	✓	✓	na
Payroll tax	na	✓	✗	na	✗ <sup>a</sup>	✗	✓	✗	na
<i>basis of estimate</i>	na	accrual	..	na	..	na	✗	na	na
Termination and long service leave	na	✓	✗	na	✓	✓	✓	✓	na
<i>basis of estimate</i>	na	cash <sup>b</sup>	..	na	accrual	na	cash	na	na
Sick leave	na	✓	✗	na	✗	✓	✓	✓	na
<i>basis of estimate</i>	na	cash <sup>b</sup>	..	na	✓	na	cash	na	na
Depreciation	na	✗	✗	✓	✓	✗	✗	✗	na
Rent	na	✓	✓	na	✓	✓	na	✓	na
<i>basis of estimate</i>	na	accrual	cash	na	accrual	na	✓	na	na
Utilities	na	✓	✓	na	✓	✓	✓	✓	na
<i>basis of estimate</i>	na	accrual	cash	na	accrual	na	cash	na	na
Umbrella department costs	na	✓	✓	na	na	✓	na	✓	na
<i>basis of estimate</i>	na	Formula <sup>c</sup>	Formula <sup>d</sup>	na	na	Formula <sup>e</sup>	na	na	na

<sup>a</sup> Education Department of WA is exempt from payroll tax. <sup>b</sup> Actual leave taken. <sup>c</sup> Departmental program structure. <sup>d</sup> Based on usage (including enrolment). <sup>e</sup> Based on per cent of program division outputs. **na** Not available. **..** Not applicable. ✓ Included. ✗ excluded.

Source: Commonwealth, State and Territory governments.

Figure 3.10 Total government expenditure per full time student, government schools, 1998-99<sup>a</sup>

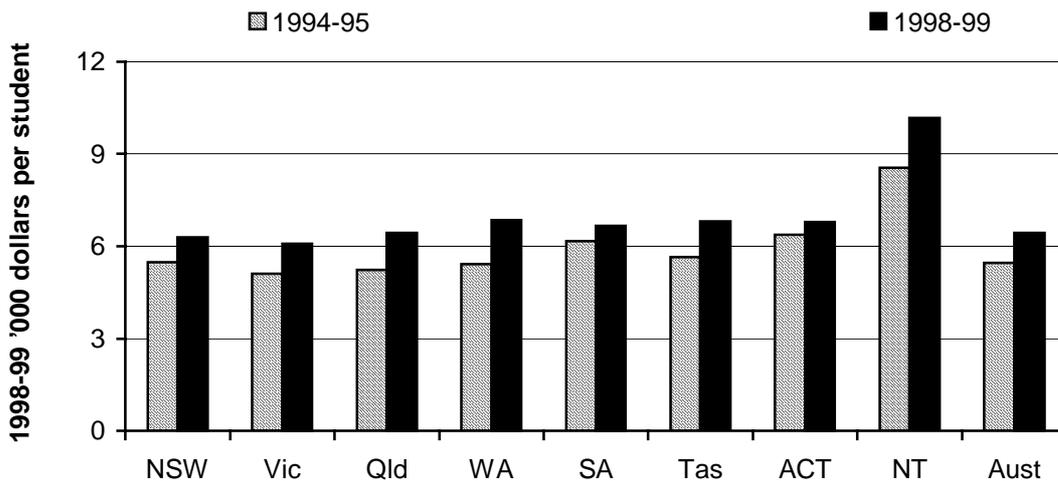


<sup>a</sup> See notes to table 3A.7 for definitions and data caveats.

Source: table 3A.8.

Total government expenditure per student in government schools increased (in real terms) between 1994-95 and 1998-99 in all jurisdictions (figure 3.11).

Figure 3.11 Total government expenditure per full time student, government schools<sup>a, b, c</sup>

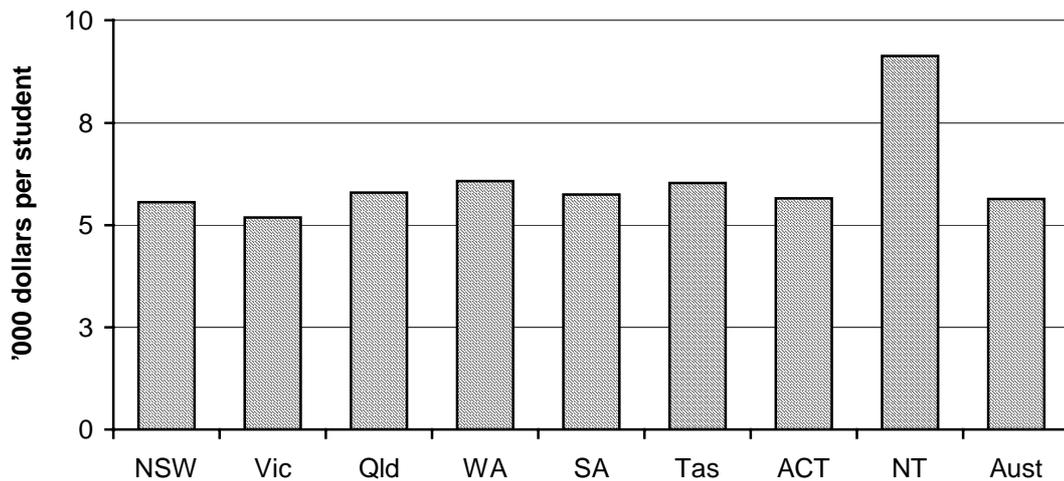


<sup>a</sup> See notes to table 3A.7 for definitions and data caveats. <sup>b</sup> 1994-95 data have been adjusted to 1998-99 dollars using the gross domestic product deflator. <sup>c</sup> Superannuation has been included in the expenditure for all jurisdictions in this figure.

Source: table 3A.9.

In 1998-99, government expenditure per student in all schools (government and non-government) in Australia ranged from \$5186 in Victoria to \$9134 in the NT. (figure 3.12).

Figure 3.12 **Total government expenditure per full time student, all schools, 1998-99<sup>a</sup>**



<sup>a</sup> The sum of Commonwealth, State and Territory government expenditure on government schools, Commonwealth specific purpose payments for non-government schools, and State and Territory payments to non-government schools.

Source: table 3A.9.

### *User cost of capital of school education*

The user cost of capital for government services is the cost of funds tied up in capital used to produce services (for example, land and buildings owned by government schools). The user cost of capital makes explicit the opportunity cost of using the funds to provide services rather than investing elsewhere or retiring debt.

When comparing costs of government services, it is important to account for the user cost of capital because:

- it is often a significant component of the cost of services; and
- it is often treated inconsistently (that is, it is included in the costs of services delivered by many non-government service providers, but effectively costed at zero for most budget sector agencies).

This chapter includes a user cost of capital for all jurisdictions (except the NT, which has yet to introduce accrual accounting) as part of the cost to government of each service. The user cost of capital is calculated by applying a jurisdictional cost

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of capital rate to the value of government assets (see chapter 2 for details of the determination of a cost of capital rate). The indicative user cost of capital per school was highest in NSW (\$1762 per student in government schools) and lowest in SA (\$672 per student in government schools) in 1998-99 (table 3A.9).

The Steering Committee accepts that asset valuation data are imperfect. However, it also recognises that the treatment of costs has not fully recognised the cost of public capital used by departments to deliver services; that is, capital has generally been considered 'free'. This can lead to significant underestimation of costs for those services for which government capital is a major input. Thus, using an imperfect costing is preferable to not costing government capital.

### *Student-to-staff ratios<sup>3</sup>*

The student-to-teacher ratio presents the number of students per person classified as a teacher in a way that can be compared across jurisdictions. A low ratio means that there are a small number of students per teacher. (The ratio is not a measure of class size.)

The ratio should be interpreted with care because it can be affected by a number of factors, including:

- the proportion of small rural schools. A large proportion of small rural schools, for example, can significantly lower the overall average student-to-teacher ratio; conversely, a large proportion of students in metropolitan schools can raise the ratio;
- the degree to which administrative work is undertaken by people classified as teachers (such as principals, deputy principals and senior teachers); and
- other inputs to school education (for example, non-teaching staff, computers, books and laboratory equipment).

Interpretation of student-to-teacher ratios is usually accompanied by assumptions about efficiency and quality.

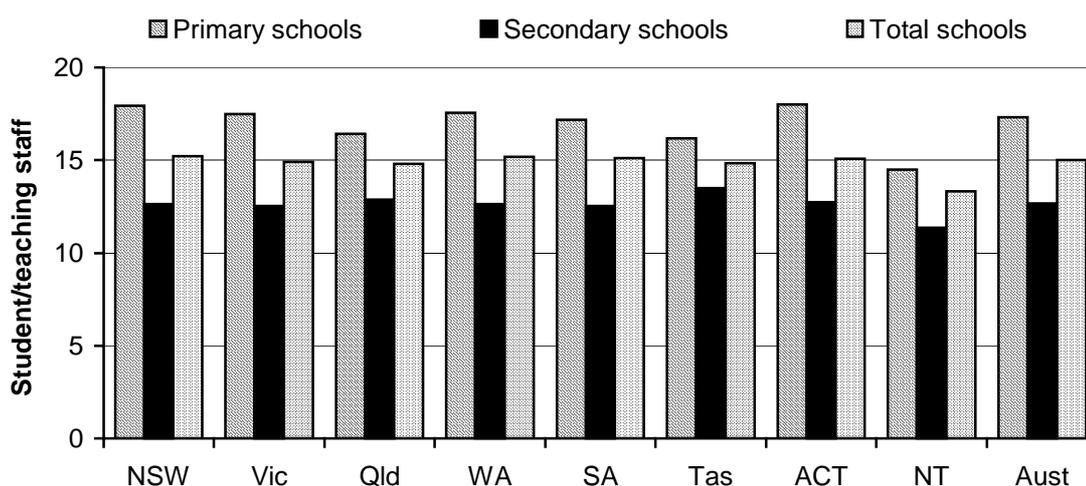
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<sup>3</sup> Teaching staff have teaching duties (that is, they are engaged to impart the school curriculum) and spend the majority of their time in contact with students. They support students, either by direct class contact or on an individual basis. Teaching staff include principals, deputy principals and senior teachers mainly involved in administrative duties, but not specialist support staff (who may spend the majority of their time in contact with students but are not engaged to impart the school curriculum). Rather, the latter provide benefits to students or teaching staff in the development of the school curriculum.

- A high ratio could indicate an efficient school system, because desired outputs are produced with a small number of inputs. However, lower inputs per unit of output only indicate efficiency when output units and outcomes are the same across all systems being compared. It is not possible to determine how changes in teaching staff numbers influence school outcomes until better indicators of those outcomes are available.
- A low ratio could indicate a higher quality education system, if it is assumed that teachers have more time for each student. The ratio should not be interpreted as an indicator of class size; further, it does not reflect the quality, experience or qualifications of teachers. The ratio is also an aggregate across all subjects and year levels, and does not reflect the fact that a lower ratio may not be so important for certain subjects or year levels. There is no clear agreement in international literature that smaller class sizes necessarily improve outcomes. It will not be possible to determine how different ratios influence quality in Australian schools until better indicators of school outcomes are available.

In school education as a whole, the ratio of full time equivalent students<sup>4</sup> to a full time equivalent teacher in 1999 ranged from 13.3 in the NT to 15.2 in NSW and WA. For primary schools, the NT had the lowest student-to-teacher ratio (14.5) and the ACT had the highest (18.0). For secondary schools, the NT had the least students per teacher (11.4) while Tasmania had the most (13.5) (figure 3.13).

Figure 3.13 **Ratio of full time equivalent students to full time equivalent teaching staff, all schools, 1999**

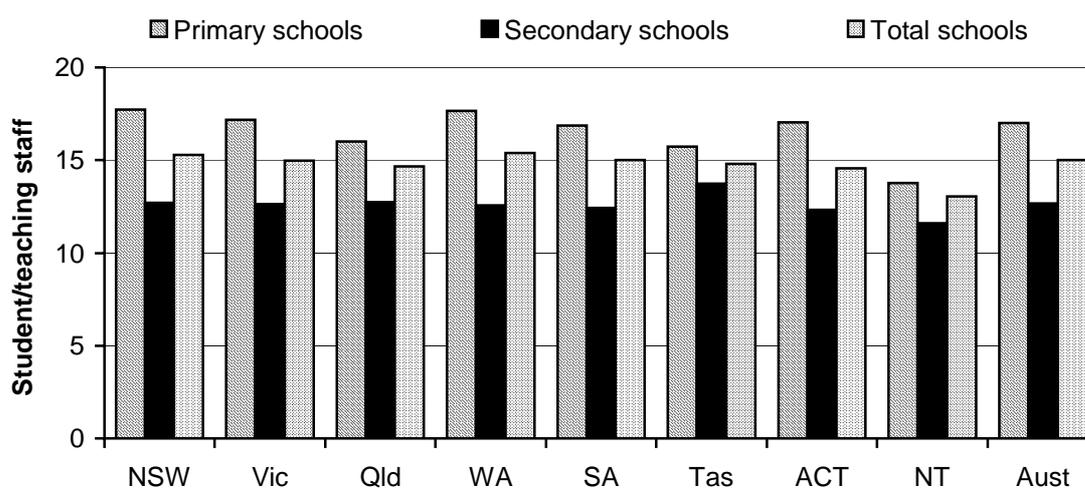


Source: table 3A.5.

<sup>4</sup> Full time equivalent students is defined as the sum of full time students and full time equivalent part time secondary students.

The overall student-to-teacher ratio in the government schools sector in 1999 ranged from 13.1 in the NT to 15.4 in WA. For primary schools, the NT had the least students per teacher (13.8) and NSW had the most (17.7). For secondary schools, the NT had the least students per teacher (11.6) and Tasmania had the most (13.7) (figure 3.14).

Figure 3.14 **Ratio of full time equivalent students to full time equivalent teachers, government schools, 1999**



Source: table 3A.5.

#### *Student-to-non-teaching, in-school staff<sup>5</sup>*

The ratio of full time equivalent students to full time equivalent, non-teaching, in-school staff should be interpreted with care. It can be affected by:

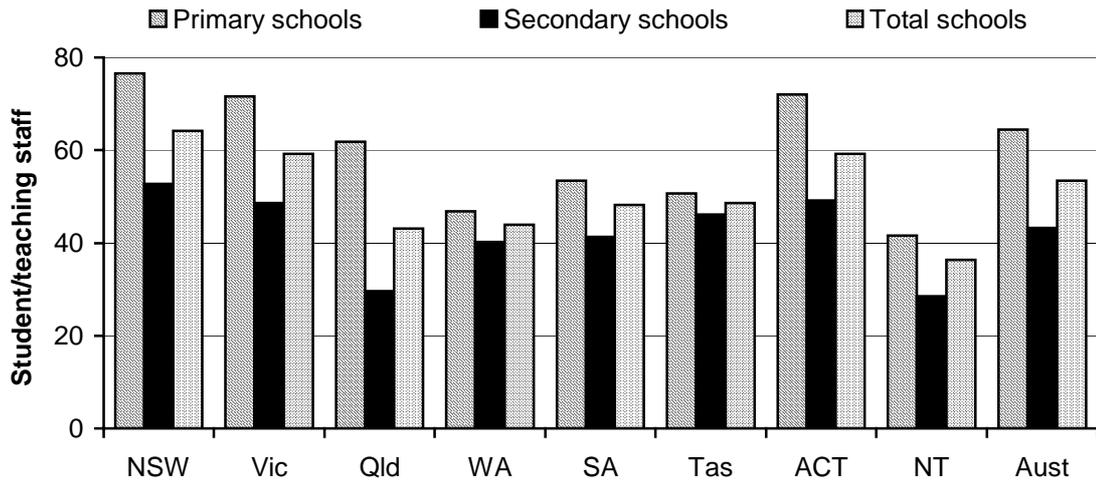
- the amount of administrative work undertaken by staff nominally classified as teachers (such as principals, assistant principals and senior teachers);
- the proportion of administrative work undertaken outside the school (because administrative tasks such as personnel management are centralised in some jurisdictions, but undertaken at the school level in others);
- the extent to which technology is applied to teaching, learning and school administration; and

<sup>5</sup> Non-teaching staff include administrative and clerical staff (teacher aides and assistants who perform functions that are of benefit to students and teaching staff, including assisting in the development of school curriculum); building operations, general maintenance and other staff; and special support staff. In-school staff include staff who spend more than half their time actively engaged in duties in one or more schools.

- the degree to which schools contract out services.

For school education as a whole, the ratio of students to non-teaching, in-school staff in 1999 ranged from 36.4 in the NT to 64.1 in NSW (figure 3.15).

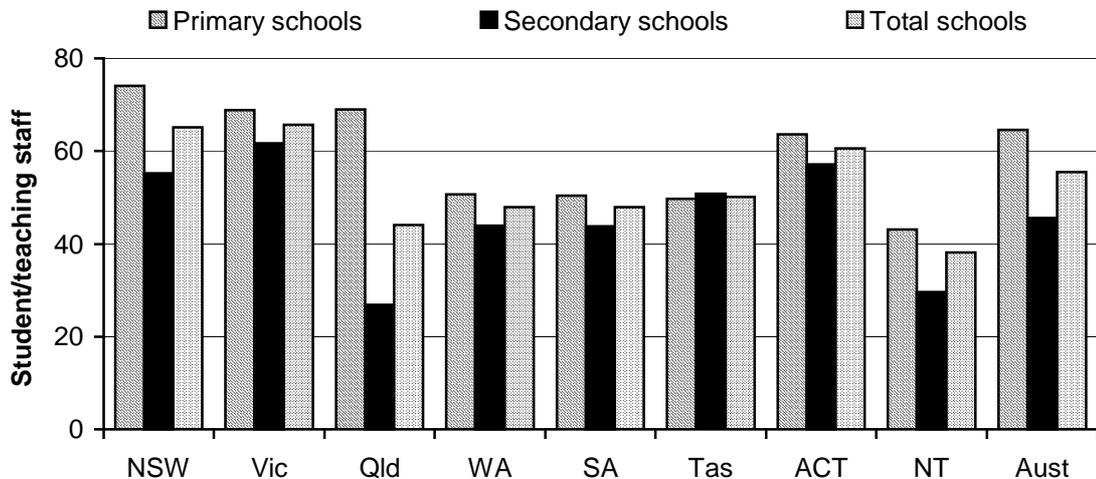
**Figure 3.15 Ratio of full time equivalent students to full time equivalent, non-teaching, in-school staff, all schools, 1999**



Source: table 3A.5.

The ratio of students to non-teaching in-school staff in the government sector in 1999 ranged from 38.1 in the NT to 65.7 in Victoria (figure 3.16).

**Figure 3.16 Ratio of full time equivalent students to full time equivalent, non-teaching, in-school staff, government schools, 1999**



Source: table 3A.5.

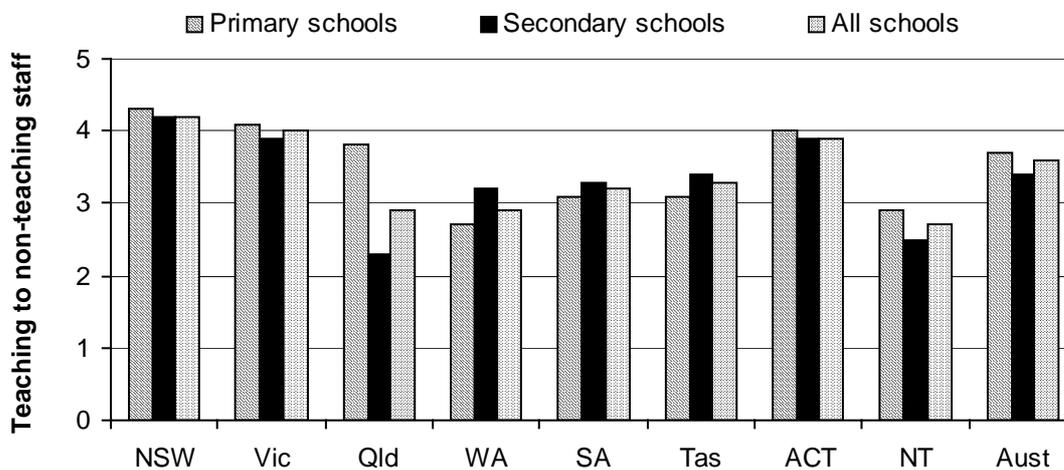
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### Teaching-to-non-teaching staff ratios

The teaching to non-teaching, in-school staff ratio partly highlights the level of administrative and management overheads that exists in a school. For school education as a whole, the overall teaching-to-non-teaching staff ratio in 1999 ranged from 2.7 in the NT to 4.2 in NSW. For primary schools, WA had the least number of teachers per non-teaching staff (2.7) and NSW had the most (4.3). For secondary schools, Queensland had the lowest ratio (2.3) and NSW had the highest (4.3). For secondary schools, Queensland had the lowest ratio (2.3) and NSW again had the highest (4.2) (figure 3.17).

Figure 3.17 **Ratio of teaching-to-non-teaching, in-school staff, all schools, 1999**

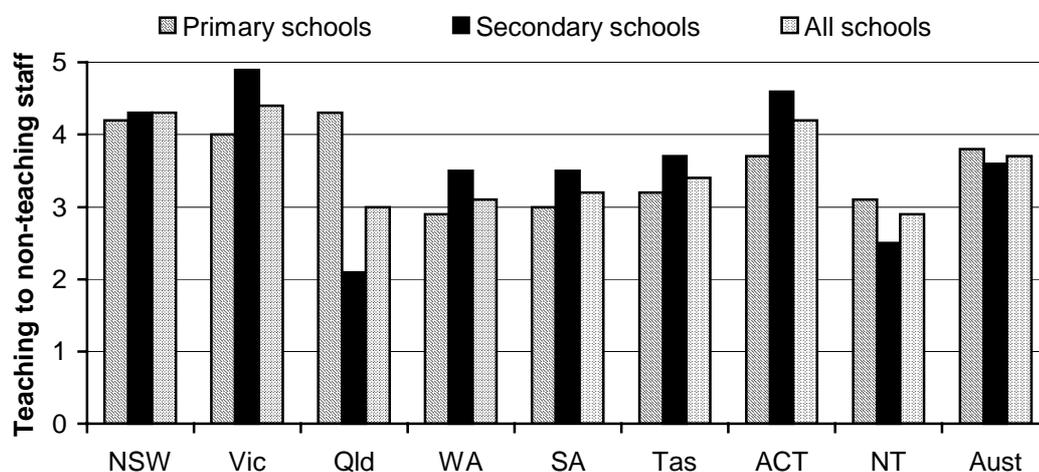
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Source: table 3A.5.

In government schools, the overall teaching-to-non-teaching staff ratio in 1999 ranged from 2.9 in the NT to 4.4 in Victoria. For primary schools, WA had the least number of teachers per non-teaching staff member (2.9) and Queensland the most (4.3). For secondary schools, Queensland had the lowest ratio (2.1) and Victoria had the highest (4.9) (figure 3.18).

Figure 3.18 **Ratio of teaching-to-non-teaching, in-school staff, government schools, 1999**



Source: table 3A.5.

### 3.5 Future directions in performance reporting

#### Nationally comparable reporting of learning outcomes

The National Education Performance Monitoring Taskforce (NEPMT), under the auspices of MCEETYA, is undertaking work in areas that will provide useful information for future Reports.

The NEPMT is coordinating the development of definitions for and approaches to collecting nationally comparable data on performance indicators that will result in additional information in line with the performance indicator framework.

#### *Literacy and numeracy*

Education ministers have agreed that the years 3 and 5 literacy benchmark results for 1999 will be published in 2000. They have agreed that the years 3 and 5 literacy and numeracy benchmark results for 2000 will be published in 2001, and that the years 3, 5 and 7 literacy and numeracy benchmark results for 2001 will be published in 2002 (provided the data available are recognised as being comparable by an objective process involving the Commonwealth, State and Territory governments). Development of years 9–10 benchmarks has been postponed pending further

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information from the Organisation for Economic Cooperation and Development Program for International Student Assessment.

### *Social and other outcomes*

The NEPMT is developing measures to test students' knowledge and understanding of the Australian system of government and civic life. A sub-group of NEPMT is developing a device in this area for the NEPMT's consideration.

### *Vocational education and training (VET) in schools*

As part of the national goals for schooling (box 3.1), students are expected to have participated in vocational learning programs before completing year 12 as a pathway to employment and further education and training. The NEPMT is working with the VET in Schools Taskforce to develop a number of key performance indicators for VET in Schools. It is anticipated that these will be considered by ministers in the first half of 2001.

### *Science literacy*

In 2000, a sample of school students aged 15 years participated in the Organisation for Economic Cooperation and Development Program for International Student Assessment, which will provide internationally comparable indicators of student achievement in scientific literacy. Results from this study will be available from December 2001. In addition, consistent with the national goals for schooling, separate measures the NEPMT is developing for monitoring the performance of year 6 primary students in scientific literacy, using the international program's definition of science.

### *Reporting on access and equity*

The NEPMT has commissioned studies into the definitions of, and approaches for collecting, comparable data, in the following areas:

- LBOTE students;
- the socioeconomic status of students; and
- the geographic location of students.

The NEPMT has endorsed approaches and definitions in these areas pending outcomes of feasibility studies to be completed by mid-2001.

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## **Indigenous peoples' access to mainstream services**

In 2000, ministers endorsed the Australian Bureau of Statistics' standards for identifying students' Indigenous status. This will improve the comparability of Indigenous students' participation rates and learning outcomes across jurisdictions.

### **3.6 Jurisdictions' comments**

This section provides comments from each jurisdiction on the services covered in this chapter and attachment 3A on the CD-ROM. Appendix A contains short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter. In addition, detailed statistics covering various aspects such as age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (such as Indigenous and ethnic status) are also found in appendix A.

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## Commonwealth Government comments

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The Commonwealth has continued to work with the States and Territories to secure improved reporting of student achievement. The National Goals for Schooling in the Twenty-First Century, which were endorsed by Commonwealth, State and Territory Education Ministers in 1999, provide both the context and framework for the reporting of student outcomes. Since then there has been a cooperative Commonwealth, State and Territory effort to develop performance measures which can progress the National Goals.

In March 2000, education ministers approved several recommendations from the National Education Performance Monitoring Taskforce to support national performance measurement, including agreement on: literacy and numeracy reporting, performance measures for student participation and middle secondary science achievement as well as two national definitions for student groups.

There has been considerable progress since 1999 in the reporting of student outcomes. Benchmark results for Year 3 students in reading were reported as a supplement to the 1999 Annual National Report on Schooling in Australia (ANR) in early 2000, and Year 5 reading and Year 3 and 5 writing and spelling results are expected to be available later this year or early in 2001. Student participation is expected to be reported on in the 2000 ANR and it is possible that data on middle secondary science achievement from Australia's participation in the OECD Programme for International Student Assessment (PISA) could be available late in 2001.

PISA will provide the initial measure of students' performance in science in the middle secondary school years. It involves the testing of 15 year old school students every three years. The first Australian assessments were conducted in 2000. Australia has elected to increase the number of Indigenous students tested in order to provide reliable estimates of achievements and hence valid reporting for Indigenous students as a group. As well as providing international comparisons of science achievement, PISA will enable comparisons between States and Territories.

In addition to work associated with the new National Goals, the Commonwealth has actively supported the collection of nationally comparable data through international studies and national surveys including the first national sample survey of civics and citizenship education which assessed students' knowledge, skills and attitudes in relation to Australia's system of government and law, political symbols, citizens' rights, obligations and expectations, multiculturalism and democracy. The Commonwealth is also supporting the repeat of the Third International Mathematics and Science Study (TIMSS-R) in respect of 13 year old students, the results of which are expected in late 2000.

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## **New South Wales Government comments**

“ The NSW Department of Education and Training is responsible for approximately one quarter of the State’s total budget and delivers education and training services from early childhood education through to post-compulsory education. The 2000-01 Budget included a record \$7.23 billion for education and training, representing an increase of \$320 million on 1999-2000 or a 4.7 per cent rise. Total expenses on school education services accounted for an estimated \$5.69 billion.

The State has made significant achievements in promoting public education despite the Commonwealth Government’s Enrolment Benchmark Adjustment (EBA) policy. This policy has seen \$31 million taken away from NSW government schools to date, which is predicted to rise to \$50 million annually by 2003. Budget increases announced by the Commonwealth for non-government schools have further affected public education.

Despite this uncertain climate NSW public schools have delivered outstanding results. The 1999 Basic Skills Test showed the best ever results in literacy and numeracy for Year 3 and 5 students. NSW figured prominently in the national results with 91.2 per cent of Year 3 students meeting or exceeding the National Literacy Benchmark. NSW has Australia’s most comprehensive state-wide testing program with Basic Skills Literacy and Numeracy tests in Years 3 and 5, the English Language and Literacy Assessment (ELLA) in Years 7 and 8, the School Certificate in Year 10 and the Higher School Certificate (HSC) in Year 12. New tests are being developed in numeracy for Year 7 and in Australian History, Geography, Civics and Citizenship for Year 10.

Almost \$450 million has been allocated over 4 years for the further expansion of the State Literacy and Numeracy Plan. Significant investments have also been made in technology for teaching and learning with \$500 million being provided over four years for the Computers in Schools program. The Government has provided 115,000 new and replacement computers and a total of \$113.6 million will be spent in 2000-01 alone. This investment in technology will keep NSW students at the forefront in the information age.

A new, better, fairer and more challenging HSC has been introduced. It features improved syllabuses, testing and reporting. To ensure NSW students are ‘job-ready’, it includes seven new vocational education and training courses, each involving extensive industry experience and leading to a nationally recognised and accredited credential, as well as counting toward University entrance.

Individual School-to-Work plans are being implemented for government school students in Years 9–12. These plans assist students in assessing their interests and skills, identifying a program of study and work experience to match their aspirations and to gain employment or move into further education and training.

Multi campus schools at Nirimba, Dubbo, Mt Druitt and Oatley are being developed as part of the Collegiate Education Plan involving joint educational campuses with TAFE, University and other education and training providers.”

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## Victorian Government comments



The Victorian Government is committed to a high-quality, universally accessible, student centred, public education system and emphasises that a strong education system is more important than ever before, given the rapid changes taking place in work, culture and technologies.

In 2000, the Victorian Government undertook two major reviews in education — The Ministerial Review of Post Compulsory Education and Training Pathways and the Review of Public Education: the Next Generation. The initiation of these reviews emphasises the importance the Government places on education and their reports have provided recommendations that will help to shape the future.

The Government has set three significant benchmark targets to provide impetus:

By 2005 – Victorian primary students will be at or above national average benchmark levels for reading, writing and numeracy.

By 2010 – 90 per cent of young people in Victoria will complete Year 12 or its equivalent.

By 2005 – there will be a 6 per cent rise in the percentage of young people aged 15 to 19 in rural and regional Victoria engaged in education and training.

A key objective for school education is for Victorian children to have access to high-quality primary and secondary education. The Early Years strategy, combined with teacher commitment and reduced class sizes, is ensuring that student achievement in literacy and numeracy continues to improve. In 1999, 86.2 per cent of Victorian students at Year 3 performed at or above the national benchmarks in reading. The establishment of the Early Numeracy Research project will lead to the development of programs that will lift numeracy learning in government primary schools to the same high standards addressed in the literacy program.

Victoria's apparent retention rate for 1999 of students from years 7 to 12 was 76.2 per cent and above the national average of 72.3 per cent. The level of participation in schooling of 15 to 19 year olds was 54.3 per cent, higher than the national average of 50 per cent and the highest of any state (except ACT). Further substantial growth was realised in the number of students participating in VET in Schools and New Apprenticeships programs. Participation and achievement in these programs provides students with pathways to university, training and further education, and to the workforce.

Victoria is widely recognised as a leader in the use of information and communication technology in education. Schools are increasingly using new technologies and multimedia to support effective teaching and learning. These technologies help to provide quality educational resources throughout the State, particularly to students in rural and remote areas that rely on technology to reduce the disadvantage of distance. Greater access to technology and related professional development is improving teacher and student skill levels.



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## Queensland Government comments



Education Queensland's vision is for all Queensland students to become active citizens in a learning society: the Smart State.

In April 2000, *Queensland State Education – 2010* was adopted by government as the strategic response to the broad economic and social change. The strategy is based on research undertaken in Queensland and reflects the views about the future expressed by people involved in public education in Queensland. The purpose of education in Queensland is to create a safe, tolerant and disciplined environment within which young people prepare to be active and reflective Australian citizens with a disposition to lifelong learning. They will be able to participate in and shape community, economic and political life in Queensland and the nation. They will be able to engage confidently with other cultures at home and abroad

The first stage initiatives for implementing Queensland State Education - 2010 have commenced. The Secondary Schools Renewal Program, a \$114 million, three-year commitment, will reinvigorate secondary school as part of the move towards establishing distinctive state schools. The New Basics, a new approach to teaching and learning that focuses on essential areas of learning, is being trialled in 38 schools.

Strategies to maximise student learning continue to be implemented. Learning Technology grants totalling more than \$22 million were provided to schools for maintenance and purchase of computers, training and software. A comprehensive review of literacy teaching in Queensland state schools was conducted and the report launched in November. It compliments and builds on the already significant achievements of schools in improving literacy standards.

Interest in vocational subjects continued to grow, broadening the career opportunities of all students, especially those who might leave school early. In 2000, 61 per cent of students in state secondary schools were studying at least one vocational subject. More than 2200 students combined schoolwork with an apprenticeship.

Confidence in public schools is an important indicator as to whether schools are providing what the public want. The majority of parents rated their school a good school and indicated satisfaction with their child's progress at school. The demand for school places continues to increase as a result of Queensland's high population growth rate, which has tapered but remains the highest in the country, at 1.6 per cent after account is taken of interstate movements.



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## Western Australian Government comments

“ Accounting for a quarter of the State budget, and employing the equivalent of some 25 000 full-time staff, the Education Department is the largest employer in Western Australia.

The Department is responsible for the education of more than 266 000 students at 767 schools spread from Kalumburu in the north to Albany in the south, and from the Cocos (Keeling) Islands in the west to Wingellina, on the edge of the Great Victoria Desert, in the east.

Following the passage of the School Education Bill in November 1999, extensive work was undertaken to ensure that the Education Department would be fully prepared for the proclamation of the legislation.

Under the *Curriculum Council Act 1997*, all schools in the State are required to use the Curriculum Framework developed by the Council to plan, deliver, assess and report on the outcomes of schooling. Government schools made substantial progress in the phased introduction of outcomes-based education using the Curriculum Framework and the Education Department's Student Outcome Statements.

As a major stakeholder, the Education Department contributed significantly to the review of post-compulsory schooling being undertaken by the Curriculum Council.

Increased local decision-making authority was trialled in 21 schools.

Schools made further progress toward the target minimum of one centrally-funded computer for every ten primary-aged students and every five secondary-aged students by 2002.

Under *Making the Difference*, a strategy targeting students at educational risk, schools developed processes for the early identification and support of these students.

Building of the State's first Indigenous government school, first co-located senior and TAFE campuses and first dedicated middle school commenced.

All eligible children were offered two sessions per week of kindergarten or eight sessions per week of pre-primary education.

Some 5200 students in years 11 and 12 at 125 government schools participated in vocational education and training (VET) programs.

The enrolment of fee-paying international students was trialled at six senior high schools.”

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## South Australian Government comments

“ The South Australian Department of Education, Training and Employment provides a range of services encompassing children’s services, schools, vocational education and training, youth affairs and employment. It also funds and regulates aspects of non-government services in childcare, education and training. In 1999, more than 37,000 employees provided services to over a quarter of a million children and students enrolled in children’s services, schools and technical and further education (TAFE) institutes.

*Partnerships 21*, a local governance and management strategy was launched in April 1999, with full implementation to occur during 2000-2002. By the end of 1999 about 40 per cent of schools and preschools had submitted their Partnership Agreements and Plans.

A Country Directorate was established to develop strategies to improve the delivery of children’s services and education in country areas. As part of Partnerships 21, a Rural Student Index was developed to specifically address the funding requirements of remote communities.

Development of the South Australian Curriculum, Standards and Accountability framework, birth to year 12, commenced mid way through 1999. The framework is designed to take account of the national goals for schooling and provide a foundation of or a broad, general education leading to a range of pathways, including vocational training, higher education and life long learning.

The scores of the years 3 and 5 Basic Skills Test for students showed improvement on previous years, particularly scores for Aboriginal students whose year 3 literacy results indicated that they were approximately ten months ahead of 1998’s year 3 Aboriginal students. The government provided an additional \$2 million for programs to help students identified by the tests as experiencing difficulties. The school entry assessment of children’s early literacy and numeracy commenced with full implementation in 2000.

Information technology was given a high profile, with the roll-out of high quality Internet services and IT infrastructure to all government schools and curriculum innovation and professional development programs aimed at using information technology to improve student learning outcomes.

The enterprise and vocational education initiative resulted in a 35 per cent increase in the percentage of year 11 and 12 students participating in vocational education and training (VET) and raising the average hours spent at off-job training by 61 per cent. VET in schools curriculum hours increased by 118 per cent to over 988,000. Windsor Gardens Vocational College commenced operations in partnership with TAFE institutes and other providers in delivering programs within the South Australian Certificate of Education.”

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## Tasmanian Government comments

“ The Tasmanian Department of Education invested significant effort during 1999 in review processes designed to improve education services to identified equity groups. Reviews occurred in relation to Aboriginal and Torres Strait Islander education and training provision in Tasmanian schools, colleges and TAFE and the Department’s Inclusion Policy for students with disabilities.

The review of Aboriginal education and training services involved extensive consultation with stakeholders. The findings of the review were published in December 1999. Key recommendations arising from the review include a need for greater leadership in policy development and implementation, reporting of achievements of goals and objectives to be undertaken regularly and ensuring outcomes for Aboriginal students are included in all planning for reporting on and publishing student learning outcomes. As a result of the review, the major emphasis for intervention with Aboriginal students will be in the areas of literacy, numeracy, attendance, participation in education and retention to Year 12.

A major review of the Department’s Inclusion policy was undertaken during 1999. The process of review was designed to incorporate extensive parental and school involvement. It was supported by research on international best practice. The review report was finalised during 1999 and was published in early 2000.

Literacy and numeracy programs within the school system remained a major focus of the education system. The Department published its second Literacy and Numeracy plan – the formal plan is now a feature of the program and it is updated for each school year. The plan provides a comprehensive overview of all programs and links the programs to strategy and educational outcomes.

During 1999 the Department had a particular emphasis on trialing and implementing programs which supported explicit literacy and numeracy teaching. The range of programs include intensive general support up to year three, intensive research and support programs in all other years of school and targeted programs for at risk groups of students.

The Department’s IT grants program was extended to all schools. The program has enabled all Tasmanian schools to be provided with networks, telecommunications connections, a significant level of hardware in classrooms and a comprehensive range of software. A program to provide professional technical support to all schools has also been implemented.

The provision of educational content was significantly advanced during 1999 with the launch of the Discover web site. The ‘Discover’ website incorporates an intelligent digital databank that acts as a repository for resources, provides web enabled services to the education community and is designed to engender an online learning community culture.”

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## Australian Capital Territory Government comments

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The ACT Department of Education and Community Services is responsible for school and vocational education, children's, family, youth, sport and recreational services. The provision of government school education is part of the seamless provision of services to children and youth in the ACT.

Enhancing information technology capacity and skills across all service delivery and management functions was a major focus for the year. This strategy significantly improved hardware, software and network facilities, and incorporated information technology into teaching and learning, and management and administration practices. The number of computers in schools more than doubled in two years from 3300 in 1997 to 8,215 in 1999. The number of computers more than doubled in high schools and colleges, and more than tripled in primary schools. In high schools, the ACT is leading the way, nationally, in assessing the Information Communication Technology competencies of year 10 students.

The School Legislation Review was completed in June 2000, providing advice to government about the best legislative basis to position education in the Territory for advancement into the new century.

The department continued to focus on assessment and reporting of literacy and numeracy skills, providing system wide data on literacy and numeracy for the first time in February 2000. Assessment is now undertaken in years 3, 5, 7 and 9. Detailed reports are issued to parents/carers on their children's achievement against curriculum profiles in both literacy and numeracy. Year 3 students were assessed against the national benchmark in reading.

Under the Indigenous Education Strategic Initiative Program, improving outcomes for Indigenous students has been a high priority. The department approved the Indigenous Literacy and Numeracy Strategy and agreed with the Commonwealth to use the literacy and numeracy assessment for years 3, 5, 7 and 9 implemented in 1999 as the benchmarks for measuring the non-Indigenous/Indigenous outcomes. It introduced a tracking strategy for Indigenous students and improved data collection and reporting procedures. Assessment of Indigenous culture education has been made part of the school review process from 2000.

The department placed a priority on looking at ways our high schools can better meet the needs of students, and parents/carers and better equip students to move from high school into college and work. High Schools for the New Millennium project ended the first of its three years with work in consulting students, parents/carers and teachers about what they think of high schools. Addressing identified needs in high schools is also underway.

There were significant developments in vocational education and training in schools. ACT secondary colleges achieved accreditation as Registered Training Organisations, allowing them to deliver nationally recognised vocational courses as part of a college course. Around 50 per cent of college students undertake at least one course in Vocational Education and Training. School based New Apprenticeships were introduced in several industries.”

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## Northern Territory Government comments

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The NT Department of Education is committed to delivering high quality and relevant learning to students within available resources. To achieve this goal, the department has undergone significant restructuring to more effectively meet the needs of students in remote and urban Territory schools. A new Departmental Plan has been promulgated identifying six new operating principles and embodying eight new strategies. These strategies have been developed to refocus the activity of the Department onto its core business of schools and school learning outcomes. This major refocus brings with it significant restructuring of the delivery of Indigenous educational services. The Collins review into Indigenous Education recommended the creation of a single Branch to coordinate and deliver educational services to remote Indigenous students, and endorsed the reorganisation of schools into seven regionally based school clusters.

The NT has the highest proportion of Indigenous students of all jurisdictions at 35 per cent of the total student population. A high percentage of Indigenous students who reside in remote communities suffer from hearing and sight impairment and other health problems which inhibit educational participation and achievement.

A small population sparsely dispersed across the Territory presents very significant challenges to service delivery. With 53.8 per cent of NT schools and 26.7 per cent of students being located in rural and remote areas, meeting this challenge means that efficiencies of scale are hard to achieve, pushing unit costs and staffing levels away from the national average.

In 1999, the NT recorded 28 986 full-time equivalent enrolments in government schools and 8 319 in non-government schools. The NT continued to have the highest proportion of government school enrolments in Australia; 78 per cent compared to the national average of 70 per cent.

The percentage of Year 3 students achieving the reading benchmark has been included in this report for the first time. The NT recorded the lowest percentage of Year 3 students achieving the benchmark with a system average of 72 per cent. For Year 3 students in Urban schools the result was significantly higher at 82 per cent indicating a need for the department to focus on rural and remote service delivery.

In response to the Commonwealth reporting requirements, the NT Multi-level Assessment Program (NT MAP) has changed from testing students in Year 4 and Year 6 to Year 3 and Year 5. Furthermore, the testing of Year 7 students is being trialed.

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### 3.7 Definitions

Data for this chapter were sourced from *Schools Australia* (ABS 2000), the *National Schools Statistics Collection* (MCEETYA 1999a) and Commonwealth, State and Territory governments, and unpublished DETYA data. More information on definitions and explanatory notes can be found in *National Schools Statistics Collection (Government Schools Sector) Notes Instructions and Tabulations 1999* (ABS 1999).

Table 3.11 Terms

<i>Term</i>	<i>Definition</i>
Apparent retention rates	The percentage of full time students who continued to year 12 in 1999 from respective cohort groups at the commencement of their secondary schooling. The rate is calculated by dividing the total number of full time students in year 12 in 1999 by the sum of the full time students in year 7 in NSW, Victoria, Tasmania and the ACT in 1994 and the full time students in year 8 in Qld, SA, WA and the NT in 1995 (year 8 being the commencement of the secondary school system in the latter group of jurisdictions).
Average expenditure per student	Total expenditure (including superannuation liabilities) divided by the total number of students. Based on the <i>National School Statistics Collection</i> definitions (MCEETYA 1999a). Expenditure figures are in financial years and student numbers are in calendar years, so the total number of students is taken as the average of two years. When calculating 1998-99 average expenditure per student, for example, the total expenditure figure is at 1998-99 but the total student number figure is the average of student numbers from 1998 and 1999.
Enrolment index	The full time equivalent enrolments in each subject as a proportion of all full time equivalent enrolments in the State or Territory, grouped into the eight key learning areas. The enrolment index for science, for example, in a State/Territory is the number of full time equivalent students enrolled in science as a proportion of all full time equivalent enrolments in that State/Territory. The enrolment index data are supplied by each jurisdiction and the counting rules for the data are based on the jurisdictions' reporting requirements in MCEETYA. The key learning areas are English; mathematics; studies of society and environment; science; arts; LBOTE; technology; and health, physical education and personal development.
Full time equivalent (FTE) student	The full time equivalent of a full time student is 1.0. The method of converting part time student numbers into full time equivalents should be based on the students' workload compared to the workload usually undertaken by a full time student.
Full time student	A person who satisfies the definition of a student and undertakes a workload equivalent to, or greater than, that usually undertaken by a student of that year level. The definition of full time student varies across jurisdictions.

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**Table 3.11 (continued)**

<i>Term</i>	<i>Definition</i>
Indigenous student	<p>A student of Aboriginal or Torres Strait Islander origin who identifies as an Aboriginal or Torres Strait Islander or as from an Aboriginal and Torres Strait Islander background.</p> <p><i>NSW:</i> Indigenous students are those who answered ‘yes’ to the question, ‘Are you an Aboriginal or Torres Strait Islander person?’.</p> <p><i>Victoria:</i> Schools are asked to answer the question, ‘Is this student Aboriginal or a Torres Strait Islander?’ on the front page of each student’s test booklet. Students are identified as Indigenous on enrolment forms at the commencement of school.</p> <p><i>Queensland:</i> Students self identify as being Indigenous by answering ‘yes’ to either or both the questions, ‘Are you an Aboriginal person?’ and ‘Are you a Torres Strait Islander person?’. Teachers are required to check the accuracy of the students’ responses.</p> <p><i>SA:</i> Students who are of Aboriginal and/or Torres Strait Islander origin and who identify as Aboriginal and/or Torres Strait Islander;</p> <p><i>WA:</i> Indigenous students are identified through their ‘yes’ response to the question ‘Are you an Aboriginal or Torres Strait Islander person?’. This question is included on the front of the student answer booklet.</p> <p><i>Tasmania:</i> Indigenous students are identified by each school from information collected at enrolment or through self identification. If the Indigenous status is unknown, the student is not considered to be Indigenous.</p> <p><i>ACT:</i> Indigenous students are identified at the time of enrolment by the parents/caregivers.</p> <p><i>NT:</i> Indigenous students are identified by schools at the time of enrolment or by self identification.</p>
Language backgrounds other than English (LBOTE)	<p>No nationally agreed definition. Some ABS publications broadly defined LBOTE persons as those born in non-English speaking countries (excluding Indigenous people). Education departments in each jurisdiction define LBOTE students as follows:</p> <p><i>NSW:</i> Those who answered ‘yes’ to the question, ‘Does anyone speak a language other than English in your home?’.</p> <p><i>Victoria:</i> schools were asked to answer the question, ‘Is this student of non-English speaking background?’ on the front page of each student’s test booklet. The generally accepted definition of an LBOTE student is one where the student or either parent was born in a non-English speaking country or has a home language other than English;</p> <p><i>Queensland:</i> Those who self identify as having a language background other than English by answering the questions, ‘At home is English the language you speak MOST of the time?’ and ‘At home, does either of your parents/care-givers speak a language other than English MOST of the time?’ Teachers are required to check the accuracy of the students’ responses.</p> <p><i>SA:</i> A definition of LBOTE is being developed for use with the Basic Skills Test.</p>

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Table 3.11 (continued)

Term	Definition
Locality	<p><i>WA:</i> Those from a language background other than English, who were identified from their responses to the following four questions, ‘Are you an Aboriginal or Torres Strait Islander person?’, ‘Does anyone in your home usually speak in a language other than English?’, ‘How often do YOU speak English at home?’ and ‘How long have you lived in Australia?’.</p> <p><i>Tasmania:</i> For government schools, those who are identified from enrolment records; for Catholic schools, those who are identified from new-arrival and special education applications.</p> <p><i>ACT:</i> Funded English as a Second Language students rather than the broader LBOTE category.</p> <p><i>NT:</i> Students identified by teachers as being eligible for inclusion in the English as a Second Language Program</p> <p><i>Commonwealth:</i> Non-English speakers, including non-English speaking Indigenous students.</p> <p>Where a school is located (either in a metropolitan or non-metropolitan area) based on the jurisdiction’s own definitions/classifications.</p> <p>In this Report, the definitions are:</p> <ul style="list-style-type: none"> <li>• capital city, as defined by the former Department of Primary Industry and Energy;</li> <li>• other metropolitan as defined by the former Department of Primary Industry and Energy;</li> <li>• rural centres (the summation of large and small rural centres), as defined by the former Department of Primary Industry and Energy; and</li> <li>• other rural and remote centres (the summation of other rural areas, remote centres and other remote areas) as defined by the Department of Primary Industry and Energy.</li> </ul> <p>Further classifications are capital city and other metropolitan as urban; large rural centres, small rural centres and other rural as rural; and other remote as remote.</p> <p>Metropolitan may be defined as capital city and other metropolitan, while non-metropolitan may be defined as rural centres and other rural and remote areas.</p> <ul style="list-style-type: none"> <li>• Capital cities consists of State and Territory capital city statistical divisions.</li> <li>• Other metropolitan centres consist of one or more statistical subdivisions that has an urban centre of population of 100 000 or more.</li> <li>• Large rural centres are statistical local areas where most of the population resides in urban centres of population of 25 000 or more.</li> <li>• Small rural centre are statistical local areas in rural zones that contain urban centres of population of between 10 000 and 24 999.</li> <li>• Other rural areas are the remaining statistical local areas within the rural zone.</li> </ul>

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**Table 3.11 (continued)**

<i>Term</i>	<i>Definition</i>
	<ul style="list-style-type: none"> <li>• Remote centres are statistical local areas in the remote zone that contain urban centres of population of 5000 or more.</li> <li>• Other remote area are the remaining statistical local areas within the remote zone.</li> </ul>
Part time student	A student undertaking a workload which is less than that specified as being full time in government schools.
Participation (15–19 years)	Number of full time students of a particular age and sex, expressed as a proportion in government schools of a particular age group, multiplied by the published participation rate for all schools of that particular age group.
Real expenditure	Nominal expenditure adjusted for changes in prices, using the GDP(E) price deflator and expressed in terms of final year prices.
Socioeconomic status	As identified by each jurisdiction.
Source of income	Income from a level of government as a percentage of total government expenditure. Income in this report may come from any of the three levels of government — Commonwealth, State and Territory, and local governments. Commonwealth expenditure is derived from specific purpose payments (current and capital) for government schools. This funding indicates the level of monies allocated, not necessarily the level of expenditure incurred in any given financial year. The data therefore provide only a broad indication of the level of Commonwealth funding.
Special needs	<p>For Tasmania, students with the intellectual disability; autism; psychiatric disorder; physical disorder; physical disability; multiple disability; sensory impairment; or other more general difficulties with learning. A central moderation process identifies the most severe levels of need.</p> <p>For the ACT, students with special needs are those with a sensory, physical, psychological, intellectual, communication disorder; severe disturbed behaviour; or multiple disabilities.</p>
Staff	Full time equivalent of staff generally active in government schools and ancillary education establishments.
Student/staff ratios	Number of full time students per full time teaching and non-teaching staff. Students at special schools are allocated to primary and secondary. The full time equivalent of staff includes those who are generally active in government schools and ancillary education establishments.
Student	Full time student only. A student is a person who is formally (officially) enrolled or registered at a school, and who is also active in a primary, secondary or special education program at that school. Students at special schools are allocated to primary and secondary on the basis of age, unless otherwise identified.
Student— primary	Student in primary education, which commences at pre-year 1 to year 6 in NSW, Victoria, Tasmania and the ACT; pre-year 1 to year 7 in WA, SA and the NT; and year 1 to year 7 in Queensland.
Student— secondary	Student in secondary education, which commences at year 7 in NSW, Victoria, Tasmania and the ACT; and at year 8 in Queensland, SA, WA and the NT.
Students with disabilities	Number of students based on the annual system reports to DETYA. The definitions of students with disabilities are based on individual State criteria, thus data are not comparable across jurisdictions.

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## 4 Vocational education and training

The focus of this chapter is on the part of the education and training system that teaches people employment related skills. The vocational education and training (VET) system provides Australians with the skills to enter and re-enter the workforce, to retrain for a new job and to upgrade skills for an existing job. It includes publicly and privately funded VET delivered by a wide range of training institutions and enterprises through a number of delivery methods.

This chapter reports on VET services that receive government funding — that is, only VET courses and modules (streams 2100–4500), not recreational, leisure and personal enrichment courses (stream 1000) (see definitions in table 4.18). Thus, the scope of VET covered in this chapter aligns with the annual VET data collection by the National Centre for Vocational Education Research (NCVER). This includes provision of VET in publicly owned technical and further education (TAFE) institutes and universities with TAFE divisions, other government and community institutions, and publicly funded activity by private providers. Data on the provision of VET services on a fee-for-service basis are also included in the general data collection. However, revenue from fees received from individuals and organisations, as well as from Commonwealth programs such as the Adult Migrant English Services, are excluded from recurrent expenditure for unit cost calculations.

The performance of publicly funded VET services is assessed within a framework of effectiveness and efficiency indicators. ANTA (ANTA 2000) provided the majority of information in this chapter. VET services provided in schools are included in chapter 3 of this Report. This chapter does not cover university education, although some descriptive information can be found in the education preface.

A profile of VET is presented in section 4.1, followed by a brief discussion of recent policy developments in section 4.2. Together, these provide a context for assessing the performance indicators presented later in the chapter (see box 4.1 for a description of some of the common terms used in the chapter). All jurisdictions have agreed to develop and report comparable indicators, and a framework of performance indicators is outlined in section 4.3. The data are discussed in section 4.4 and future directions in performance reporting are discussed in 4.5. The chapter concludes with jurisdictions' comments in section 4.6 and definitions of terms in section 4.7.

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#### Box 4.1     **Some common VET terms**

**nominal hours – supervised:** the total number of nominal supervised hours of training delivered in a year, calculated by multiplying the approved number of hours for a curriculum module by the number of modules delivered to the number of students in a traditional, supervised delivery setting

**course:** a structured sequence of VET that leads to the acquisition of identified competencies and includes assessment leading to a qualification or statement of attainment

**load pass rate:** the ratio of students who passed assessment in an assessable module or unit of competency to all students who were assessed and passed, failed or withdrew. The calculation is based on the nominal hours supervised for each assessable module or unit of competency.

**module:** a unit of training in which a student can enrol and be assessed

**module completers:** identified in the 1999 Student Outcomes Survey as TAFE students who successfully completed at least one module in 1999 in a study of stream between 2100 and 4500, who were graduates in that year and who had left the TAFE system at the time of the survey (see definitions in table 4.18)

**unit of competency:** the basic unit in the competency standards framework. A unit of competency is the smallest unit that can be assessed and recognised in the VET system.

**training package:** a package of industry competency standards, guidelines for assessment and qualifications that result from successful assessment, and sometimes training and assessment resources. As they are developed, training packages are becoming the basis for all government funded training. New Apprenticeships are based on training packages.

*Source:* ANTA (2000).

#### *Supporting tables*

Supporting tables for chapter 4 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as \Publications\Reports\2001\Attach4A.xls and in Adobe PDF format as \Publications\Reports\2001\Attach4A.pdf.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 4A.3 is table 3 in the electronic files). They may be subject to revision. The most up-to-date versions of these files can be found on the Review web page ([www.pc.gov.au/service/gsp/2001/](http://www.pc.gov.au/service/gsp/2001/)). Users without Internet access can contact the Secretariat to obtain up-to-date versions of these tables (see details on the inside front cover of the Report).

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## 4.1 Profile of vocational education and training

### Service overview

The general roles of the system and the main reasons that students attend VET programs are to:

- develop skills, including general education skills such as literacy and numeracy, that enhance ability to enter the workforce;
- retrain or update workforce skills; and
- provide a stepping stone to further tertiary education.

#### Box 4.2 National skill shortage list (first half of 1999)

The Department of Employment, Workplace Relations and Small Business compiles a list of skill shortages at the national level. There may be regional skill shortages that are not reflected in this list.

##### Professionals

Accountant  
Child care coordinator  
Computing professional  
Electronics engineer

##### Associate professionals

Chef (for 4–5 star hotels and selected Asian cuisines such as Thai and Japanese)

##### Tradespersons

Metal machinist	Toolmaker	Metal fabricator (boilermaker)
Welder	Sheetmetal worker	Motor mechanic
Automotive electrician	Panel beater	Vehicle painter
Solid plasterer	Pastry cook	Hairdresser
Furniture upholsterer	Fitter	Bricklayer
Carpenter	Refrigeration and air-conditioning mechanic	

Source: DEWRSB (1999).

In any dynamic economy there will be some mismatch between skills demanded by employers and those possessed by people looking for work. Many employers in Australia in the first half of 1999 found it difficult to fill employment vacancies in a recognised occupation or specialisation at the existing level of remuneration and conditions of employment, including location (box 4.2). A perfect match is never possible and many factors (including working conditions, career choices, industry profile and employer attitudes) influence both the supply of and demand for skills at regional, State and Territory, and national levels.

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## *Diversity of VET*

The VET system involves the interaction of employers, Commonwealth, State, Territory and local governments (as both purchasers and providers) and an increasing number of specialist private providers. The system provides a diverse range of programs and qualification levels, with course durations varying from a module (a stand-alone course component or subject) of a few hours to full courses of up to four years (box 4.3).

### **Box 4.3 Diversity of VET training**

*The levels of training* range from a single module or unit of competency (which can involve fewer than 10 contact hours) to advanced diplomas (which can involve up to four years of full time study). All training levels in the VET system need to be assessed because many students complete modules or units of competency (which do not provide a course award) without intending to complete a course.

*The types of training* range from formal classroom learning to workplace based learning, and may include flexible, self paced learning and/or online training. The availability of distance education has increased with off-campus options such as correspondence, Internet study and interactive teleconferencing.

*The types of training institution* range from institutions specialising in VET delivery (such as publicly owned TAFE institutes and agricultural colleges, private providers and Adult Community Education providers) to secondary schools and universities. The latter have started to provide dual award courses that combine traditional studies with VET, with an award from both the VET provider and the secondary school or university. In addition to specialist institutions, employers in the workplace deliver much informal on-the-job training that does not lead to a qualification.

## **Funding**

Total expenditure on VET by governments, employers and individuals was an estimated \$8.5 billion in 1998 — equivalent to approximately 1.5 per cent of gross domestic product. Enterprises contributed an estimated 45 per cent of funding, with governments and individuals contributing an estimated 44 per cent and 11 per cent respectively (ANTA 2000).

### *Government recurrent VET expenditure per person*

Government recurrent VET expenditure is reported on an accrual basis. It is defined to exclude fee-for-service revenue, ancillary trading revenue, other operating revenue and revenue from Commonwealth specific purpose funds. Accrual expenditure data are reported for both 1998 and 1999. Recurrent government VET

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expenditure per person aged 15–64 years ranged from \$216 in Victoria to \$445 in the NT in 1999. Per person expenditure in NSW, WA, the ACT and the NT was higher than the national average (table 4A.2).

## **Size and scope**

The VET system is an integral part of Australia's education system. It plays an important role in providing and updating the skills of the Australian workforce, with at least 31 per cent of the Australian workforce holding VET qualifications in May 1998 (ABS 1998).

Over 1.65 million people participated in publicly funded and/or provided VET programs in 1999 (up by 111 900 students or 7 per cent from the 1998 level), comprising about 11 per cent of the Australian population aged 15–64 years (ANTA 2000). The target population for VET is people aged 15–64 years and this group is used in this chapter for per person comparisons across jurisdictions.

Over 331 million hours of VET programs were publicly funded or delivered on a fee-for-service basis by public providers in 1999 (ranging from 112 million hours in NSW to 4 million hours in the NT) (table 4A.1). The number of annual hours delivered per student ranged from 184 in SA to 289 in the ACT. The national average was 201 hours per student. These programs were delivered by 85 public training institutions, 1075 community based providers and 2465 publicly funded private providers (NCVER 2000a).

The size of VET training provider locations varied across jurisdictions in 1999, ranging from 701 students per training location in NSW to 51 students per training location in the NT (table 4A.1). (Similarly, there was a large variation in the number of VET hours delivered per training provider location.)

State and Territory TAFE institutes and universities with TAFE divisions provide the majority of publicly funded VET services, delivering approximately 85 per cent of all VET hours in 1999 (compared with about 86 per cent in 1998). Adult and community education providers and private providers delivered the remaining 15 per cent of VET hours in 1999 (compared with about 14 per cent in 1998) (NCVER 2000a).

The infrastructure (net assets) of the government owned TAFE institutes and universities with TAFE divisions was worth over \$5.6 billion at 31 December 1999, of which 89 per cent comprised the value of land and buildings (NCVER 2000b). The value of these assets per person (aged 15–64 years) varied across jurisdictions, ranging from \$1043 in the NT to \$357 in Queensland (table 4A.3).

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### *Students studying in rural and remote locations*

The proportion of students studying in rural and remote locations varied across jurisdictions in 1999. The proportion of students studying in rural locations ranged from 57.2 per cent in Tasmania to 1.3 per cent in the ACT, while the proportion in remote locations ranged from 51.3 per cent in the NT to less than 1 per cent of students in NSW and Victoria (excluding the ACT, which has no remote locations) (table 4A.1).

### **Roles and responsibilities**

The national VET system is a cooperative arrangement between Commonwealth, State and Territory governments, industry (represented by Industry Training Advisory Bodies) and service providers. Different bodies may provide services, funds, advice and decisions (figure 4.1). State and Territory governments play dual roles as both purchasers of VET services (from private and community providers) and direct providers of services (through TAFE institutes and universities with TAFE divisions). In addition, each State and Territory government is responsible for administering its training system, setting fees and determining exemption, concession and loan arrangements for students.

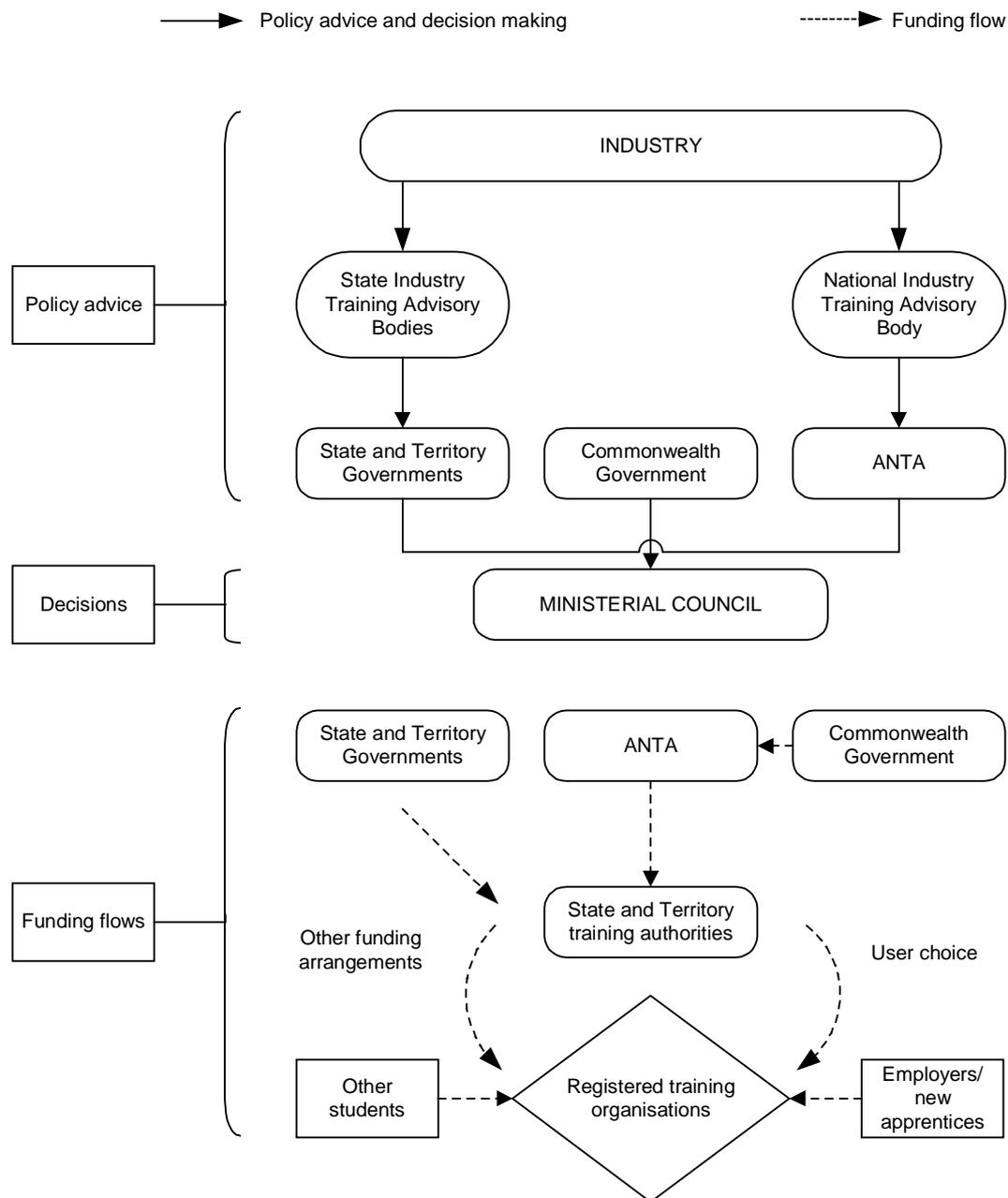
Public VET funding comes from Commonwealth, State and Territory governments. State and Territory governments provided just over 73 per cent of recurrent government funding in 1999 and the Commonwealth Government provided the remainder (NCVER 2000b).

The proportion of government funding allocated to private and adult community providers varied across jurisdictions — the NT, Queensland and SA had the highest proportions in 1999 (10 per cent, 9 per cent and 9 per cent respectively) and NSW and Tasmania had the lowest (4 per cent each). All jurisdictions except Queensland reported a real increase in the amount of government funds going to private and adult community providers for VET delivery between 1998 and 1999 (table 4A.4).

### *Allocation of VET funding*

The majority of government VET funds are allocated to major public providers based on the planned activity of State and Territory training authorities (which plan the amount of annual curriculum hours to be delivered in each field of study). Competitive tendering was introduced in the early 1990s to allocate \$21 million of additional Commonwealth funds to public and private providers (HRSCEET 1998).

Figure 4.1 Decisions, advice and funding flows within the VET system



Commonwealth, State and Territory ministers agreed on the pursuit of a more effective training market, with public and private provision of training, as a key objective of the national vocational education and training system. This approach is reflected in the Australian National Training Authority (ANTA) Agreement of 1992. In line with this objective, States and Territories have made greater use of competitive funding arrangements, which have increased the provision of publicly

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funded training by other providers, including private training providers. Processes used to allocate funds on a competitive basis include:

- *competitive tendering* — where public and private providers compete for funding contracts from State and Territory training authorities (based on one or more selection criteria) in response to government offers (tenders);
- *user choice* — where the employer and apprentice/trainee choose a registered training provider and negotiate key aspects of their training. Public funds flow to that provider; and
- *preferred supplier arrangements* — an extension of competitive tendering, where a contract is awarded to a provider (chosen by the tender process) to provide training on a longer term basis.

Competitive tendering mechanisms for allocating funds to VET providers are designed to expose the sector to greater competition by facilitating the entry of new providers and the expansion of existing providers. Competitive tendering may also have an effect, either positive or negative, on other dimensions of VET service provision, including quality and access by equity target groups. Some jurisdictions are pursuing efficiency and effectiveness gains through competitive tendering mechanisms.

Employers consider that the ability to choose a training provider is important to their business. Results from the 1997 Employer Satisfaction Survey indicated that 77 per cent of employers believed that having a choice of training providers was ‘very important’ (46 per cent) or ‘important’ (31 per cent) to their business. Large employers were more likely to say that choice was ‘very important’ or ‘important’ (86 per cent) than were medium (75 per cent) or small employers (78 per cent) (NCVER 1998).

An estimated \$441 million of public VET funding was allocated on a competitive basis in 2000 (including user choice arrangements) — up 11.36 per cent from the amount in 1999 (ANTA 2000). There were 1566 registered training providers accessing public funds in 1999, with 937 registered training providers chosen under contestable funding arrangements.

The degree of competition in the tendering process varies across jurisdictions. Some funds are potentially available to both public and private providers (open competitive tendering) whereas some tendering is restricted to either public or private providers (limited competitive tendering). Similarly, the potential for competition, in terms of the size of the market of potential providers, also varies across jurisdictions (table 4A.5).

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Technical and Further Education institutes and universities with TAFE divisions may be subject to factors that affect their ability to compete effectively for funding allocated by competitive tendering (box 4.4).

**Box 4.4 TAFE institutes and competitive tendering**

The House of Representatives Standing Committee on Employment, Education and Training (HRSCEET) argues that the following factors impede the competitive position of TAFE institutes.

- Many publicly owned TAFE institutes and universities with TAFE divisions cannot retain revenue earned from fee-for-service activity.
- Governments set concessional fees but do not necessarily compensate TAFE institutes and universities with TAFE divisions for the revenue lost in meeting this community service obligation.
- Governments set mainstream course fees that may not reflect course costs.
- Governments require publicly owned TAFE institutes and universities with TAFE divisions to operate in higher cost regional and remote areas.

However, TAFE institutes and universities with TAFE divisions have some competitive advantages over other VET providers. HRSCEET notes that a main advantage is the size and value of the public infrastructure to which they have access.

*Source:* HRSCEET (1998).

## **4.2 Policy developments in vocational education and training**

As part of the planning and accountability arrangements for the national VET system, ministers agreed in June 1999 to four annual national priorities for 2000.

- *Consolidation of national training arrangements.* Ministers agreed to implementation plans to increase the number and range of training packages available. The implementation plans include definitions of appropriate pathways to training package qualifications; the expansion of New Apprenticeship arrangements, including the use of strategies to increase opportunities for young people; and improved recognition and mobility across all sectors of education and training.
- *Achieving diversity and flexibility to meet the needs of all.* Ministers agreed to increase and improve outcome opportunities for those underrepresented in VET; to improve choice and flexibility in training delivery through the developed framework for flexible delivery; to develop strategies to improve language,

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literacy and numeracy, including continual improvement in the incorporation of language, literacy and numeracy into training packages; and to improve outcomes from VET in schools (including increased participation).

- *Value for money.* Ministers agreed to implement key performance measures for the VET sector; develop plans for sector growth derived through the achievement of efficiencies; implement agreed outcomes from the Review of Infrastructure program; and enhance strategies to ensure the quality of outcomes.
- *Changing attitudes to training.* Ministers agreed that a national marketing strategy be progressed with comprehensive and accessible information on the training options, and a range of strategies to increase industry investment and participation in training.

The current ANTA Agreement expires at the end of 2000. Ministers for vocational education and training are currently negotiating a new agreement. Once established, the new agreement will outline the funding and accountability arrangements for government funded VET over the next few years.

### 4.3 Framework of performance indicators

The framework used in this Report is built around a set of shared VET objectives (box 4.5). The performance indicators discussed here reflect the national VET objectives — for example, participation by target groups indicates the access to and equity of VET outcomes; skill profile indicates the mobility of the labour market; overall employer satisfaction with VET indicates the preparedness of people for work; and recurrent expenditure per annual curriculum hour indicates, the extent to which the value of public VET expenditure is maximised.

#### Box 4.5 Objectives for VET services

Ministers agreed in 1997 on four objectives for VET services:

- to achieve equitable outcomes in VET;
- to enhance mobility in the labour market;
- to equip Australians for the world of work; and
- to maximise the value of public VET expenditure.

In early 1998, a fifth objective — to increase investment in training — was added.

*Source:* ANTA (1998b).

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## Efficiency indicators

Government recurrent expenditure was reported on an accrual basis for the first time in 1998. The move to accrual reporting represents a break in the series. However, accrual and cash data are available for 1997, which will facilitate some continuity in the time series and allow comparisons over time from 1997. Ongoing work to provide a more comprehensive set of performance indicators and to improve existing indicators and the data is discussed in section 4.5.

## 4.4 Key performance indicator results

Different delivery contexts, locations and types of client may affect the effectiveness and efficiency of VET services. Appendix A contains detailed statistics and short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter.

### Access and equity

This chapter provides data on the extent to which the general population, young people and the ANTA-designated equity target groups have access to and participate in the publicly funded VET system. ANTA-designated equity target groups are women, Indigenous people, people with a disability, residents of rural and remote communities, and people from non-English speaking backgrounds.

#### *VET participation of the general population*

The national VET participation rate for people aged 15–64 years was 11 per cent in 1999. Victoria reported the highest participation rates (13.5 per cent) and the ACT reported the lowest (8 per cent). The participation rate was lower for females than for males, except in NSW and the NT (figure 4.3).

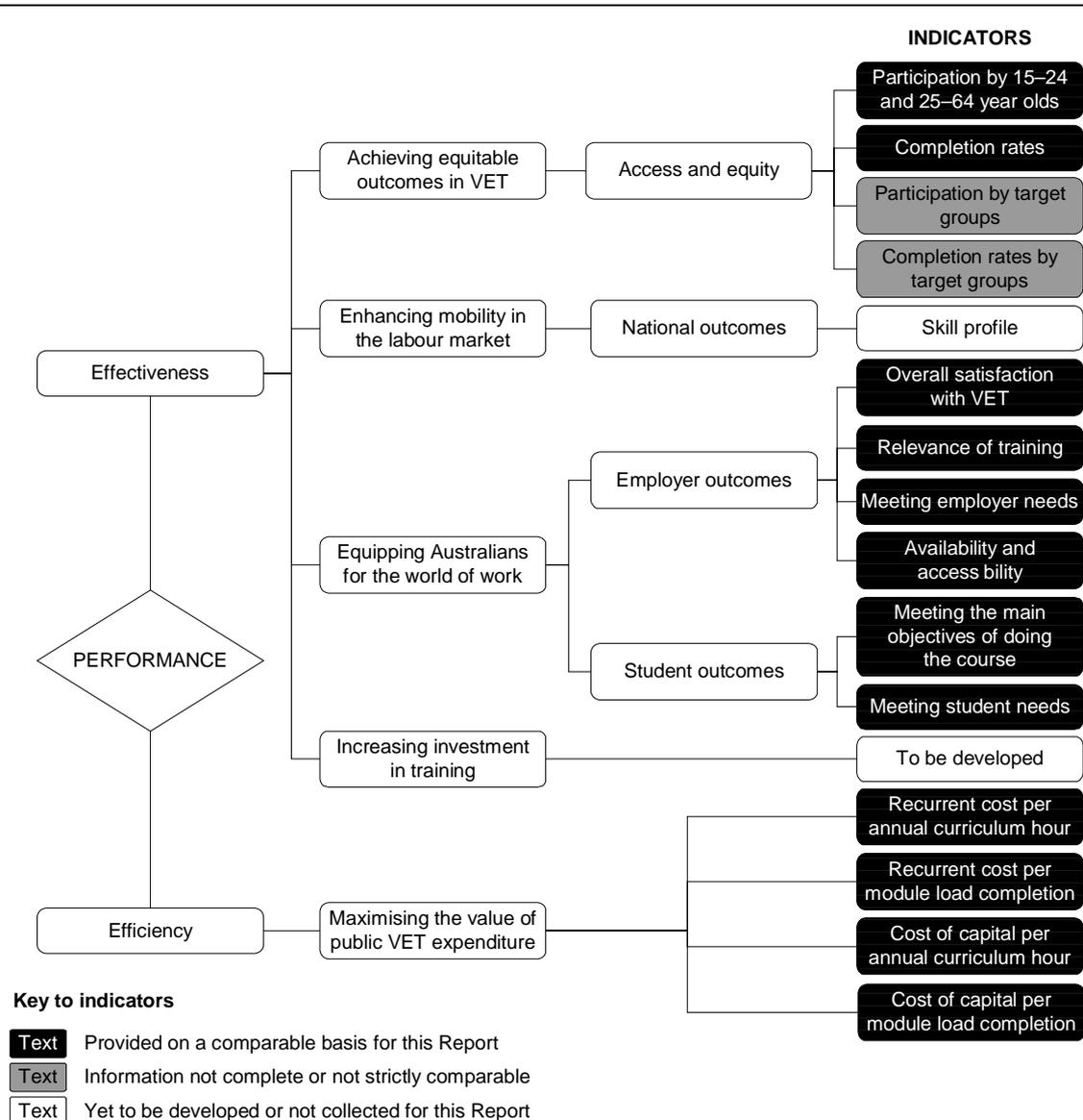
Males aged 15–29 years had higher participation rates than those of their female counterparts, with the reverse being true for the group aged 40–59 years. Males and females were equally likely to participate at 30–39 years of age and over 60 years of age (table 4A.6).

#### *VET participation of young people (15–24 years of age)*

Over 600 000 young people (22 per cent of people aged 15–24 years of age) participated in VET in 1999 (table 4A.6). Traditionally, young males (15–24 years

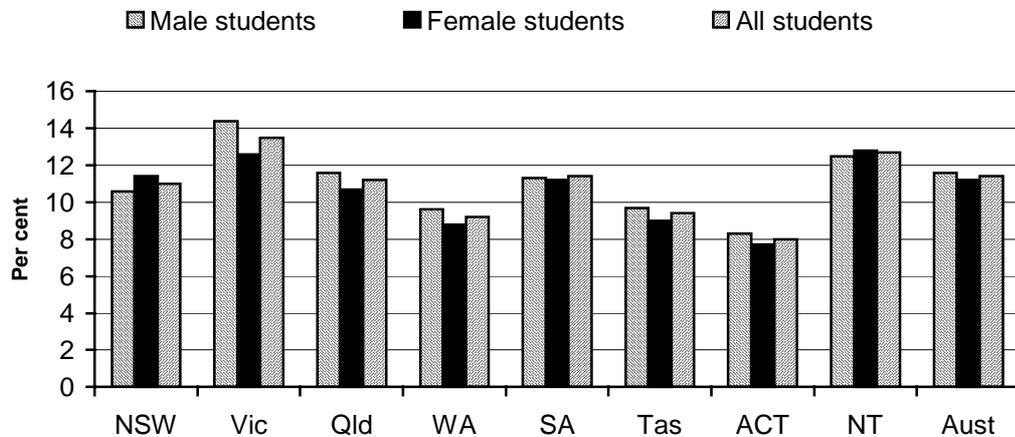
of age) have had a higher VET participation rate than that of young females, and this pattern continued in 1999. The majority (80 per cent) of young people undertook their training at TAFE or other government providers, with the remainder divided between community education and other registered providers (NCVER 2000c).

Figure 4.2 Performance indicators for VET services<sup>a, b</sup>



<sup>a</sup> The depicted relationship between the performance indicators and objectives for VET is imperfect. In some cases the performance indicators may relate to more than one of the objectives for VET: for example, the indicator 'Meeting the main objectives of doing the course' also reports on results for target groups that fall under the equity objective, and the access and equity indicators also relate to the objective of enhancing mobility in the labour market. <sup>b</sup> The VET sector has identified total investment in VET as a key performance measure, but this is included as descriptive (not performance) information in this Report.

Figure 4.3 VET participation rates for people aged 15–64 years, 1999



Source: table 4A.7.

#### Load pass rate for the general population

Load pass rates report the extent to which students pass assessment in an assessable module or unit of competency. Comparisons should be made with care because average module durations and competencies achieved by students vary across jurisdictions. This chapter provides load pass rates (the ratio of students who passed assessment in an assessable module or unit of competency to all students who were assessed and either passed, failed or withdrew) for all students and ANTA-designated equity target groups. The calculation is based on the nominal hours supervised for each assessable module or unit of competency.

Load pass rates in 1999 ranged from 86 per cent in SA to 70 per cent in the NT. Queensland, SA, Tasmania and the ACT reported rates above the national average of 75 per cent. In general, there was little difference in the completion rates of males and females in each jurisdiction (table 4.1).

Table 4.1 Load pass rates, 1999 (per cent)<sup>a</sup>

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Male	71.6	72.2	75.2	73.6	84.8	82.0	77.8	71.1	73.9
Female	72.2	75.4	75.8	72.9	86.8	84.8	81.9	67.9	75.1
All people	71.9	73.6	75.5	73.3	85.7	83.4	79.8	69.5	74.5

<sup>a</sup> Comparisons should be made with care across jurisdictions because average module durations and competencies achieved by students vary across jurisdictions.

Source: table 4A.8.

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### *VET participation of target groups*

A key national goal of the VET system is to increase opportunities and outcomes for disadvantaged groups. Participation by these groups, compared with their representation in the general population, may reflect the effectiveness of current strategies in achieving this objective. Participation rates of people with special needs should be interpreted with care because the data generally depended on self identification at the time of enrolment, and nonresponses (that is, students who did not indicate whether they had special needs) were both high and varied across jurisdictions.

The VET participation rate of people with a disability was below this group's representation in the population in all jurisdictions, although there were high nonresponse rates for several jurisdictions (table 4A.10).

The national participation rate of people identifying themselves as being from a non-English speaking background (that is, people born in a non-English speaking country) was below this group's representation in the population. NSW, Queensland and the ACT reported a participation rate above this group's share of the population (table 4.2). Tasmania, the ACT and the NT reported the lowest nonresponse rates. The nonresponse rates in WA (50 per cent), SA (23 per cent) and Victoria (22 per cent) remained high. Given such high nonresponse rates, comparisons across jurisdictions must be treated with caution (table 4.2).

**Table 4.2 VET participation by people from a non-English speaking background, by country of birth, 1999 (per cent)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Students who reported being born in a non-English speaking country	16.2	13.0	7.9	7.0	9.2	3.5	14.2	7.2	12.1
People who were born in a non-English speaking country, as a proportion of the total population	15.8	17.1	7.3	11.8	10.6	3.9	13.8	8.1	13.3
Non-response rate <sup>a</sup>	13.3	21.6	11.7	49.8	23.6	8.3	11.0	9.7	18.9

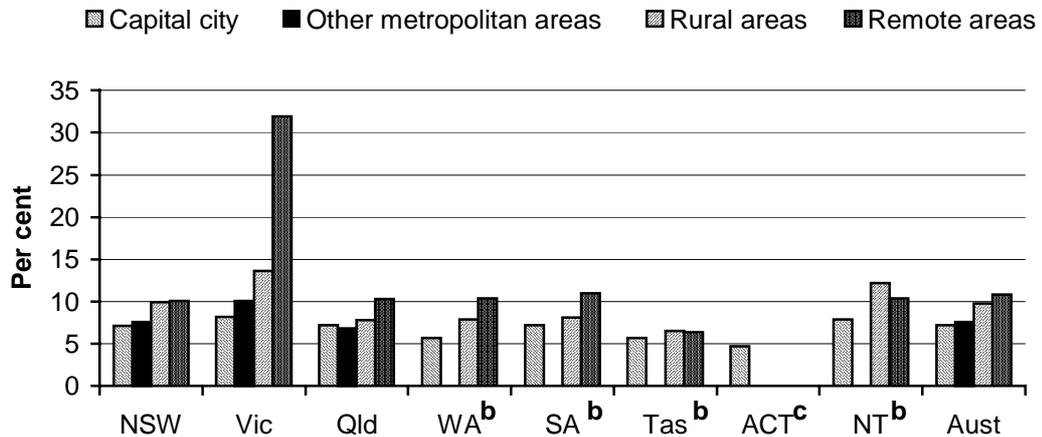
<sup>a</sup> Students who did not indicate the country in which they were born.

Source: table 4A.9.

Participation rates for rural and remote areas were highest in Victoria (13.6 per cent and 31.9 per cent respectively). The remote area participation rates for SA (11.0 per cent), Queensland (10.3 per cent), WA (10.4 per cent) and the NT (10.4 per cent) were similar to the national average (10.8 per cent). Tasmania had below average participation by people living in each of the regions for which meaningful participation rates could be calculated (figure 4.4). Interpretation of rural and

remote area participation rates should consider both the target population and the proportion of students from these regional areas (table 4A.1 and appendix A).

Figure 4.4 VET participation, by region, 1999<sup>a</sup>



<sup>a</sup> Interpretation of rural and remote participation rates should consider the absolute number of students from these regional areas (table 4A.1 and appendix A). <sup>b</sup> The number of students from other metropolitan areas is too small to calculate meaningful rates. <sup>c</sup> The numbers of students from rural, remote and other metropolitan areas are too small to calculate meaningful rates.

Source: table 4A.11.

The proportion of VET students who identified as Indigenous ranged from 1 per cent in Victoria and the ACT to 38 per cent in the NT in 1999. The proportion of VET students who identified as Indigenous was greater than or equal to the Indigenous population share in all jurisdictions except Tasmania, where the two rates were similar (table 4.3).

Table 4.3 VET participation by Indigenous people, 1999 (per cent)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Students who reported being Indigenous	2.8	0.8	4.2	6.4	2.6	2.7	1.3	37.8	3.1
Indigenous people as a proportion of total population	1.7	0.5	2.9	3.0	1.4	3.0	1.0	24.4	2.0
Non-response rate <sup>a</sup>	14.5	19.9	8.9	38.9	22.7	12.8	1.1	5.6	17.3

<sup>a</sup> Students who did not indicate if they were Indigenous.

Source: table 4A.12.

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### Load pass rates for target groups

Tasmania reported the highest load pass rates for Indigenous people (72 per cent). SA reported the highest load pass rates for people from rural and remote areas (90 per cent and 85 per cent respectively) and for people with a disability (81 per cent). SA (80 per cent) and Tasmania (97 per cent) reported the two highest load pass rates for people from a non-English speaking background and for all students (86 per cent and 83 per cent respectively) (table 4.4).

Nationally, the ANTA-designated equity target group — students from rural areas — reported load pass rates higher than the national average for all students in 1999 (77 per cent compared with 74 per cent respectively) (table 4.4). Comparisons across jurisdictions should be made with care because average module duration and competencies achieved by students vary across jurisdictions.

Table 4.4 **Load pass rates, by target groups, 1999 (per cent)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
All people	71.9	73.6	75.5	73.3	85.7	83.4	79.8	69.5	74.5
Target groups									
Students who reported being Indigenous	55.1	57.6	58.4	54.4	69.8	71.6	65.8	63.5	58.3
Students who reported having a disability	66.7	67.3	66.9	66.2	80.7	71.0	74.5	64.3	67.7
Students who reported speaking a language other than English at home	69.9	68.1	59.9	62.3	80.1	96.6	73.9	59.6	69.0
Rural area students	72.2	77.4	78.0	73.9	90.0	82.7	na	74.0	76.8
Remote area students	67.8	78.9	76.0	67.2	85.2	82.9	na	67.9	71.8

<sup>a</sup> Comparisons should be made with care across jurisdictions because average module durations and competencies achieved by students vary across jurisdictions. **na** Numbers too small to calculate a meaningful rate.

Source: table 4A.8.

### Employer outcomes

Employer satisfaction is an important indicator of the quality of VET services. The NCVER 1999 Survey of Employer Views on Vocational Education and Training obtained views on aspects of VET from 3558 employers in 17 different industries nationally (tables 4A.13–4A.18). The 1999 survey also draws a distinction between employers with direct experience of the VET system and those with little or no experience of the system. The scope of the survey was expanded in 1999 to include both employers employing a recent VET graduate before they completed a course and those without a VET graduate. Of the 3558 employers surveyed, 2504 employed a recent VET graduate before the graduate had completed their training (see NCVER 1999b).

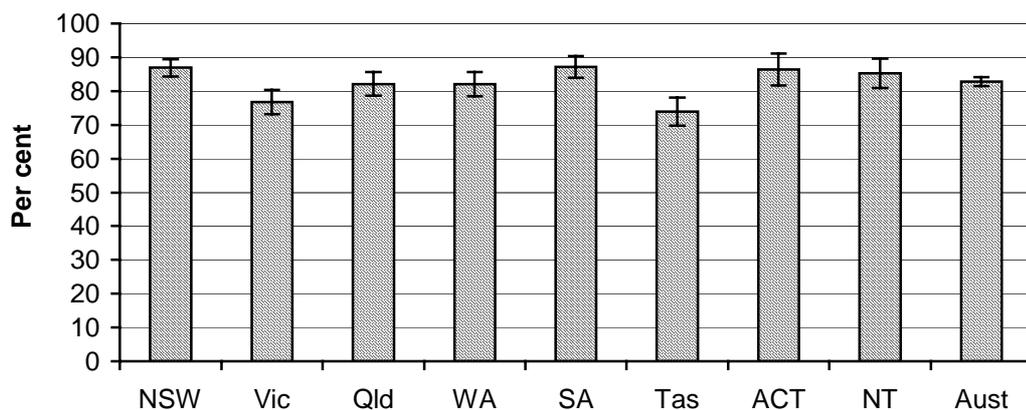
The precision of survey estimates depends on the survey sample size and the sample estimate. Larger sample sizes result in higher precision, as do larger sample estimates; for example, if 90 per cent of surveyed respondents chose an answer, then there would be less uncertainty about the actual population's views than if 50 per cent of respondents had chosen it. Consequently, small differences in results should be interpreted with care. The 95 per cent confidence intervals for given estimates are provided in the figures and tables presenting the survey data.

The 1999 Survey of Employer Views covered employers across a range of workforce sizes — small (1–19 employees), medium (20–99 employees) and large (100 or more employees). On average, employers' overall satisfaction with VET tended to decrease slightly as the size of the workforce increased (table 4A.14).

#### *Employer overall satisfaction with VET providers*

The 1999 Survey of Employers Views asked employers to rate their 'overall satisfaction' with VET on a scale from 1 (very dissatisfied) to 10 (very satisfied). Nationally, 83 per cent of surveyed employers reported an overall satisfaction score of 6 or higher. NSW (87 per cent), SA (87 per cent) and the ACT (86 per cent) had the highest proportions of employers with a satisfaction ranking of 6 or higher. Tasmania (74 per cent) and Victoria (77 per cent) had the lowest proportions (figure 4.5).

**Figure 4.5 Proportion of surveyed employers who ranked their satisfaction with VET providers as 6 or higher, 1999<sup>a, b</sup>**



<sup>a</sup> The error bars presented above each column in the chart depict the 95 per cent confidence intervals associated with each point estimate. <sup>b</sup> Rankings: 1 = very dissatisfied; 10 = very satisfied.

Source: table 4A.15.

Surveyed employers' satisfaction with the system varied across industries in 1999. Respondents from the electricity, gas and water, government administration and defence, and manufacturing industries were the least satisfied with VET providers, while those from communication services, mining and agriculture were among the most satisfied (table 4A.16).

### *Employer satisfaction with the relevance of training*

Employers of recent VET graduates who completed their course after commencing their current employment were asked about their satisfaction with the relevance of training. Surveyed employers expressed a range of views about the relevance of the training that their employees received in the VET system and the extent to which training accounted for employers' needs. Nationally, 11 per cent of surveyed employers expressed high satisfaction with VET course content. Sixteen per cent of those in Victoria and 10 per cent in Queensland and WA reported that the content of VET courses was at the leading edge of industry needs, whereas the corresponding figure for Tasmania was 6 per cent (table 4.5).

Nationally, 90 per cent of surveyed employers agreed that the content of VET courses was relevant to industry needs, while 7 per cent said that it was not. The highest proportions of employers satisfied with the content of VET courses were in Tasmania (92 per cent), NSW (91 per cent) and Victoria (90 per cent). Satisfaction was lowest in WA, SA and the ACT (85 per cent). There were large relative standard errors associated with the estimate for the ACT and the NT, so care should be taken when interpreting this figure (table 4.5).

**Table 4.5 Employer satisfaction with the relevance of VET course content, 1999 (per cent)<sup>a, b, c</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
At the leading edge of Industry needs	9 (±2.5)	16 (±3.5)	10 (±3.1)	10 (±3.5)	7 (±2.8)	6 (±2.6)	9 <sup>d</sup> (±4.7)	9 <sup>d</sup> (±4.0)	11 (±1.2)
Directly relevant to Industry needs	34 (±4.1)	46 (±4.8)	34 (±4.9)	44 (±5.8)	49 (±5.5)	48 (±5.4)	36 (±7.9)	48 (±6.9)	40 (±1.9)
Mostly relevant and Useable by the industry	48 (±4.3)	28 (±4.3)	45 (±5.1)	31 (±5.4)	29 (±5.0)	38 (±5.3)	40 (±8.0)	32 (±6.5)	39 (±1.9)
Not relevant to industry Needs	8 (±2.4)	6 (±2.3)	6 (±2.4)	9 (±3.3)	7 (±2.8)	7 (±2.8)	10 <sup>d</sup> (±4.9)	10 (±4.2)	7 (±1.0)
Cannot say	1 <sup>d</sup> (±0.9)	3 <sup>d</sup> (±1.6)	5 (±2.2)	5 <sup>d</sup> (±2.5)	7 (±2.8)	2 <sup>d</sup> (±1.5)	5 <sup>d</sup> (±3.6)	2 <sup>d</sup> (±1.9)	3 (±0.7)

<sup>a</sup> The relative standard errors corresponding to a 95 per cent confidence interval for the percentage estimates are reported in parentheses under the estimates. <sup>b</sup> This question was asked only of employers with recent VET graduates employed during training. <sup>c</sup> Totals for each jurisdiction may not add to 100 per cent as a result of rounding. <sup>d</sup> The relative standard errors associated with this estimate are greater than 25 per cent. This estimate is not considered reliable for most practical purposes.

Source: table 4A.17.

### *Employer satisfaction with the availability and accessibility of training*

The 1999 Survey of Employer Views also asked employers of recent VET graduates (who had commenced their course after commencing their current employment) about their satisfaction with aspects of the availability and accessibility of the VET system. Surveyed employers in Queensland, SA, and the NT reported above average satisfaction with the flexibility of VET course delivery. An above average proportion of surveyed employers in NSW and Tasmania reported that they considered the courses had limited or no flexibility (table 4.6).

**Table 4.6 Employer satisfaction with the flexibility of VET course delivery, 1999 (per cent)<sup>a, b, c</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Satisfied with flexibility of course delivery	56 (±4.3)	63 (±4.6)	71 (±4.7)	61 (±5.7)	72 (±5.0)	60 (±5.3)	61 (±8.0)	65 (±6.6)	63 (±1.9)
Considered flexibility limited or no flexibility	38 (±4.2)	33 (±4.5)	27 (±4.6)	34 (±5.5)	26 (±4.8)	37 (±5.2)	29 (±7.4)	26 (±6.1)	34 (±1.9)

<sup>a</sup> The relative standard errors corresponding to a 95 per cent confidence interval for the percentage estimates are reported in parentheses under the estimates. <sup>b</sup> This question was only asked of employers with recent VET graduates employed during training. <sup>c</sup> 'Cannot say' represented the balance of responses in each jurisdiction.

Source: table 4A.18.

### *Views of employers with no VET graduate employees — comparison of employers' general views on the relevance of training*

For the first time, a sample of 2495 employers with no VET graduate employees was also surveyed (tables 4.8 and 4.9). There were similar levels of agreement by both employers of recent VET graduates and employers with no VET graduates that 'there should be more work experience or work placements as part of VET' and that 'the VET system needs to provide more practical skills'. A higher proportion of employers with no VET graduates (74 per cent) than of employers of recent VET graduates agreed that 'on-the-job skills are more useful than skills obtained through formal education' (table 4.7).

Forty-eight per cent of employers with no VET graduates believe VET qualifications are not relevant to their industry and 27 per cent meet all their training needs through in-house courses (table 4.8).

**Table 4.7 Employer views on the relevance of training, by attitude statement, 1999 (per cent in agreement)**

<i>Attitude statement</i>	<i>Employers of recent VET graduates</i>	<i>Employers with no VET graduates</i>
The VET system is providing graduates with skills appropriate to employers' needs	69	41
There should be more work experience or work placements as part of VET	85	86
The VET system needs to provide more practical skills	77	79
On the job skills are more useful than skills obtained through formal education	66	74

<sup>a</sup> The relative standard errors corresponding to a 95 per cent confidence interval for the percentage estimates were  $\pm 0.7$  for employers of recent VET graduates and  $(\pm 0.9)$  for employers with no recent graduates.

Source: table 4A.19.

**Table 4.8 Reasons for not employing VET graduates, by reason, 1999 (per cent)<sup>a, b</sup>**

Qualifications are not relevant to our industry	48
All our training requirements are provided in-house	27
Fully qualified people are not required; staff attend only modules relevant to our operations	15
We have staff currently studying for such qualifications	12
We are not aware of any training available to suit our needs	4
We have not been happy with the quality of VET qualifications	2
Other	10
Don't know	4

<sup>a</sup> The relative standard error corresponding to a 95 per cent confidence interval for the percentage estimates was  $\pm 0.9$  for employers with no recent VET graduates. <sup>b</sup> More than one reason could be given.

Source: 4A.20.

## Student outcomes

ANTA commissioned a Student Outcomes Survey in 1999 to ascertain the work and promotional opportunities resulting from training in the Australian VET system for 1998 graduates from TAFE institutes and universities with TAFE divisions (AC Nielsen 1999). The scope of the survey was increased to determine the outcomes for students who had successfully completed training below the level of full qualification and who were no longer engaged in training. Data on these students were collected for the first time this year, so they required further work to determine whether they were comparable.

Care should be exercised when generalising from the views of the graduates surveyed, because the survey was not weighted for non-responses.<sup>1</sup> Adjusting the results for non-response bias would tend to increase the reported satisfaction although by different amounts across jurisdictions. It is also important to remember that factors external to the VET system — such as general economic conditions and labour market conditions (appendix A) — may affect reported outcomes for students. Nevertheless, graduate destination surveys provide valuable information on student outcomes.

### *Main reason for undertaking VET course*

The 1999 Student Outcomes Survey asked 1998 TAFE institute graduates to nominate their main reason for undertaking a VET course. Nationally 79 per cent of surveyed graduates indicated that they enrolled for vocational reasons (for example, to obtain a job or promotion). This proportion ranged from 74 per cent in WA to 86 per cent in SA (table 4.9).

**Table 4.9 TAFE graduates' main reason for undertaking a VET course, 1998 (per cent)<sup>a, b, c</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Vocational reason	78 (±0.5)	80 (±0.7)	81 (±0.9)	74 (±1.1)	86 (±1.0)	85 (±1.9)	79 (±2.4)	78 (±4.7)	79 (±0.3)
Non-vocational reason	22 (±0.5)	19 (±0.7)	18 (±0.9)	26 (±1.1)	13 (±1.0)	14 (±1.9)	21 (±2.4)	21 (±4.6)	20 (±0.3)

<sup>a</sup> The relative standard errors corresponding to a 95 per cent confidence interval for the percentage estimate are reported in parentheses under the estimate. <sup>b</sup> Includes 'to get into another course of study', which could ultimately be vocational. <sup>c</sup> 'Not stated/refused' represented the balance of responses in each jurisdiction.

Source: table 4A.21.

The proportion of TAFE institute graduates who reported that their course helped or partly helped them achieve their main reason for doing the course ranged from 73 per cent in Tasmania to 85 per cent in the NT (table 4.10).

<sup>1</sup> The views of graduates who did not respond may differ from those of graduates who did respond. Those who did respond may not be representative of the total graduate population if the non-response rate was high. Response rates for the 1999 Student Outcomes Survey are contained in table 4A.26.

**Table 4.10 Whether VET course helped TAFE institute graduates achieve their main reason for doing the course, 1999 (per cent)<sup>a, b</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Course helped to achieve main reason	62.1 (±0.6)	64.6 (±0.9)	62.4 (±1.1)	66.5 (±1.2)	66.8 (±1.4)	57.6 (±2.7)	64.5 (±2.8)	69.6 (±5.2)	63.4 (±0.4)
Course partly helped to achieve main reason	16.6 (±0.4)	15.4 (±0.6)	16.4 (±0.8)	14.9 (±0.9)	14.6 (±1.0)	15.6 (±2.0)	16.3 (±2.2)	15.7 (±4.1)	16.0 (±0.3)
Course did not help to achieve main reason	8.0 (±0.3)	6.9 (±0.5)	9.9 (±0.7)	7.3 (±0.7)	8.2 (±0.8)	12.4 (±1.8)	7.2 (±1.5)	4.2 <sup>c</sup> (±2.3)	8.0 (±0.2)
Do not know yet	12.5 (±0.4)	12.1 (±0.6)	10.3 (±0.7)	10.4 (±0.8)	9.2 (±0.8)	13.2 (±1.8)	10.9 (±1.8)	9.3 (±3.3)	11.7 (±0.3)

<sup>a</sup> The relative standard errors corresponding to a 95 per cent confidence interval for the percentage estimates are reported in parentheses under the estimates. <sup>b</sup> 'Not stated/refused' represented the balance of responses in each jurisdiction. <sup>c</sup> The relative standard errors associated with this estimate are greater than 25 per cent. This estimate is not considered reliable for most practical purposes.

Source: table 4A.22.

The extent to which students achieved their main reason for doing a course not only varied across jurisdictions but also across target groups. Nationally, 68 per cent of TAFE institute graduates who enrolled in a VET course to obtain a job achieved this outcome. This outcome was lower for people identifying as Indigenous (65 per cent) and for people from non-English speaking backgrounds (65 per cent) (table 4.11).

**Table 4.11 Whether VET course helped TAFE institute graduates achieve their main reason for doing the course, by reason and special needs group, 1999 (per cent)<sup>a, b</sup>**

<i>Reason for course</i>	<i>Graduates from a non-English speaking background</i>		<i>All graduates</i>		<i>Indigenous graduates</i>	
To obtain a job (or own business)	64.8	(±0.7)	67.8	(±0.4)	64.5	(±2.9)
To try for a different career	65.2	(±0.7)	68.3	(±0.4)	72.8	(±2.7)
To obtain a better job or promotion	69.3	(±0.7)	72.8	(±0.4)	81.2	(±2.3)
To fulfil requirements of the job	94.2	(±0.3)	94.6	(±0.2)	90.4	(±1.8)
To learn extra skills for the job	91.9	(±0.4)	93.9	(±0.2)	91.6	(±1.7)
To qualify for another course	89.0	(±0.4)	88.8	(±0.3)	86.5	(±2.1)
Interest or personal development	90.0	(±0.4)	92.0	(±0.2)	91.3	(±1.7)
Other	77.1	(±0.6)	76.8	(±0.3)	63.4	(±2.9)

<sup>a</sup> Includes respondents who indicated that their VET course helped or partly helped them achieve their main reason for doing the course. <sup>b</sup> The relative standard errors corresponding to a 95 per cent confidence interval for the percentage estimate are reported in parentheses to the right of the estimate.

Source: table 4A.23.

## Meeting student needs — employment outcomes of VET graduates

Of the surveyed TAFE institute graduates who completed a VET program during 1998, 73 per cent indicated that they were employed (NCVER 1999 unpublished). Graduates from Victoria, Queensland, SA, the ACT and the NT reported better than average employment outcomes (table 4.12). Interpretation of employment outcomes must account for the general economic conditions in each jurisdiction (appendix A) and the enrolment of some students for non-vocational reasons. South Australia, for example, reported the highest employment rate of graduates but also the highest proportion of VET enrolments for vocational reasons.

**Table 4.12 Labour force status of 1998 TAFE institute graduates, 1999 (per cent)<sup>a, b, c</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Employed <sup>d</sup>	70.8 (±0.5)	75.0 (±0.8)	73.3 (±1.0)	71.0 (±1.2)	80.6 (±1.2)	71.0 (±2.5)	73.6 (±2.6)	76.7 (±4.8)	72.8 (±0.4)
Unemployed	13.9 (±0.4)	12.1 (±0.6)	13.6 (±0.8)	12.1 (±0.8)	9.9 (±0.9)	15.5 (±2.0)	13.6 (±2.0)	10.5 (±3.5)	13.0 (±0.3)
Not in labour force	14.7 (±0.4)	12.0 (±0.6)	12.4 (±0.7)	16.4 (±1.0)	8.8 (±0.8)	12.2 (±1.8)	12.6 (±1.9)	11.5 (±3.6)	13.5 (±0.3)

<sup>a</sup> At 28 May. <sup>b</sup> The relative standard errors corresponding to a 95 per cent confidence interval for the percentage estimates are reported in parentheses under the estimates. <sup>c</sup> 'Not stated/refused' represented the balance of responses in each jurisdiction. <sup>d</sup> The proportion of TAFE institute graduates employed does not equal the sum of those employed full time and part time because some graduates reported that they were employed but not whether their work was full time or part time.

Source: table 4A.24.

An above average proportion of employed TAFE institute graduates in Victoria, WA, SA, Tasmania, the ACT and the NT reported that their course was highly relevant to their job. The NT (79 per cent) and Tasmania (77 per cent) had the highest proportions reporting that their course was either highly relevant or of some relevance to their job (table 4.13).

The proportion of TAFE institute graduates who received a pay increase after completing their course ranged from 22 per cent in Queensland to 29 per cent in the NT. The proportion who received a promotion (or increased status at work) as a result of doing their VET course ranged from 16 per cent in Queensland and WA to 23 per cent in the NT (table 4.14).

**Table 4.13 Employed 1998 TAFE institute graduates who undertook their course for vocational reasons — relevance of course to main job, 1999 (per cent)<sup>a, b</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Highly relevant	49.0 (±0.6)	52.8 (±0.9)	50.3 (±1.1)	55.0 (±1.3)	53.1 (±1.5)	52.9 (±2.7)	56.0 (±2.9)	55.3 (±5.6)	51.1 (±0.4)
Some relevance	24.1 (±0.5)	22.4 (±0.7)	23.4 (±1.0)	17.6 (±1.0)	22.5 (±1.2)	23.8 (±2.3)	20.1 (±2.3)	24.1 (±4.8)	22.9 (±0.3)
Total	73.2 (±0.5)	75.2 (±0.8)	73.7 (±1.0)	72.6 (±1.2)	75.5 (±1.3)	76.8 (±2.3)	76.0 (±2.5)	79.4 (±4.6)	74.0 (±0.3)

<sup>a</sup> Totals may not add as a result of rounding. <sup>b</sup> The relative standard errors corresponding to a 95 per cent confidence interval for the percentage estimates are reported in parentheses under the estimates.

Source: table 4A.25.

**Table 4.14 Employed 1998 TAFE institute graduates who undertook their course for vocational reasons — benefits of course, 1999 (per cent)<sup>a</sup>**

<i>Benefit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
An increase in earnings	26.0 (±0.5)	26.3 (±0.8)	22.3 (±0.9)	27.9 (±1.2)	24.2 (±1.3)	28.4 (±2.5)	27.0 (±2.6)	29.1 (±5.1)	25.7 (±0.3)
A promotion (or increased status at work)	17.9 (±0.4)	17.2 (±0.7)	15.6 (±0.8)	15.8 (±0.9)	20.9 (±1.2)	20.3 (±2.2)	20.6 (±2.4)	23.1 (±4.8)	17.7 (±0.3)
Obtained a job	24.0 (±0.5)	27.0 (±0.8)	28.3 (±1.0)	34.7 (±1.2)	25.1 (±1.3)	25.2 (±2.4)	28.3 (±2.6)	23.1 (±4.8)	26.3 (±0.4)
Change of job or new job	18.0 (±0.4)	16.6 (±0.7)	19.5 (±0.9)	15.8 (±0.9)	16.9 (±1.1)	15.3 (±2.0)	20.6 (±2.4)	22.1 (±4.7)	na na
Benefit in some way <sup>b</sup>	65.9 (±0.6)	66.8 (±0.8)	64.5 (±1.1)	68.5 (±1.2)	66.6 (±1.4)	66.5 (±2.6)	68.6 (±2.7)	71.4 (±5.1)	66.3 (±0.4)

<sup>a</sup> The relative standard errors corresponding to a 95 per cent confidence interval for the percentage estimates are reported in parentheses under the estimates. <sup>b</sup> 'Benefit in some way' may not equal the sum of the benefits, because graduates could report more than one type of benefit. **na** Not available.

Source: table 4A.27.

## Efficiency

The ANTA Agreement 1998–2000 requires States and Territories to demonstrate improved efficiency in the provision of publicly funded VET. Unit cost performance therefore assumes greater significance over this period (ANTA 1999a).

A proxy indicator of efficiency is the level of government inputs per unit of output (unit cost). Two unit cost indicators are reported here:

- recurrent cost per annual curriculum hour; and

- 
- recurrent cost per government funded successful module load completion.

The factors which have the greatest impact on efficiency include:

- training-related factors such as class sizes, teaching salaries, teaching hours per full time equivalent staff member and differences in the length of training programs of similar types;
- differences between States and Territories, including sociodemographic composition, administrative scale, and dispersion and scale of service delivery; and
- vocational education and training policies and practices, including the level of fees and charges paid by students.

The Steering Committee decided in 1998 that a user cost of capital should be included, where possible, as part of the costs for each government service reported here, and that this should be calculated by applying a jurisdiction cost of capital rate to the value of government assets. The cost of capital is included in estimates of the cost of government services because it reflects the opportunity cost of government assets that could be used to provide other services or retire debt. Not reporting the user cost of capital underestimates the opportunity cost to government (box 4.6).

**Box 4.6 Comparability of cost estimates**

It is an objective of the Review to report comparable estimates of costs. Ideally, the full range of costs to government is counted on a comparable basis. Where the full costs cannot be counted, costs should be estimated on a consistent basis.

The Steering Committee has identified four areas that could diminish the comparability of costs across government and private providers.

- Superannuation costs are included in cost estimates for VET. It is recommended that (SCRCSSP 1998) superannuation be costed on an accrued actuarial basis.
- Depreciation costs are included in cost estimates for all VET services.
- The user cost of capital is not included in estimates of recurrent expenditure, although it is reported separately (as the cost of capital per adjusted annual curriculum hour and the cost of capital per adjusted module load completion). The user cost of capital represents the opportunity cost to government of the funds tied up in VET assets. Excluding the user cost of capital from accrued costs lowers the

(Continued next page)

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**Box 4.6 Continued**

costs per annual curriculum hour and the costs per government funded module load completion. Comparability can be improved by adding the reported user cost of capital to accrued costs if debt servicing costs and State and Territory based capital asset charges are deducted from accrual costs.

- Payroll tax is payable by all jurisdictions (except the ACT) for VET; a payroll tax estimate has been included in cost estimates for the ACT. It is recommended that payroll tax be costed to unit cost estimates to achieve comparability across government and private providers and across jurisdictions (SCRCSSP 1999).

Sources: SCRCSSP (1998) and (1999).

### *Unit cost — government expenditure per hour of delivery*

Unit costs are reported in terms of total recurrent government expenditure per annual curriculum hours, adjusted to account for course mix differences across jurisdictions.<sup>2</sup> Financial and activity data from States and Territories are reported within an agreed scope and boundary to ensure unit costs accurately reflect the relative efficiency of government service provision across jurisdictions.

Data used in the calculation of unit cost is largely derived from the Australian Vocational Education and Training Management Information Statistic Standard. Both activity (nominal hours — supervised) and financial data are audited under arrangements with the States and Territories.

Recurrent expenditure per annual curriculum hour of government funded VET programs in 1999 ranged from \$19.63 in the NT to \$9.30 in Victoria. Only Victoria (\$9.30) and SA (\$11.76) reported unit costs below the national average of \$12.60. All jurisdictions reported a real decrease in unit costs from 1999 (except Queensland, which reported an 8.8 per cent real increase in unit costs) (figure 4.6).

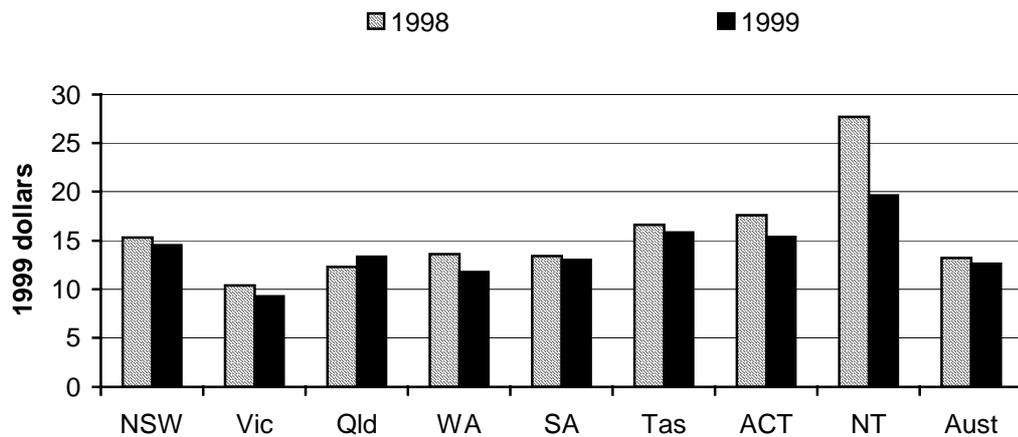
The full cost of providing VET services includes both the cost of capital and recurrent costs. To integrate these costs to make up total cost, it is necessary to convert the cost of capital to a year-by-year charge. The Steering Committee has adopted an 8 per cent user cost of capital rate to reflect the income that might have been earned if the funds had been invested elsewhere rather than in the capital item. The basis for the 8 per cent capital charge is discussed in chapter 2.

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<sup>2</sup> Other unaccounted external influences on the unit cost of VET provision include the population density and the provision of VET for disadvantaged groups (see appendix A).

The Steering Committee acknowledges the potential for differences in some input costs (for example, land values) to affect reported costs across jurisdictions without necessarily reflecting the efficiency of service delivery. The costs of capital for land and other assets are presented separately to allow users to consider any differences in land values among jurisdictions when assessing the results (table 4.15).

Figure 4.6 **Government recurrent expenditure per adjusted annual hours of curriculum<sup>a</sup>**



<sup>a</sup> The deflator used is the gross non-farm product deflator. <sup>b</sup> The ACT is the only jurisdiction not to levy payroll tax on its VET employees. A payroll tax estimate based on the ACT payroll tax rate has been included in the expenditure data presented. The payroll tax estimate has increased recurrent government VET expenditure per adjusted annual curriculum hour in the ACT by \$0.48 in 1998 and by \$0.25 in 1999.

Source: table 4A.28.

Table 4.15 **Cost of capital, 1999<sup>a</sup>**

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Noncurrent physical assets										
Land	\$m	315	255	121	69	37	11	7	18	834
Other	\$m	1 720	1 056	744	378	391	132	106	124	4 651
<b>Total</b>	<b>\$m</b>	<b>2 035</b>	<b>1 311</b>	<b>865</b>	<b>447</b>	<b>428</b>	<b>143</b>	<b>113</b>	<b>142</b>	<b>5 485</b>
Capital charge	%	8	8	8	8	8	8	8	8	8
Cost of capital										
Land	\$m	25	20	10	6	3	1	1	1	67
Other	\$m	138	84	60	30	31	11	8	10	372
<b>Total</b>	<b>\$m</b>	<b>163</b>	<b>105</b>	<b>69</b>	<b>36</b>	<b>34</b>	<b>11</b>	<b>9</b>	<b>11</b>	<b>439</b>

<sup>a</sup> Totals may not add as a result of rounding.

Source: table 4A.29.

The total cost of government owned capital per annual curriculum hour varied across jurisdictions in 1999, ranging from \$1.45 in Victoria to \$3.70 in the NT.

Excluding land assets, the government cost of other capital per annual curriculum hour ranged from \$1.17 in Victoria to \$3.23 in the NT. The cost of government owned land capital per annual curriculum hour ranged from \$0.12 in the ACT to \$0.47 in the NT in 1999 (table 4.16).

**Table 4.16 Cost of capital per annual curriculum hour, 1999<sup>a</sup>**

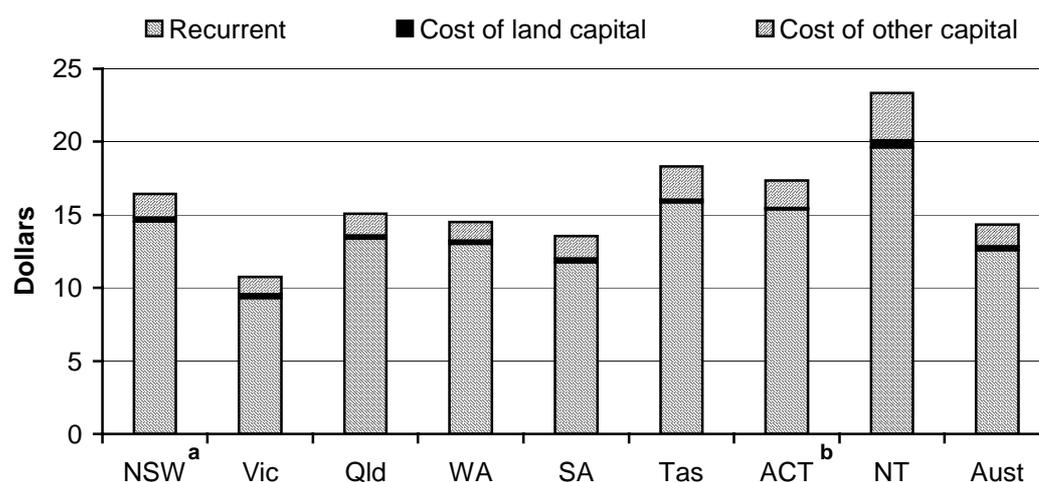
	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Adjusted annual curriculum hours	no.	86 251	72 396	40 181	23 991	20 458	4 697	4 561	3 066	255 601
Cost of capital per adjusted annual curriculum hour										
Land	\$	0.29	0.28	0.24	0.23	0.14	0.19	0.12	0.47	0.26
Other	\$	1.60	1.17	1.48	1.26	1.53	2.25	1.86	3.23	1.46
<b>Total</b>	<b>\$</b>	<b>1.89</b>	<b>1.45</b>	<b>1.72</b>	<b>1.49</b>	<b>1.67</b>	<b>2.43</b>	<b>1.98</b>	<b>3.70</b>	<b>1.72</b>

<sup>a</sup> Totals may not add as a result of rounding.

Source: table 4A.29.

The national full cost to government of funding VET per adjusted annual curriculum hour in 1999 was \$14.32 (recurrent cost of \$12.60, plus cost of land capital of \$0.26, plus cost of other capital of \$1.46). Across jurisdictions, the full cost per adjusted annual curriculum hour ranged from \$10.75 in Victoria to \$23.33 in the NT (figure 4.7). These results should be interpreted with caution because the asset data used to calculate cost of capital are not as reliable as the recurrent cost data.

**Figure 4.7 Total government VET costs per annual curriculum hour, 1999**



<sup>a</sup> ANTA data include gains and losses arising from asset sales in reported unit cost estimates. This had a small effect on most jurisdictions, but increased NSW reported costs by 0.5 per cent in 1998. <sup>b</sup> The ACT is the only jurisdiction not to levy payroll tax on its VET employees. A payroll tax estimate, based on the ACT payroll tax rate has been included in the expenditure data presented. The payroll tax estimate has increased recurrent government VET expenditure per adjusted annual curriculum hour in the ACT by \$0.25 in 1999.

Source: table 4A.30.

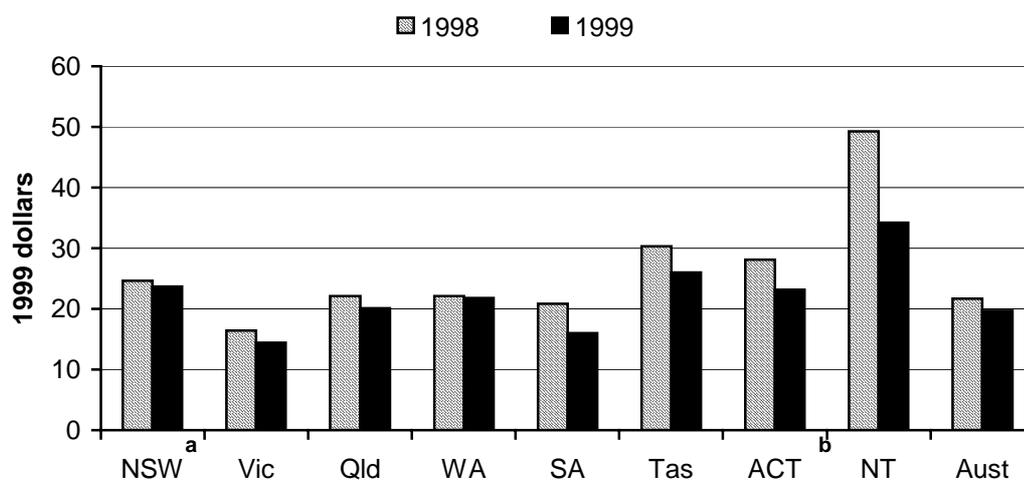
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*Unit cost — government expenditure per publicly funded module load completion*

Government expenditure per publicly funded module load completion is the cost to government of each successfully completed VET module (that is, the cost per output produced). The cost of producing successful publicly funded outputs decreased in all jurisdictions between 1998 and 1999 (figure 4.8).

**Figure 4.8 Government recurrent expenditure per hour of successful publicly funded module load completion<sup>a, b</sup>**

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<sup>a</sup> Comparisons across jurisdictions should be made with care because average module durations and competencies achieved by students vary across jurisdictions. <sup>b</sup> The deflator used is the gross non-farm product deflator. <sup>c</sup> ANTA data include gains and losses from asset sales in recurrent expenditure and, thus, unit costs. These gains and losses accounted for about half of the reported increase in NSW unit costs between 1997 and 1998 but had a much smaller effect on the unit costs of other jurisdictions. <sup>d</sup> The ACT is the only jurisdiction not to levy payroll tax on its VET employees. A payroll tax estimate, based on the ACT payroll tax rate, has been included in the expenditure data presented. The payroll tax estimate has increased recurrent government VET expenditure per publicly funded successful module load completion in the ACT by \$1.12 in 1998 and by \$0.92 in 1999.

Source: table 4A.31.

Total government cost of capital per module load completion in 1999 ranged from \$2.22 in Victoria and SA to \$6.21 in the NT. Excluding land assets, the government cost of capital per module load completion ranged from \$1.78 in Victoria to \$5.65 in the NT in 1999 (table 4.17).

**Table 4.17 Cost of capital per module load completion, 1999<sup>a, b</sup>**

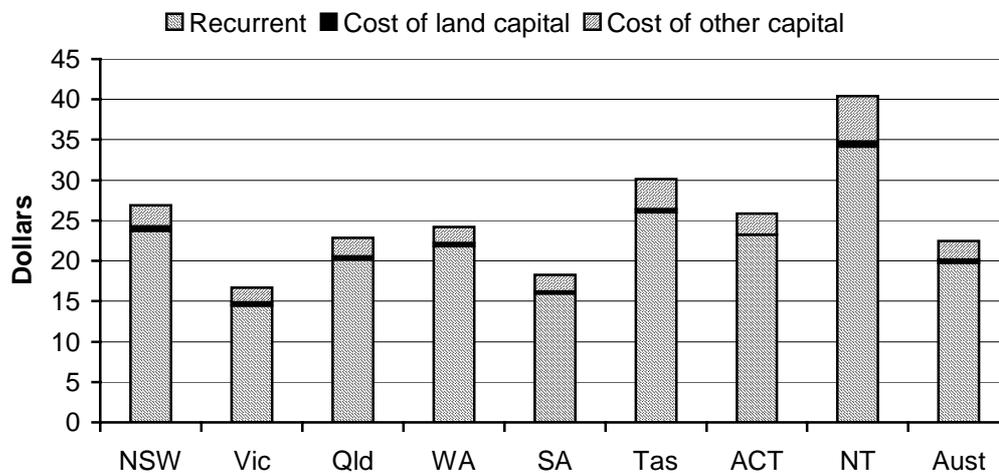
Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Adjusted module load completions									
no.	51 670	47 217	26 399	15 000	15 118	2 963	3 019	1769	163 007
Cost of capital per adjusted module load completion									
Land	\$ 0.48	0.42	0.37	0.40	0.20	0.34	0.01	0.56	0.41
Other	\$ 2.67	1.78	2.27	2.00	2.04	3.70	2.65	5.65	2.28
<b>Total</b>	<b>\$ 3.15</b>	<b>2.22</b>	<b>2.61</b>	<b>2.40</b>	<b>2.24</b>	<b>3.70</b>	<b>2.98</b>	<b>6.21</b>	<b>2.70</b>

<sup>a</sup> Comparisons across jurisdictions should be made with care because average module durations and competencies achieved by students vary across jurisdictions. <sup>b</sup> Totals may not add as a result of rounding.

Source: table 4A.32.

The national full cost per module load completion was \$22.44 (recurrent cost of \$19.75, plus cost of land capital of \$0.41, plus cost of other capital of \$2.28) in 1999. Across jurisdictions, this ranged from \$16.67 in Victoria to \$40.40 in the NT (figure 4.9). These results should be interpreted with caution because as the asset data used to calculate cost of capital are not as reliable as the recurrent cost data.

**Figure 4.9 Total government VET costs per module load completion, 1999**



<sup>a</sup> ANTA data include gains and losses arising from asset sales in reported unit cost estimates. This had a small effect on most jurisdictions, but increased NSW reported costs by 0.5 per cent in 1998. <sup>b</sup> The ACT is the only jurisdiction not to levy payroll tax on its VET employees. A payroll tax estimate, based on the ACT payroll tax rate, has been included in the expenditure data presented. The payroll tax estimate has increased recurrent government VET expenditure per publicly funded successful module load completion in the ACT by \$1.12 in 1998 and by \$0.92 in 1999.

Source: table 14A.32.

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## 4.5 Future directions in performance reporting

### Reporting new indicators

ANTA, through its Performance Review Committee, developed a new suite of eight performance indicators (or Key Performance Measures) for VET. Ministers gave their final agreement to the indicators in June 1999 and also agreed to the recommendations contained in the committee's final report, *Key Performance Measures for Vocational Education and Training* (ANTA 1999d). The report identified the remaining implementation tasks and assigned responsibility for these tasks. The National Training Statistics Committee, under the auspices of the ANTA Board, has assumed responsibility for the ongoing management of the Key Performance Measures including a refinement of data collected to support performance reporting.

While some of the agreed measures refine existing indicators, other indicators are new to the sector. ANTA is working in cooperation with the Commonwealth, State and Territory governments to implement each of the indicators. Full reporting against each of the indicators is expected in the 2002 Report, using 2001 data.

The agreed performance indicators will be reviewed in line with the national strategy for VET (1998–2003).

### Improving reporting of existing indicators

Work is continuing on improving the measurement of unit costs. Accounting for timing differences when reporting revenue derived from the sale of assets can, for example, potentially mask the measurement of efficiency. It is recognised that jurisdictions are in various cycles of asset accumulation or disposal, and ANTA will work with States and Territories to resolve this issue for future reporting purposes.

A National Working Group is currently investigating and advising on a methodology for reporting the user cost of capital within the unit cost of publicly funded VET across Australia.

## 4.6 Jurisdictions' comments

This section provides comments from each jurisdiction on the services covered in this chapter and attachment 4A on the CD-ROM. Appendix A contains short profiles on each State and Territory, which may assist in interpreting the

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performance indicators presented in this chapter. In addition, detailed statistics covering aspects such as age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (such as Indigenous and ethnic status) are also found in appendix A.

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## **New South Wales Government comments**

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The NSW Department of Education and Training is responsible for approximately one quarter of the State's total budget and delivers education and training services from early childhood education through to post-compulsory education. The 2000-01 Budget included a record \$7.23 billion for education and training, representing an increase of \$320 million on 1999-2000 or a 4.7 per cent rise. Expenses on TAFE NSW and related services are estimated at \$1.46 billion.

NSW spends more on vocational education and training than any other state and provides more than one-third of all VET in Australia. 1999 saw a record number of enrolments in TAFE NSW, with more than 455,000 students studying in TAFE.

The continuing rationale underpinning the New South Wales approach to provision of TAFE NSW services has been a commitment to service quality and social justice. The TAFE NSW budget has had to take into account on-going reductions in Commonwealth Government funding and the need for greater efficiencies in an increasingly competitive training market. The cessation of Commonwealth VET growth funding, the abolition of Commonwealth funded labour market programs and the financial impact of additional young people on Youth Allowance attending TAFE institutes, have each placed additional demands on the State's VET budget.

While the Commonwealth has focused only on reducing unit costs, NSW has pursued a balanced approach to growth through efficiencies. Within NSW efficiencies have been brought about through improved management systems, the expansion of competitive purchasing arrangements, the enhancement of flexible delivery methods and the expansion of the VET in Schools program. Strategically targeted training initiatives for industry have also played a key role. Despite the reductions in Commonwealth support, NSW made substantial inroads into the provision of additional training. In 1999 NSW delivered more than 86.25 million Annual Hours Curriculum, an increase of 3.2 million hours or 4 percent on 1998.

Major TAFE NSW initiatives currently underway include the provision of almost \$15 million over 4 years to support TAFE scholarships and students at risk programs, Small Business Training Bonus Scheme to encourage small businesses to provide accredited training for their staff and putting more training courses on-line. Payroll Tax Concessions for employers will cover an additional 250 apprentices and trainees each year leading to a rebate of up to \$16 million over 4 years.

The Government has exceeded its target of increasing the number of trainees employed in the NSW public sector from 600 to 2000 by the end of 2000.

TAFE NSW was the Official Training Services Supporter of the Games, and played a key role in delivering the highly successful Olympic and Paralympic Games.

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## Victorian Government comments

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Collectively, 14 TAFE institutes, 5 TAFE divisions within universities and almost 1000 other registered training organisations provided skills training across all major industries and occupational levels, as well as further education and personal development programs, to over 562 000 students — a 5.6 per cent increase on 1998. Performance information in this report indicates that the Victorian training system performed comparatively well on some indicators, particularly participation in vet and student employment outcomes. At the same time, Victoria's very high level of efficiency compared to other jurisdictions and low level of employer satisfaction suggest that the Victorian training had been under-funded and that consequently the quality of training had suffered. The policies of the Victorian government seek to build on the strengths of the current system to position it to meet the challenge of providing flexible, high quality and relevant training to meet the skill requirements of Victorian industry and the needs and aspirations of Victorians.

The Victorian government will, over the next four years, provide:

- An additional \$127 million to TAFE institutes to improve effectiveness and quality, compensate for fee concessions, assist workforce restructuring, undertake urgent maintenance and replace obsolete plant and equipment;
- An additional \$50.4 million for training of apprentices and trainees by private providers;
- \$40 million to create 2600 apprenticeships and traineeships in the public sector;
- \$32.4 million to assist private sector employers recruit 6000 apprentices and trainees in areas of skill shortage;
- \$12.5 million to support an extra 10 000 long-term unemployed and disadvantaged young people into apprenticeships and traineeships;
- \$65 million to develop new approaches to post compulsory education and training by increasing the range of education and training options available to 15 to 24 year olds; and
- \$9 million to improve infrastructure at Adult Community Education providers.

The Government will also focus on:

- ensuring that resources are directed to priority areas such as training linked to employment, training to facilitate regional development and to address skill shortages and training to provide skills for strategic and emerging industries such as information and communications technology;
- developing Learning Communities to enable more flexible and rapid responses to changing requirements at the local level and to encourage life-long learning;
- strengthening audits of training provision; and
- raising standards under the National Recognition Framework.

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## Queensland Government comments

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In 2000 Queensland has developed an integrated strategic direction for the vocational education and training system. One of the key areas for action that has emerged focuses on raising Queensland's skills and qualification levels, with skills development aligning with economic and social development planning. The focus is particularly on those Queenslanders who do not have a qualification or have not participated in training, across all age groups from young people in transition from school to work through to existing workers, particularly mature-age workers whose skills need updating for changing industries.

The Community Training Partnerships regional program, piloted in 10 communities across Queensland prior to full implementation in 2000-01, trialled a new way of assisting people to identify their skills and match their training to future regional employment needs. Under the program regional networks are funded to analyse the training needs related to regional economic development and then provide future work and training advice to fill skills gaps.

Implementing a comprehensive response to the skill and infrastructure needs of hi-tech changes to industry is also a priority. Queenslanders need to have the skills to use technology to enable smarter, better business processes in the information and biotech age. Strategies will aim to ensure Queenslanders have skills to maximise the value of information, use technology, particularly in emerging industries, and conduct electronic business effectively, to compete and expand markets on a local and global level.

In 1999 over \$22 million was provided for Queensland's information technology and telecommunications training needs for both institutional delivery and through apprenticeships and traineeships — an increase of almost \$5 million from 1998. \$11.343 million was provided for the development of cutting edge information technology infrastructure and systems in TAFE institutes.

Another key segment of the strategic direction aims for all stakeholders in the training system to take on the challenge of creating an enduring culture of innovation and collaboration. The training system will need to expand current learning pathways and training options if we are to meet the skills needs of diverse Queenslanders in the future. Good ideas and more efficient, collaborative processes will help meet the training needs of the future faster.

Quality is also emphasised in the strategic approach. Building on the quality of VET is still a major focus for the future.

The concepts in the strategic direction aim to expand opportunities for a diverse range of Queenslanders to gain skills for current and emerging work.

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## Western Australian Government comments

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The Western Australian Vocational Education and Training system consists of 14 publicly funded providers (TAFE Colleges) and in excess of 700 private providers, some 100 of which receive public funding through contestable means. In 1999 delivery exceeded 23 million student contact hours to around 100,000 students at a recurrent and capital cost of approximately \$320 million.

The Department's strong industry focus provided by the State Training Board and its principal planning mechanism the State Training Strategy, provides government, industry and training providers with short, medium and long term directions and advice on the training priorities and skill needs of Western Australia. This is an important feature of the Western Australian vocational education and training system and one which places the State at the forefront in actively seeking industry involvement in the identification and planning of VET.

By focusing on industry, student and community requirements within a competitive training market, a more demand-driven and responsive system for publicly funded training effort has been developed with a commitment to system monitoring and the development of quality processes.

This report highlights some of the Western Australian VET sector accomplishments for 1999 including:

- 82 per cent of employers indicated that they were very satisfied or satisfied with the VET system;
- 81.4 per cent of WA graduates said that they achieved or partly achieved their main reason for doing their course;
- 68.5 percent of graduates who undertook their course for vocational reasons said that they benefited in some way;
- The recurrent expenditure per adjusted annual curriculum hour in WA for 1999 was \$13.03, down from \$13.39 in 1998, making WA the third lowest of all states and territories.

The development of the Western Australian VET system will see a continuing commitment to the establishment of a competitive training environment that offers quality and diversity across training providers and their services.

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## South Australian Government comments

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South Australia continued to develop an efficient, quality vocational education and training (VET) system that plays an important role in providing and updating the skills of our workforce. The Report highlights some of the VET achievements during 1999, where SA:

- expanded its publicly funded activity by 21 per cent to 20.4 million hours in 1999 from 16.9 million hours in 1998 and increased the number of contract of training commencements from 17 950 in 1998 to 18 530 in 1999.
- improved the efficiency of publicly funded VET by 13 per cent through a reduction in the unit costs of publicly funded delivery from \$13.58 in 1998 to \$11.76 in 1999. This compares favourably with the national average cost of \$12.62. The total government VET cost in South Australia per hour of successful module completion has improved from \$20.63 in 1998 to \$16.01 in 1999 and cost remains lower than the national average cost of \$19.88.
- increased the participation rate of VET students from remote areas from 10.8 per cent in 1998 to 11.0 per cent in 1999.
- maintained the highest load pass rate (85.9 per cent) in the country, which considerably exceeds the national average of 74.4 per cent.
- with employer satisfaction for recent VET graduates at 87 per cent, is the equal highest in Australia and exceeds the 83 per cent national average.
- recorded the highest employment rate for recent TAFE graduates (81 per cent for 1998 graduates), well above the national average of 73 per cent.

South Australia has continued to closely align the VET system to the economic and social needs of our community, including the emerging training needs of SA enterprises. Results from the *1997 and 1999 Employer Satisfaction Surveys and the 2000 Student Outcomes Survey* indicate that TAFE provides high quality training, while TAFE qualifications consistently improve the chances of finding work, advancing careers and changing occupations.

The outcomes and initiatives shown in this Report demonstrate the efforts by the South Australian Department of Education, Training and Employment to continually improve the effectiveness and efficiency in delivering training. South Australia continues to support improvements in service and performance, and the value of demonstrating this through reliable performance information.

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## Tasmanian Government comments

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In 1999, Tasmania maintained and enhanced the effectiveness, efficiency and quality of vocational education and training provided to meet the needs of industry and the community.

Achieving efficiencies in the delivery of VET in Tasmania is constrained by factors specific to the State. These include the small, widely dispersed population; the comparatively low proportion of the population residing in the capital city compared to other States; and the broad but thin composition of Tasmanian industry which necessitates provision of a wide range of services to small groups of students. Within these and fiscal constraints, key goals have been achieved, including increased participation and cost effectiveness, and demonstrated responsiveness to client needs.

- The 1999 Student Outcomes Survey reports that 85.4 per cent of graduates in Tasmania cited vocational reasons as their main reason for undertaking their course. This is 6.4 percentage points above the national average.
- The Survey also shows that of those who were unemployed at the commencement of their training, Tasmania had above national levels of employment after completion of the training. Among graduates who were unemployed at the start of their training, 50.6 per cent had found employment by 28 May 1999. This is 3.2 percentage points above the national average.
- Tasmania's participation rate in VET continued to rise in 1999. The proportion of Tasmanians aged 15 to 64 participating in VET has risen consistently and at a greater rate than the national average, from 7.3 per cent in 1996 to 9.4 per cent in 1999.
- In 1999, Tasmania delivered 4.70 million Annual Hours Curriculum, an increase of 19.2 per cent above actual 1997 levels. This equates to an estimated additional 8,376 student places.
- The continuing improvement in efficiency of the State's VET system is demonstrated by the unit cost (recurrent) of Tasmanian VET activity which has improved by 16.4 per cent from \$19.00 in 1997 to \$15.80 in 1999.

Tasmania's improved efficiency and participation rate in 1999 was linked to implementation of its three year plan for growth derived through efficiencies, which covers the period 1998 to 2000 (inclusive). Tasmania also continued to focus on developing an effective VET system through closer integration of industry needs, (particularly in areas of strategic importance to the State), with provision of VET.

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## Australian Capital Territory Government comments

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In the ACT apprentice and trainee numbers increased spectacularly in 1999 — up around 40 per cent on 1998 levels. Growth has been driven by a number of factors including:

- a strong ACT economy;
- greater flexibility in the New Apprenticeships through User Choice program;
- the ACT Government's Youth 1000 program;
- successful marketing;
- the availability of new apprenticeships in new occupational groups; and
- the enrolment of 1800 'Existing Workers' as part of a Commonwealth initiative.

In 1999 the ACT delivered 4.56 million adjusted annual hours curriculum — an increase of 7.2 per cent from 1997. Over the same period, unit cost efficiency levels significantly improved by 12.1 per cent.

A mixture of contestable programs have been designed to encourage a competitive training market in accordance with the National Strategy for Vocational Education and Training. Funding for contestable programs reached \$8 million in 1999. As well, new tendering and purchasing arrangements were implemented to ensure more flexible purchasing, enhanced performance monitoring and increased access for equity groups. Around \$41 million of VET is purchased through TAFE (Canberra Institute of Technology) under specific purchaser/provider arrangements set out in a Purchase Agreement, representing almost three-quarters of ACT Government funded activity.

The ACT has recognised the need for managing both immediate and longer term risks associated with purchased training. The development of the ACT's performance review process during 1999 has meant stricter performance monitoring and compliance with quality assurance and Australian Recognition Framework principles. During 1999, 16 senior secondary colleges (years 11 and 12) in the government and non-government sector achieved Registered Training Organisation status. These colleges now have the capacity to deliver training to certificate II level.

The Office of Training and Adult Education developed and disseminated a database for private providers to enable them to report training activity in line with national reporting standards. The intention for 2000 is to provide a similar program for New Apprenticeship Centres to further streamline the information flow about New Apprenticeships through User Choice.

The ACT government continues to work closely with the ITAB's to ensure publicly funded training is meeting industry needs. 22 Training Packages were implemented in the ACT in 1999. Relevant pathways to qualifications continue to be negotiated with industry and VET stakeholders.

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## Northern Territory Government comments

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A key national goal of the VET system is to increase opportunities and outcomes for disadvantaged groups. In the Northern Territory 51 per cent of VET students were studying in remote locations during 1999. This is the highest proportion of anywhere in Australia. The same is true for VET participation by Indigenous people who comprised 37.8 per cent of those undertaking VET training in the Territory. This compares very favourably with the 24.4 per cent proportion of the population comprised of indigenous people in the Territory.

The Student Outcomes Survey commissioned by ANTA in 1999 confirmed the effectiveness of VET training for these target groups with indigenous students achieving a 63.5 per cent load pass rate and remote area students 67.9 per cent. Employment outcomes achieved from VET training in the Territory were evidenced by positive 1999 labour force participation rates which indicate that 76.7 per cent of the Territory's VET institute graduates and 48 per cent of indigenous VET graduates were reported to be employed at the completion of their training.

The VET institute outcomes compare very favourably with the 78 per cent of students who gave the main reason for undertaking a VET course as being achievement of a vocational outcome. Whilst the vocational outcome rate for indigenous students is not as impressive, it represents a significant achievement and efforts will continue to be made to improve upon these results.

Employer satisfaction is an important indicator of the quality of VET services. The 1999 NCVET Survey of Employer Views on Vocational Education and Training surveyed a total of two hundred and seventy two employers in the Northern Territory. Its findings were that 85 per cent of employers surveyed reported an overall satisfaction score of 6 out of 10 or higher. This was further supported by a finding that 89 per cent of Territory employers surveyed agreed that the content of VET training was relevant to industry needs.

Growth in new apprenticeships is another success story, with the numbers of female apprentices being particularly notable as evidenced by an increase of 27.3 per cent in 1999. The introduction of User Choice has seen employers and apprentices enthusiastically embrace the concept. The NCVET Employer Satisfaction Survey showed that employers regard the ability to choose a training provider as important to their business. The success of the User Choice program has resulted in the need for increasing proportions of VET funding to be redirected to it.

The year 2000 will be a year of consolidation with a focus on enhancing quality outcomes and improved performance management for the sector as a whole. Preparations are also underway for major projects coming on line including the Alice Springs to Darwin railway and the Timor Sea oil and gas developments.

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## 4.7 Definitions

Table 4.18 Terms

<i>Term</i>	<i>Definition</i>
Annual curriculum hours	The anticipated hours of supervised learning or training deemed necessary to adequately present the education material. These hours are generally specified in the curriculum documentation and do not include hours associated with field work or work experience. Changed in 1999 to nominal hours – supervised.
Adjusted annual curriculum hours	Annual curriculum hours that are adjusted to account for module enrolments reported with an outcome of recognition of prior learning and invalid module enrolments.
Adjusted module load completion rate	Module load completions that are adjusted to account for module enrolments reported with an outcome of recognition of prior learning and invalid module enrolments.
AVETMISS	Australian Vocational Education and Training Management Information Statistical Standard. This is a specification of information standards for recording and reporting VET inputs (resource module) and activity and outputs (business module). This standard was observed in the collection and preparation of data for this Report.
Community education providers	Community education training organisations that have provided information to the NCVET data collection.
Completions	Fulfilment of all of the requirements of a course enrolment or module enrolment.
Contract of training	A contractual agreement between an employer and employee (apprentice or trainee) specifying the competencies to be developed over the period of the contract and the rights and obligations of each party.
Course	A structured sequence of vocational education and training that leads to the acquisition of identified competencies and includes assessment leading to a qualification or statement of attainment.
Enrolment	The registration of a student with a training provider for the purpose of doing a course or module. The enrolment is considered valid only if all fee obligations have been met and the student has attended at least one lesson or submitted at least one piece of work.
Fee-for-service activity	Activity that is funded by fees received from individuals and organisations, other than regulatory student fees. This includes Commonwealth and State-specific funded programs (such as Labour Market Programs and Adult Migrant English Services).
Geographic region	A geographic classification (based on statistical local areas) devised by the former Department of Primary Industry and Energy and the Department of Employment, Education, Training and Youth Affairs. <i>Remote:</i> regions that contain urban centres with a population of less than 5000 and that are more than 150 kilometres from an urban centre with a population of 10 000 or more <i>Rural:</i> regions that consist of statistical local areas associated with urban centres of population of 5000 to 100 000 and that are not classified as remote.

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**Table 4.18 (continued)**

<i>Term</i>	<i>Definition</i>
Graduate	A person who has completed a vocational program.
Load pass rate	The ratio of students who pass assessment in an assessable module or unit of competency to all students who are assessed and pass, fail or withdraw. The calculation is based on the nominal hours supervised for each assessable module or unit of competency.
Module	A unit of training in which a student can enrol and be assessed.
Module completers	Students who successfully completed at least one module in a study stream between 2100 and 4500.
Nominal hours – supervised	The anticipated hours of learning or training deemed necessary to adequately present the educational material associated with the delivery of a training program when delivered in standard classroom delivery mode. These hours are generally specified in the curriculum documentation and do not include hours associated with work experience, industry placement, or field placement. See also annual curriculum hours.
Non-English speaking background (by country of birth)	Born in a country that is non-English speaking.
Nonresponse rate	Proportion of VET students who did not indicate on their enrolment form whether they were a member of a target group.
Occupational group	Occupations that are linked to particular Australian Bureau of Statistics Standard Occupational Classification (ASCO) groups. Category A courses have a direct link to an individual ASCO, category B have multiple links to ASCOs and category C courses potentially link across all ASCO areas.
Occupational level	Classified as 'general/unspecified', 'operative/clerical', 'trades/skilled' and 'para-professional/professional'. These are also linked to the Australian Bureau of Statistics ASCO group.
Private provider	A commercial organisation that provides training to individuals and industry.
Real expenditure	Actual expenditure adjusted for changes in prices. Adjustments are made using the GDP(E) price deflator and expressed in terms of final year prices.
Recurrent funding	Funding provided by the Commonwealth and State and Territory governments to cover operating costs, salaries and rent.
State Training Profile	An annual publication by the State training authorities, which outline the planned training in terms of annual hours, by occupational groupings, for the year ahead (with indicative estimates for the next two years). It also outlines initiatives to meet State and national strategies.
Stream 1000	Recreation, leisure and personal enrichment courses directed towards the encouragement and development of creative, social and personal pursuits and skills that enable people to make more effective use of leisure time.
Streams 2100–4500	Courses for entry to employment or further education; initial vocational courses and courses subsequent to initial vocational courses. These are typically associated with preparatory, operative, trades/skilled and para-professional education and training.

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**Table 4.18 (continued)**

<i>Term</i>	<i>Definition</i>
TAFE	Technical and Further Education colleges and institutes, which are the primary providers of publicly funded VET.
Training packages	Provide the basic building blocks for vocational education and training programs under the National Training Framework. They are developed by industry and create national standards, programs, qualifications and learning resources.
VET program	A course or module offered by a training organisation in which clients may enrol.
Government funding to private and adult and community providers	Government recurrent expenditure to private and adult and community providers for the delivery of VET services. Expenditure includes payments to secondary schools, other government providers, enterprises, private providers, ACE providers, industry and local government providers.
Hours delivered per campus	The ratio of unadjusted VET hours delivered to the number of campuses in each jurisdiction.
Net assets of public VET providers per person aged 15–64	Net assets (total assets less liabilities) of publicly owned VET providers per person aged 15–64 years.
Number of campuses	The number of locations at which VET providers delivered VET programs or modules.
Recurrent government VET expenditure per person aged 15–64 years	Total State and Commonwealth recurrent expenditure (based on 'maintenance of effort' cash expenditure as reported by ANTA 1998a) per person aged 15–64 years.
Students per campus	The ratio of the number of students who undertook vocational programs to the number of campuses in each jurisdiction.
Students studying in remote areas	The ratio of the number of students who studied in campuses located in remote areas to the total number of VET students
Students studying in rural areas	The ratio of the number of students who studied in campuses located in rural areas to the total number of VET students
Cost per curriculum hour (average)	Total government recurrent expenditure per total adjusted annual curriculum hours
Employer perception of the level of VET graduates' work skills	Descriptions of graduates' work skills range from 'they do not show any better skills' to 'they have significantly improved their skills and productivity'
Employer satisfaction with VET value for money	Employer satisfaction with VET value for money is reported as a spectrum of views ranging from 'the VET course being mostly a waste of money' to 'the VET course being an excellent return on investment' (that is, productivity increases greatly exceed the costs of the course)
Government cost of capital per hour of successful publicly funded module load completions	Cost to the government of using capital (physical non-current assets) per adjusted publicly funded successful module load completions
Government costs of capital per adjusted annual curriculum hours	Cost to the government of using capital (physical non-current assets) for delivering VET services

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**Table 4.18 (continued)**

<i>Term</i>	<i>Definition</i>
Load pass rate (also reported by ANTA-designated target groups)	The ratio of students who pass assessment in an assessable module or unit of competency to all students who are assessed and pass, fail or withdraw. The calculation is based on the nominal hours supervised for each assessable module or unit of competency.

**Table 4.19 Indicators**

<i>Indicator</i>	<i>Definition</i>
Module completers	Students who successfully complete at least one module in a study stream between 2100 and 4500
Overall employer satisfaction with VET providers	Employer satisfaction with VET training providers (including both TAFE and non-TAFE). It is rated on a scale from 1 to 10, with 1 being 'very dissatisfied' and 10 being 'very satisfied'.
TAFE institute graduates' main reason for undertaking VET course	Either vocational reasons (to get a job, to try for a different career, to meet job requirements, to get extra job skills) or nonvocational reasons (for to get into another course, personal interest, for other reasons)
VET costs per adjusted annual curriculum hours	Government recurrent expenditure per adjusted publicly funded annual curriculum hours
VET participation by Indigenous people	The proportion of Indigenous VET students compared with the proportion of Indigenous people aged 15–64 years
VET participation by people from a non-English speaking background by country of birth	The proportion of VET students who report being born in a non-English speaking country compared with the proportion of people in the population who were born in a mainly non-English speaking country
VET participation rate for people aged 15–64 years	The ratio of the number of people who undertake a VET program or module to the number of people in Australia (or each jurisdiction) aged 15–64 years
VET participation rate for people of all ages by region (capital city, rural, remote and other metropolitan areas)	The ratio of the number of people who undertake VET programs or modules in specified geographic areas (that is, capital cities, rural areas, remote areas and other metropolitan areas) to the total population of people in those geographic areas
Whether the VET course helped graduates achieve their main reason for doing the course	Whether 'the course helped', 'the course partly helped', 'the course did not help' or the graduates 'cannot say'

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## C Health preface

Health care services are concerned with promoting, restoring and maintaining a healthy society. They involve the prevention, detection, intervention and treatment of illnesses and injury among persons, and the palliative care of individuals who experience illness and injury. More broadly defined, the health system includes a range of activities that raise awareness, thereby reducing the risk and onset of illness and injury (box C.1).

Health care services in Australia are delivered by a variety of government and non-government providers in a range of service settings. The Report concentrates on the performance of public hospitals (particularly, the provision of acute care services to admitted patients and emergency department services) and general practitioners (GPs) because they represent a significant component of government expenditure on health care. According to the most recent comparative data, Australian governments expended almost \$19 billion on public hospitals and GPs in 1997-98 — 63 per cent of recurrent health expenditure.

The Report also examines the interactions between different service mechanisms for dealing with two health management issues: mental health and breast cancer.

Areas of government involvement in health care provision not covered in these chapters include:

- community health services;
- nursing home services (these are reported in chapter 11, ‘Aged care services’);
- patient transport services (these are reported in chapter 10, ‘Emergency management’);
- public health programs, other than those for breast cancer and mental health; and
- funding for specialist medical practitioners and pharmacists.

A range of government services, such as public housing, sanitation and water supply, also influence health outcomes. These are not formally part of Australia’s health system and are not the subject of the following health chapters. A range of other factors, such as Indigenous status, socioeconomic status and residential location are potential influences on the health outcomes in this Report. It is a priority of the Review to improve the reporting of data on health outcomes and access to health

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care services for Indigenous people and residents in non-metropolitan regions of Australia.

**Box C.1 Some common health terms**

**Acute care hospital:** a hospital that provides at least minimum medical, surgical or obstetric services for admitted patient treatment and/or care, and around-the-clock, comprehensive, qualified nursing services and other necessary professional services

**Community health services:** health services for individuals and groups delivered in a community setting, rather than via hospitals or private facilities

**general practitioners:** medical practitioners who, for the purposes of Medicare, are vocationally registered under section 3F of the *Health Insurance Act 1973* (Cwlth), hold fellowship of the Royal Australian College of General Practitioners or equivalent, or hold a recognised training placement

**Medicare:** Commonwealth Government funding of private medical and optometrical services (Medicare Benefits Schedule). Some users use the term to include other forms of Commonwealth Government funding— for example, funding of selected pharmaceuticals (Pharmaceutical Benefits Scheme) and public hospital funding (Australian Health Care Agreements)— which is aimed at providing public hospital services free of charge to public patients.

**Public health:** an organised social response to protect and promote health and to prevent illness, injury and disability. The starting point for identifying public health issues, problems and priorities, and for designing and implementing interventions, is the population as a whole or population subgroups. Public health is characterised by a focus on the health of the population (and particular at-risk groups) and complements clinical provision of health care services.

**Public hospital:** a hospital that provides free treatment and accommodation to eligible admitted persons who elect to be treated as public patients. It also provides free services to eligible non-admitted patients and may provide (and charge for) treatment and accommodation services to private patients. However, charges to non-admitted patients and admitted patients on discharge may be levied in accordance with the Australian Health Care Agreements (for example, charges for aids and appliances).

*Sources:* AIHW (2000a); DHAC (1999).

The remainder of this preface is a summary of the nature of Australia's health care system and a report on the broad outcomes under that system.

Supporting tables for the 'Health preface' are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format at `\Publications\Reports\2001\Attach5A.xls` or in Adobe PDF format at `\Publications\Reports\2001\Attach5A.pdf`.

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Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 5A.3 is table 3 in the electronic files). They may be subject to revision. The most up-to-date versions of these files can be found on the Commission's Review web page ([www.pc.gov.au/service/gsp/2001/](http://www.pc.gov.au/service/gsp/2001/)). Users without Internet access can contact the Secretariat to obtain up-to-date versions of these tables (see the details on the inside front cover of the Report).

## **Profile of health services**

### **Roles and responsibilities**

The Commonwealth Government's health services activities include:

- funding hospitals, GPs, some specialist medical services, and public health programs;
- the Pharmaceutical Benefits Scheme;
- funding and providing nursing home services;
- funding the Commonwealth private health insurance rebate;
- promulgating and coordinating health regulations; and
- undertaking health policy research and policy coordination between the Commonwealth and the States and Territories.

State and Territory governments are responsible for delivering a range of health care services, such as:

- public hospital services;
- public health programs, including those for mental health;
- home and community care;
- child, adolescent and family health services;
- patient transport;
- health promotion; and
- the regulation, inspection, licensing and monitoring of premises, institutions and personnel.

Local governments are generally involved in environmental control and a range of community based and home care services, although the exact nature of their involvement varies across jurisdictions.

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The non-government sector plays a significant role in the health system, delivering general practice and specialist medical and surgical services, dental services, a range of other allied health services (such as optometry and physiotherapy) and private hospital and nursing home services.

## **Funding**

Funding the various components of the health care system is a complicated process. The Commonwealth Government subsidises many of the services provided by the non-government sector (mostly through the Medicare Benefits Schedule, the Pharmaceutical Benefits Scheme and the private health insurance rebate) and funds a number of nationally coordinated public health programs. It also provides funding for public acute hospitals under the Australian Health Care Agreements to the States and Territories.

State and Territory governments, through income raised by taxes and from both general and specific purpose grants received from the Commonwealth, contribute funds to community health services, and public hospitals (through casemix and other payments) which in turn fund specialists (through limited fee-for-service or sessional arrangements). Private individuals, health insurance funds and other non-government institutions also contribute funding to a range of non-government health care providers.

Governments (at all levels) fund approximately 70 per cent of total expenditure on health care services, with the remainder coming from individuals, health insurance funds, and workers compensation and compulsory motor vehicle third party insurance providers (figure C.1). (The latter two are treated as non-government funding because funds are obtained on the basis of fee for service). The Commonwealth Government accounted for the largest proportion of total health care expenditure in Australia (47 per cent) in 1998-99.

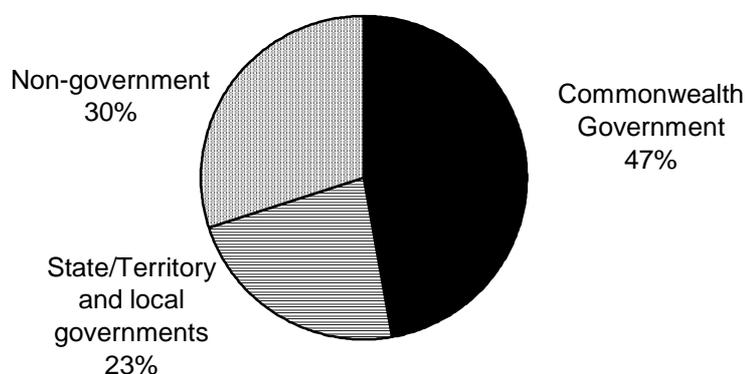
## **Size and scope of sector**

Total expenditure (recurrent and capital) on health care services in Australia was \$50.2 billion in 1998-99. This was equivalent to 8.5 per cent of gross domestic product, up from 7.5 per cent in 1989-90. This implies that health care expenditure grew faster than the economy over the past decade (AIHW 2000b).

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Figure C.1 Total health expenditure by source, 1998-99<sup>a, b, c, d</sup>

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<sup>a</sup> Expenditure by the Commonwealth Government and the non-government sector has been adjusted for tax expenditures. <sup>b</sup> Based on preliminary estimates by the Australian Institute of Health and Welfare and the Australian Bureau of Statistics. <sup>c</sup> 'Non-government' includes expenditure by individuals, health insurance funds, and workers compensation and compulsory motor vehicle third party insurers. <sup>d</sup> Includes expenditure on nursing homes and patient transport services.

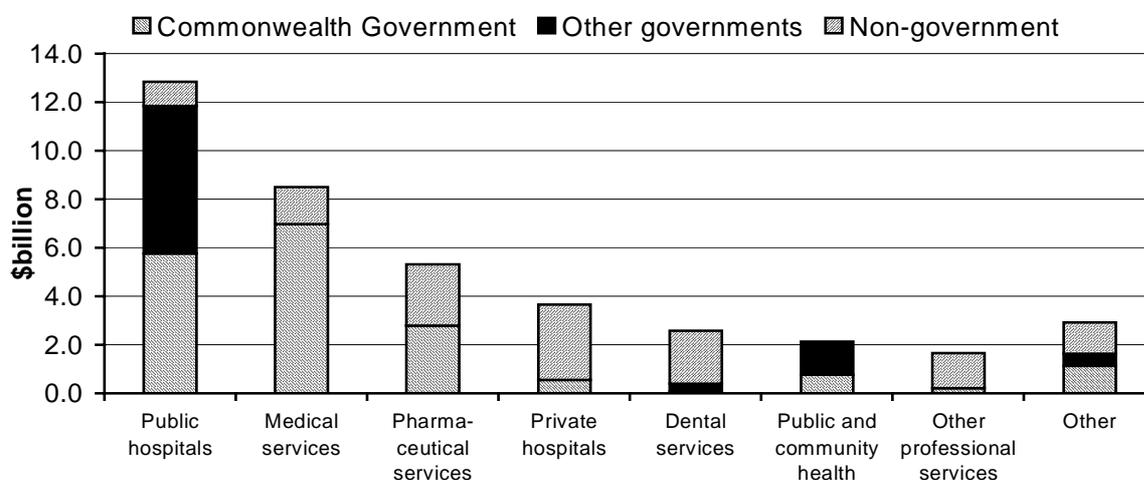
Source: table 5A.34.

The growth of total expenditure was partly the result of an increase in expenditure by the Commonwealth. Expenditure by Commonwealth Government sources grew proportionally faster than expenditure by State and Territory governments and non-government sources. Between 1989-90 and 1998-99 the average annual rate of growth in expenditure was 5.5 per cent for the Commonwealth Government, 2.8 per cent for State and Territory and local governments and 3.1 per cent for non-government. (AIHW 2000b).

Almost one third of the increase in expenditure by the Commonwealth Government was due to the introduction of the Private Health Insurance Incentive Scheme on 1 July 1997 and the subsequent introduction of the private health insurance rebate in early 1998-99 (AIHW 2000b).

The single largest item of recurrent health care expenditure by government and non-government sources in 1997-98 (the year for which the most recent comparative data are available) was on public hospitals. Nearly \$13 billion was used to fund the treatment of 3.7 million admitted patients and 32.8 million non-admitted occasions of service (figure C.2 and AIHW 1999a). Government recurrent expenditure on public hospitals of \$11.8 billion accounted for 39.5 per cent of total government recurrent expenditure on health care services in that year. Medical services accounted for \$6.9 billion of government expenditure (23.2 per cent of all government recurrent expenditure) and pharmaceutical services accounted for \$2.8 billion (9.3 per cent) (figure C.2).

Figure C.2 Total health services recurrent expenditure, 1997-98<sup>a, b, c</sup>



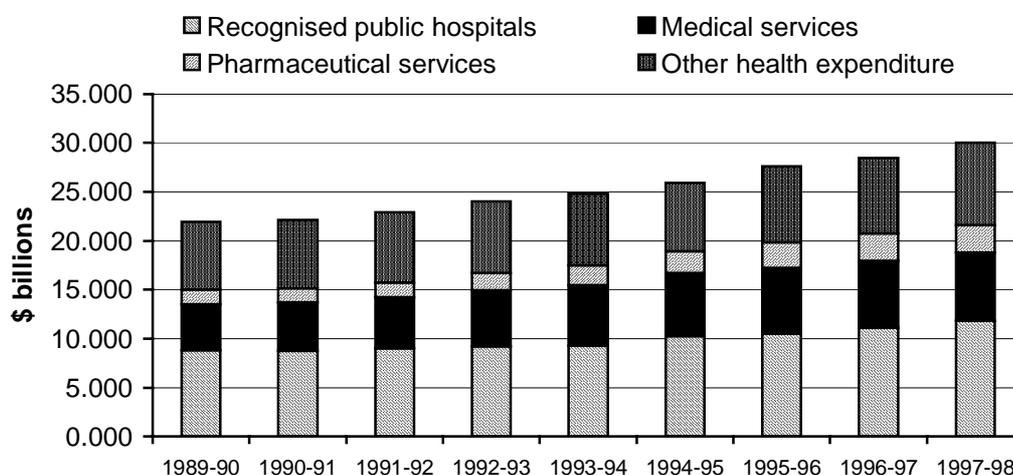
<sup>a</sup> Includes public funding for private hospitals, public repatriation and psychiatric hospitals, ambulance services, aids and appliances, administration and research. <sup>b</sup> All payments to vocationally registered GPs, including, (but not limited to), the Medical Benefits Schedule. <sup>c</sup> Includes (but are not limited to), payments under the Pharmaceutical Benefits Scheme.

Source: table 5A.35.

Recurrent expenditure on public hospitals by all governments grew by almost \$3 billion (in 1999-2000) dollars between 1989-90 and 1997-98. This accounted for almost 40 per cent of growth in government expenditure on health services (figure C.3). The public hospital share, however, fell slightly from 40.1 per cent in 1989-90 to 39.5 per cent in 1997-98.

The decline in the proportion of government expenditure on public hospitals reflected the rapid growth of expenditure on medical and pharmaceutical services (figure C.3). The real average annual growth rate of recurrent expenditure on medical services and pharmaceuticals was 4.9 per cent and 6.4 per cent respectively between 1989-90 and 1997-98 (AIHW 2000b). The growth in medical and pharmaceutical services expenditure reflected an increase in the number of services delivered. The average number of medical services processed under the Medicare scheme rose from 8.2 in 1988 to 10.6 per person in 1998 (ABS 2000a). Similarly, increased government expenditure on pharmaceuticals reflected the increased use of medications and availability of new pharmaceuticals.

Figure C.3 **Total government recurrent health expenditure (constant prices)<sup>a, b</sup>**



<sup>a</sup> All payments to vocationally registered GPs, including, (but not limited to), the Medical Benefits Schedule.

<sup>b</sup> Includes, (but are not limited to), payments under the Pharmaceutical Benefits Scheme.

Source: table 5A.36.

The rapid growth of expenditure on medical and pharmaceutical services meant that their proportion of government health care expenditure rose over the period 1989-90 to 1997-98. Expenditure on medical services increased from 21.5 per cent of government expenditure in 1989-90 to 23.2 per cent in 1997-98 (after peaking at 24.9 per cent in 1993-94 and 1994-95), while the share devoted to pharmaceutical services increased from 6.9 per cent to 9.3 per cent over the same period (after peaking at 9.8 per cent in 1996-97) (table 5A.36). This strong growth placed pressure on the Commonwealth Government in 1996-97 to restrict Medicare provider numbers and encourage the use of generic pharmaceutical brands. These initiatives had the effect of slowing the growth of expenditure in real terms.

## Policy developments

A number of recent policy developments in Australia and abroad have been aimed at improving the performance measurement of health systems and health care providers. One development was the establishment by the Australian Health Ministers' Conference of the National Health Performance Committee (NHPC) in August 1999 to replace the National Health Ministers' Benchmarking Working Group. The NHPC has the responsibility of developing and maintaining a national performance measurement framework for the whole of the health system to support benchmarking for health system improvement, and to provide information on

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national health system performance. The Committee is currently developing a performance indicator framework for national reporting that will cover:

- health status and outcomes (comprising the dimensions of health conditions, human function, life expectancy and wellbeing, and deaths);
- determinants of health (grouped into environmental factors, socio-economic factors, community capacity, health behaviours and person-related factors); and
- the performance of health systems (grouped into nine dimensions of performance comprising effectiveness, appropriateness, efficiency, responsiveness, accessibility, safety, continuity, capability and sustainability).

The *World Health Report* (WHO 2000) provided an international benchmarking comparison of the health systems of 191 countries worldwide. National health systems were benchmarked against three key objectives: attainment of good health, responsiveness of systems to the expectations of the population, and the level and fairness of financial contribution. Indexes were constructed for each key objective area, then aggregated to provide a ranking of each country's health system.

Another important development is the reporting of health-related performance indicators for Indigenous Australians under the auspices of the Australian Health Ministers' Advisory Council. The *National Summary of the 1998 Jurisdictional Reports against the Aboriginal and Torres Strait Islander Health Performance Indicators* (NHIMG 2000), identified a revised performance indicator framework for future reporting. Some suggested indicators include: distance to a hospital that provides admitted patient care; access to hospital care; time required to reach primary health care services; hospital outpatient activity and service deficiencies; and racism in health services. Other proposed indicators cover health outcomes for Indigenous Australians: child immunisation rates, life expectancy, standardised mortality rates, the number of low birthweight infants and the main causes of death.

This project represents progress towards improving the understanding of whether government policies and programs are making a significant difference in improving the health of Indigenous people. However, there is no timetable for regular publication of this information.

## **Framework for measuring the performance of the health system**

Government involvement in health services is predicated on the desire to improve the health of all Australians (box C.2) and governments use a variety of services in a variety of settings to fulfil this objective.

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### **Box C.2 Overall objectives for the health system**

Government involvement in the health system is aimed at efficiently and effectively protecting and restoring the health of the community by:

- preventing or detecting illness through the provision of services that 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; and
- providing equitable access to these services.

Primary prevention strategies are implemented before the diagnosis of an illness and generally aim to:

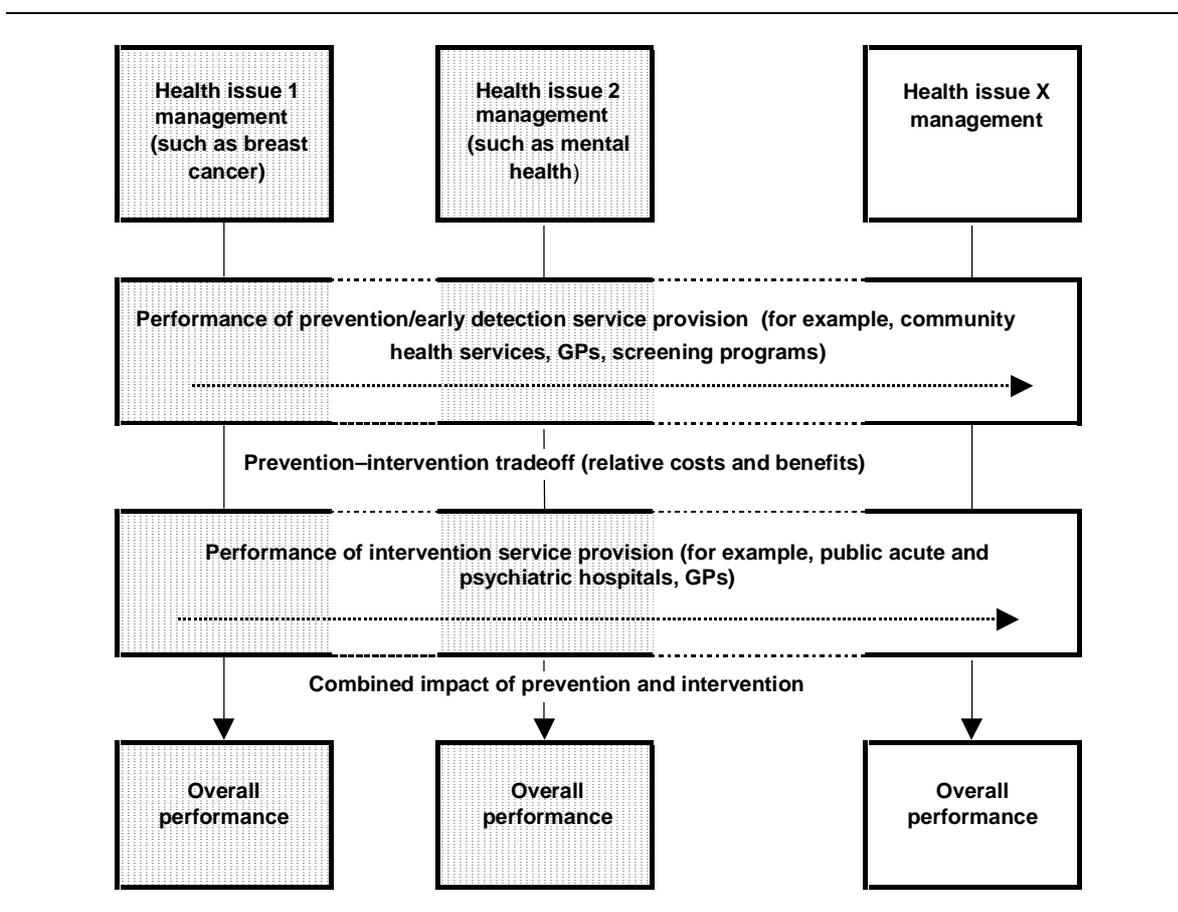
- reduce a person's risk of getting a disease or illness by increasing protective factors; and
- delay the onset of illness.

Intervention strategies are implemented after a diagnosis.

Measuring the effectiveness and efficiency of Australia's health system is a complex task. It must account for the performance of a range of services delivered (such as prevention and intervention), and the performance of service providers (such as community health centres, GPs and public acute hospitals), as well as the overall outcomes generated by the health system. The Steering Committee has not sought to develop a single unifying performance indicator framework that captures all these aspects of the health care system. Instead, it has adopted performance indicator frameworks for each component of the health care system. The frameworks report on two key aspects of the health system — health care providers and health issues. A complete set of performance indicator frameworks can contribute to an improved understanding of the performance of health systems in each jurisdiction.

The measurement approach adopted in this Report is represented diagrammatically (figure C.4). Frameworks of indicators measuring the performance of health service providers across a range of health care issues (represented by the horizontal arrows) are presented for two service delivery mechanisms used in Australia: public acute care hospitals and general practitioners.

Figure C.4 Australian health system — measurement diagram



The appropriate mix of services (prevention versus intervention) and the appropriate mix of service delivery mechanisms (hospital based versus community based) are measured by focusing on a health management issue (represented by the vertical arrows). As in 1999 and 2000, the Report covers breast cancer management and mental health services. The breast cancer management framework integrates the early detection and intervention strategies, which should inform the tradeoffs in the allocation of resources between these two strategies. The mental health framework provides information on the interaction and shared care arrangements between community based and hospital based providers in meeting the needs of Australians with a mental illness. Performance indicator frameworks are discussed in more detail in chapters 5, 6 and 7.

## Measuring the aggregate health care system

It is difficult to isolate the effect of health care services on the general health of the population. Socioeconomic factors (such as ethnicity, residential location income

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levels and employment rates) and the provision of non-health care government services (such as clean water, sewerage, food safety regulation, education and public housing) each contribute to overall health outcomes. Measures of aggregate health outcomes used in this Report include: the prevalence of illness and injury; mortality rates (for infants and all persons, as well as for the leading causes of death); average life expectancy; and the burden of disease and injury (as measured by the years of life lost to mortality or disability).

Similarly, the efforts of governments to address health care needs are influenced by factors external to their control, including geographic dispersion, age profiles, racial characteristics and socioeconomic status. Statistical appendix A provides a summary of factors that could influence health outcomes and government expenditure. Measures of the efficiency of government and non-government expenditure include the per person expenditure on health care services. It is important to remember the limits of these measures, given the effects of other non-health-related factors.

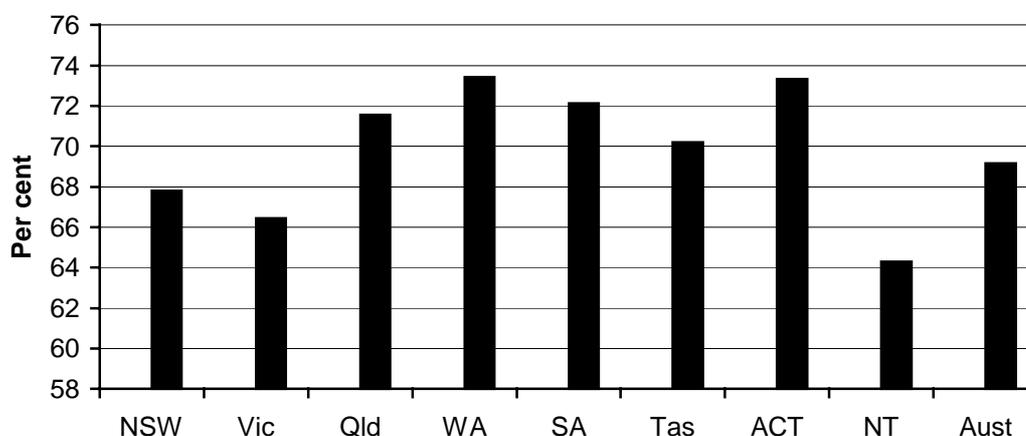
### **Prevalence of illness and injury**

The Australian Bureau of Statistics published data on the prevalence of illness and injury in 1997. These data have not been updated since the 1995 National Health Survey. The following discussion first appeared in the 1999 Report and has been retained to provide an overview of the potential data available for this issue.

Almost 70 per cent of Australians reported experiencing an illness in the two weeks before being interviewed for the 1995 National Health Survey. The most common illnesses were diseases of the respiratory system (such as bronchitis/emphysema, the common cold, hayfever, asthma and coughing or a sore throat). These accounted for 31.1 per cent of the total reported illnesses. Symptoms, signs and ill-defined conditions (such as allergies, headaches, heartburn and hangover) accounted for 28.5 per cent of all reported illnesses (ABS 1997a). The proportion of the population reporting a recent illness was 69.2 per cent for Australia, and this ranged from 73.4 per cent in WA to 64.3 per cent in the NT (figure C.5).

According to the survey, most Australians took action for a health-related concern in the two weeks before the survey — 79.9 per cent of females and 70.8 per cent of males. For some people, this constituted taking the day off work or school, or merely ‘taking it easy’ for a day or so. However, the more common health-related actions involved some contact with the Australian health care system. The most common action was taking medication (69 per cent of respondents), followed by consulting a doctor (23 per cent) and consulting another health care professional (13 per cent). Significantly fewer people visited a hospital, either as an admitted or non-admitted patient (only 2.1 per cent and 2.7 per cent respectively) (ABS 1997a).

Figure C.5 Persons reporting a recent illness, 1995 <sup>a, b, c</sup>



<sup>a</sup> Illness refers to a medical condition experienced in the two weeks before interview and may include long term conditions experienced in the period. <sup>b</sup> Data were standardised for age and sex differences across jurisdictions. <sup>c</sup> Estimates relate to predominantly urban areas only.

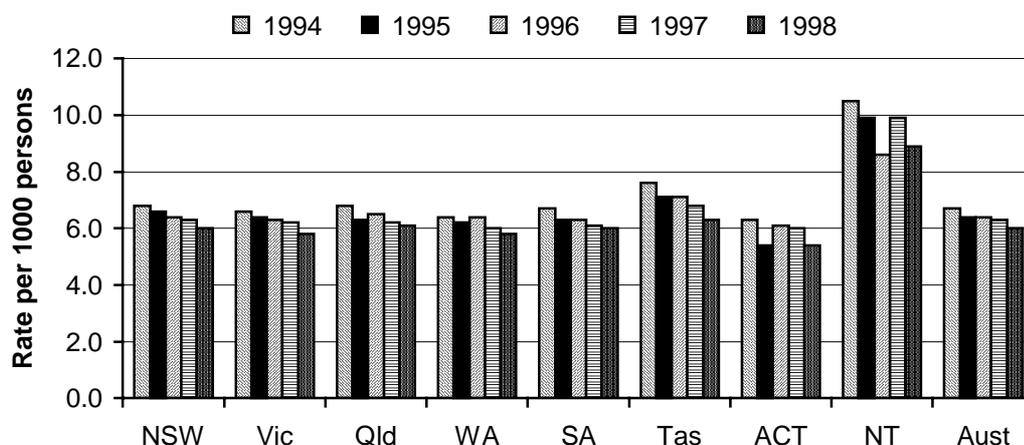
Source: table 5A.36.

## Mortality rates

A second method for measuring overall health outcomes is the mortality rate among all persons and infants. There were 127 200 deaths in Australia in 1998 (ABS 2000a) which translated into a mortality rate (standardised for age differences across jurisdictions) of 6.0 per 1000 population (figure C.6). Across jurisdictions Mortality rates in 1998 were highest in the NT (8.9 per 1000) and lowest in the ACT (5.4 per 1000). Mortality rates for Indigenous Australians are also reported for the first time this year. In 1998, Indigenous mortality rates in Queensland, WA, SA and the NT (the only jurisdictions with sufficiently reliable data) were approximately two to three times that of the national average (table 5A.38).

Indigenous mortality, infant mortality, life expectancy, and median age at death need to be interpreted with caution. The coverage of Indigenous deaths (and births) in Australia is imperfect. Not every registered death (or birth) is appropriately identified as Indigenous. This can result in the underestimation of the number of Indigenous deaths (or births) occurring and, by extension, an underestimation of the mortality (or birth) rate of Indigenous persons (ABS 2000b). The Australian Bureau of Statistics publishes the Indigenous mortality data for Queensland, WA, SA and the NT because it considers these jurisdictions to have the most complete collections (ABS 1999).

Figure C.6 Mortality rate per 1000 persons, age standardised<sup>a</sup>

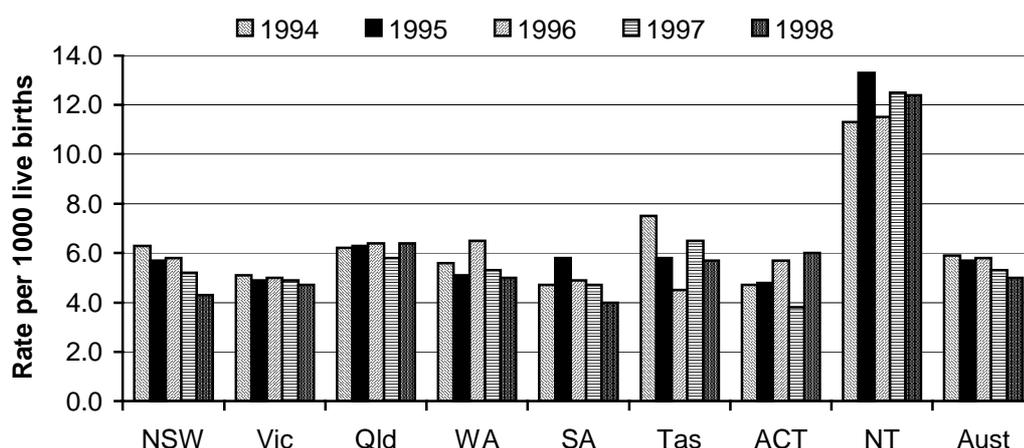


<sup>a</sup> NT sample includes only metropolitan areas.

Source: table 5A.38.

Infant mortality rates in Australia declined between 1994 and 1998 —down from 5.9 per 1000 live births to 5.0 per 1000 live births. The rates appear to have increased, however, in the NT over the period (figure C.7). Across jurisdictions Infant mortality rates in 1998 were lowest in SA (4.0 per 1000 live births) and highest in the NT (12.4 per 1000 live births).

Figure C.7 Infant mortality rate



<sup>a</sup> NT sample includes only metropolitan areas.

Source: table 5A.39.

Infant mortality rates for Indigenous Australians are reported for the first time this year. In Queensland, WA, SA and the NT (the only jurisdictions to have sufficiently reliable data), the Indigenous infant mortality rate was approximately two to three

times that of the national average for Indigenous and non-Indigenous Australians in 1998 (table 5A.40). Care must be taken in interpreting these data, given the systematic underreporting of both infant deaths and births.

## Principal causes of death

The main causes of death among Australians in 1998, when measured in terms of broad categories of disease and injury, were diseases of the circulatory system (heart diseases and strokes), neoplasms (tumours and malignant cancers), diseases of the respiratory systems (such as chronic obstructive pulmonary disease) and external causes (including accidents and suicide). These accounted for 85 per cent of all deaths among males and 84 per cent of all deaths among females (table 5A.40).

Table C.1 Principal causes of deaths, 1998 (per cent)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Male									
Heart disease <sup>a</sup>	22.6	21.4	23.0	21.1	23.7	22.7	19.2	15.0	22.4
Stroke <sup>b</sup>	7.6	6.9	6.9	6.8	7.1	8.3	6.5	4.6	7.2
Lung cancer <sup>c</sup>	7.2	7.2	7.4	6.8	7.0	7.5	7.4	5.7	7.2
COPD <sup>d</sup>	5.3	5.7	5.7	4.6	5.0	6.6	4.8	4.6	5.4
Prostate cancer	3.7	4.3	3.8	2.9	3.4	4.3	3.7	0.8	3.8
Suicide	3.0	2.7	3.7	4.1	3.3	2.6	4.3	6.6	3.2
Motor vehicle accidents	1.6	1.8	1.7	2.4	1.8	1.2	3.6	10.6	1.8
Female									
Heart disease <sup>a</sup>	22.3	20.7	23.2	20.3	23.2	21.3	17.1	13.5	21.9
Stroke <sup>b</sup>	10.1	9.0	9.0	9.0	9.2	10.3	9.0	4.9	9.4
Lung cancer <sup>c</sup>	5.5	5.4	5.5	5.4	5.0	5.5	6.1	4.5	5.4
COPD <sup>d</sup>	4.8	5.0	4.9	4.2	4.3	5.8	4.7	5.6	4.8
Breast cancer	3.9	4.3	4.0	3.5	3.8	4.0	5.0	1.4	4.0
Suicide	1.9	1.8	2.6	2.7	2.1	1.6	2.4	4.8	2.1
Motor vehicle accidents	1.2	1.3	1.3	1.8	1.4	0.9	2.5	8.4	1.4

<sup>a</sup> Ischaemic heart disease. <sup>b</sup> Cerebrovascular disease. <sup>c</sup> Cancer of the trachea, bronchus and lung. <sup>d</sup> Chronic obstructive pulmonary disease.

Source: table 5A.40.

Table C.1 summarises the six most significant individual causes of mortality among Australian males and females. Ischaemic heart disease, cerebrovascular disease, lung cancer, chronic obstructive pulmonary disease, prostate and breast cancer, suicide and motor vehicle accidents accounted for 51 per cent of all male deaths in Australia in 1998 and 49 per cent of all female deaths.

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Indigenous Australians in 1998 experienced quite different patterns of mortality than those of the Australian population as a whole. The four major categories of mortality (circulatory diseases, neoplasms, respiratory diseases and external causes) accounted for between 68 per cent (WA) and 77 per cent (NT) of deaths among Indigenous males and between 66 per cent (NT) and 77 per cent (SA) of deaths among Indigenous females (table 5A.41). Diabetes mellitus, motor vehicle accidents, suicide and 'other external causes' accounted for between 25 per cent (WA) and 33 per cent (Queensland) of all deaths among Indigenous males and 18 per cent (Queensland) and 24 per cent (NT) of all deaths among Indigenous females.

### **Burden of disease and injury**

The *Australian Burden of Disease and Injury Study* (Mathers, Vos and Stephenson, 1999) provides a comprehensive assessment of the amount of ill health and disability in Australia — the 'burden of disease'. The burden of disease is measured in terms of the total years of life lost to premature mortality or disability (box C.3). In 1996, premature mortality was responsible for 1.35 million years of life lost in Australia. When adjusted to include the number of years lost to disability resulting from disease or injury, the Australian Institute of Health and Welfare estimated the total burden to be 2.5 million disability-adjusted life years (DALY) in 1996.

#### **Box C.3 Disability-adjusted life years**

Mortality, disability, impediment and injury arising from a range of diseases and injuries can be measured using the disability-adjusted life year (DALY). The World Bank (1993) used the method to provide a comprehensive assessment of the global burden of disease and injury, and the World Health Organisation has since adopted it as a tool for reporting on overall health outcomes (WHO 2000).

The DALY method provides a convenient and economical way of forming a single statistic, information on the impact of premature death and the effects of disability and other non-fatal health outcomes for a range of diseases and injuries.

One DALY is a lost year of a 'healthy' life and is calculated as a combination of years lost to premature mortality (years of life lost: YLL) and the equivalent 'healthy' years of life lost due to disability (years of life lost to disability: YLD).

YLL is equal to the number of years a deceased person would have expected to survive had they achieved the life expectancy of persons in their age cohort. In a study of the burden of disease for Australia, the Australian Institute of Health and Welfare's Australian life expectancies for 1996 are taken as the reference.

YLD is calculated similarly to YLL, but weights are applied that reflect the degree of disability or handicap that the person suffers as a consequence of their disease or injury. The weights vary from zero (very healthy) to one (death) and are defined for 54 disease and injury conditions.

Source: Mathers *et al.* (1999).

The leading causes of DALYs in Australia in 1996 were ischaemic heart disease and stroke. Together, these accounted for nearly 18 per cent of the total disease burden. Chronic obstructive pulmonary disease and lung cancer (also smoking-related diseases) are the third and fifth leading causes of disease burden, accounting for 7.3 per cent of the total. Depression is the fourth leading cause of disease. If the burden attributable to suicide and self-inflicted injury is included, then depression rises to third place, accounting for an overall 5 per cent of the total (table C.2).

**Table C.2 Leading causes of disease and injury in Australia, 1996 (per cent of DALYs)**

	<i>% of DALYs</i>
Ischaemic heart disease	12.4
Stroke	5.4
Chronic obstructive pulmonary disease <sup>a</sup>	3.7
Depression	3.7
Lung cancer	3.6
Dementia	3.5
Diabetes mellitus	3.0
Colorectal cancer	2.7
Asthma	2.6
Osteoarthritis	2.2

<sup>a</sup> Chronic bronchitis and emphysema.

Source: Mathers *et al.* (1999).

## Life expectancy

The life expectancy of Australians has improved dramatically since the turn of the century. The average life expectancy at birth was 55.2 years for males and 58.8 years for females in the period 1901–10, then rose steadily until it reached 75.9 for males and 81.5 for females in 1996–98 (table 5A.42).

Life expectancy at birth varies across jurisdictions. Average life expectancy for males at birth was 77.5 years in the ACT in 1996–98, compared with 70.6 years in the NT (table C.3 and table 5A.42). The average for females in WA was 81.9 years, which was almost seven years longer than that for females in the NT. This difference reflects the large number of Indigenous people living in the NT (compared with other jurisdictions), and the shorter life expectancy of Indigenous people generally.

**Table C.3 Average life expectancy at birth, 1996 – 1998 (years)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
<b>Males</b>									
1994–96	75.0	75.6	75.1	75.4	75.3	74.1	76.6	69.2	75.2
1995–97	75.4	75.8	75.4	75.7	75.7	74.8	77.1	70.0	75.6
1996–98	75.8	76.3	75.6	76.1	76.0	75.1	77.5	70.6	75.9
<b>Females</b>									
1994–96	80.9	81.2	80.9	81.3	81.3	80.0	81.6	75.0	81.1
1995–97	81.2	81.4	81.3	81.6	81.5	80.1	81.3	74.7	81.3
1996–98	81.6	81.7	81.5	81.9	81.6	80.4	81.6	75.0	81.5

Source: table 5A.42.

Indigenous Australians had considerably worse health than that of non-Indigenous Australians in 1996–1998. Their life expectancy at birth, for example, was between 58 years in the NT and 63 years in Victoria for males, and between 64 years in the NT and 68 years in Victoria and WA for females (table 5A.42).

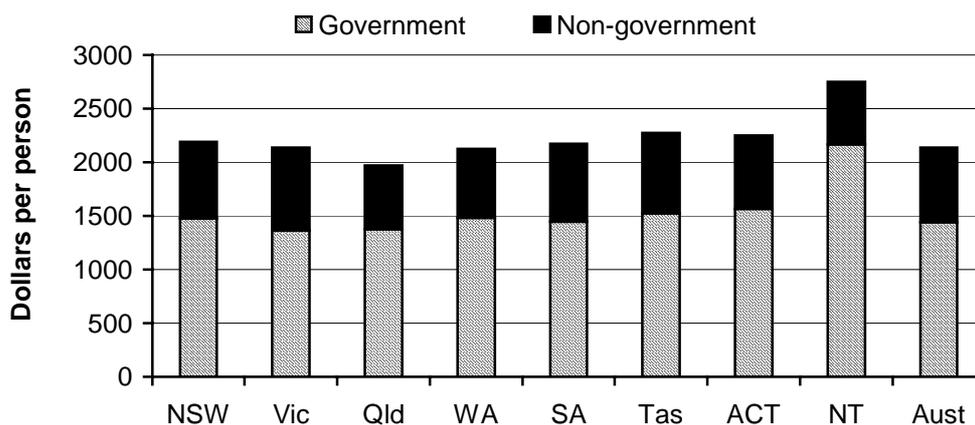
Concerns with the under reporting of Indigenous deaths also affect estimates of life expectancies (ABS 2000b). An alternative measure of longevity is the median age at death, although this does not indicate the current health status of living persons. In 1998, the median age at death in Australia among all Australians was 77.4 years (table 5A.43). Across jurisdictions, median age at death was highest in SA (78.4 years) and lowest in the NT (53.6 years). In contrast, the median age at death for Indigenous Australians was highest among females in Queensland (59.4 years) and lowest among males in SA (44.5 years) (table 5A.43).

## Efficiency

Total (government and non-government) recurrent expenditure per person can be considered as an imperfect proxy for the efficiency with which health care services are provided. As mentioned earlier, however, a number of factors influence this indicator, including geographic dispersion, differences in population mix, and differences in the types of outputs delivered by agencies. Government expenditure can influence the total expenditure on health. Real government recurrent expenditure on health (excluding nursing homes and ambulance services) rose from \$1350 per person in 1995-96 to \$1438 in 1997-98 in Australia (table 5A.44). Expenditure in 1997-98 was lowest in Victoria (\$1363 per person), and highest in the NT (\$2169) (figure C.8).

Real total recurrent expenditure on health care services rose from \$2023 per person in 1995-96 to \$2138 per person in 1997-98 (again, after deducting expenditure on nursing homes and ambulance services). Non-government expenditure was highest in Victoria (\$772 per person) and lowest in the NT (\$584 per person) in 1997-98 (table 5A.44).

Figure C.8 **Total recurrent expenditure per person, 1997-98**



<sup>a</sup> Excludes expenditure on ambulance services and nursing homes.

Source: table 5A.44.

An investigation of health care expenditure by governments on Indigenous and non-Indigenous Australians revealed that expenditure through publicly subsidised programs (excluding nursing homes and ambulance services) was \$2069 per Indigenous person in 1995-96, compared with \$1331 per non-Indigenous Australian. The majority of this expenditure was sourced from States and Territories through public acute hospitals, community health centres and public health programs (Deeble *et al.* 1998; tables 5A.45 and 5A.46). Total expenditure on health, including government and non-government sources, was \$2173 per Indigenous person and \$2010 per non-Indigenous person in 1995-96 (table 5A.46). This suggests that Indigenous people are relatively dependent on government funding for health expenditure, but that the total amount of expenditure does not differ substantially between Indigenous and non-Indigenous people. Closer inspection reveals that government and non-government expenditure on private hospitals, the Medical Benefit Schedule, the Pharmaceutical Benefits Scheme, private dental services and non-prescribed medicines was considerably higher for non-Indigenous people (\$1106 per person) than for Indigenous people (\$207 per person) in 1995-96 (table 5A.46).

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## Future directions

A key challenge for improving the efficiency and effectiveness of the health care system is to improve our understanding of whether health care services are appropriately addressing Australia's health needs. The 'appropriateness' of service provision includes:

- the appropriate sequence of events in promoting health care issues and preventing disease and injury in the population, and in treating an individual patient;
- the appropriate level and mix of treatments (for example, the level and mix of separations);
- the appropriate mix of service types (for example, the mix of promotion and prevention, and intervention); and
- the appropriate mix of service providers (for example, the mix of public health organisations, community based services and hospital based services).

The first of these involves assessing the care provided to an individual patient against a normative standard of care or clinical pathway. Unexplained variations from the clinical pathway are sometimes measured, largely as an indicator of the quality of care provided to the patient. Information on clinical pathways is not yet available on a national basis as a quality of care indicator.

The second interpretation of appropriateness used in this Report relates to care provided by public acute care hospitals. Two indicators — separations per 1000 people and the separation rate for certain procedures — focus on geographic variations to highlight differences that may require further investigation.

The third and fourth interpretations of appropriateness are the focus of chapter 6. The framework of performance indicators for breast cancer management focuses on the tradeoff between the allocation of resources to disease prevention (or early detection in this case) and intervention. The framework for mental illness management, on the other hand, looks at the alternatives in service delivery by community-based and hospital-based providers in meeting the needs of Australians with mental illness.

Despite these efforts, the following three factors continue to hinder assessments of the appropriateness of the care provided by Australia's health care system:

- there are no measurable standards of service against which current levels can be assessed for many health services;

- 
- the Review covers only parts of the whole health care system. Reporting would need to be expanded to include coverage of community based services, government support for pharmaceuticals and other health issues (such as the remaining National Health Priority Areas — cardiovascular health, diabetes mellitus, asthma and injury prevention and control) before the relative contribution of each area to total health outcomes could be assessed; and
  - the links between frameworks are not yet identified. There is insufficient information to aid assessments of whether governments should focus more effort on supporting one range of service over another (for example, prevention or intervention) or conversely, one health care provider over another (for example, public acute care hospitals or GPs). Ideally, information on the links between health care providers and types of activity (for example, as to whether they are complementary and substitutes) would need to become available.

A robust examination of all aspects of health care would help with the reporting of, and ultimately the improvement of, overall health outcomes in Australia.

### **Specific tasks for the Review**

The key challenges for improving reporting on the health sector, including identifying the appropriateness of services, are:

- introducing a national performance indicator framework for the health care system as a whole. This framework will be reported in the preface and will report on the performance of private and public health services. It may include such recent developments as the population health monitoring activities of the jurisdictions and the work undertaken by the World Health Organisation, and will seek to arrive at improved overall measures of outcomes and efficiency;
- improving reporting under the existing performance indicator frameworks by refining existing indicators and/or introducing new ones. Key areas where indicators can be improved include efficiency and quality of acute care services. Issues for improving reporting under the individual frameworks are discussed in detail in the relevant chapters. Improving data on the quality of hospital services, for example, is specific to the reporting framework for public acute care hospitals (see chapter 5). Similarly, issues specific to breast cancer control and mental illness are discussed in chapter 7;
- expanding reporting to better account for trends in service substitution. Two forms of service substitution include substituting acute admitted patient services for those delivered in the home ('hospital in the home') and substituting same-day surgery for longer stay acute admitted patient care;

- 
- improving reporting of the effectiveness of service delivery to key client groups, such as Indigenous people and people in regional, rural and remote areas. In this respect, the Australian Health Ministers' Advisory Council report on Indigenous health outcomes (NHIMG 2000) will be useful. More attention would need to be paid to the level of resources expended by mainstream services in contributing to those outcomes. The challenges faced in improving the quality of data on Indigenous access to mainstream services are addressed in chapter 2; and
  - extending the coverage of the Review to include diabetes mellitus (as well as other National Health Priority Areas) and community health services.

Issues for improving reporting under the individual frameworks are discussed in detail in the relevant chapters.

### **Expanding the scope of the Review**

The 2000 Report noted that a long term goal of the Steering Committee is to include a performance measurement framework for community health services, similar to that for public hospitals and general practice. Community health services provide health promotion and early detection services, assess health problems and provide care. These services are diverse and incorporate a range of service providers (dietitians, community nurses, psychologists and so on). This multidisciplinary approach makes it difficult to define the scope of community health services accurately and to attribute health outcomes to particular providers.

A study was commissioned by the Commonwealth, State and Territory governments in 1998 to examine the feasibility of developing performance indicators for this sector. The unpublished study noted that:

The validity of performance indicators relies, in part, on homogeneity in the units being measured ... issues of homogeneity and comparability are significantly more complex and difficult for community health [than for acute health] ... Reliable data collections present a major challenge (DHAC 1999).

In the meantime, the Steering Committee has agreed to report on the performance of jurisdictions in addressing diabetes mellitus in the 'Health management' chapter. Reporting is expected to begin in the next Report. Diabetes mellitus represents the seventh largest burden of disease in Australia (table C.2) and is a significant cause of mortality among Indigenous Australians. Renal dialysis, which is directly associated with diabetes mellitus, is the most common episode of acute care delivered by public acute hospitals (accounting for over 11 per cent of all acute separations — see chapter 5 and table 5.1). The reporting is likely to consider the

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effectiveness and efficiency of jurisdictions in their promotion/prevention, intervention and ongoing management of the condition.

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## 5 Public hospitals

Public hospitals are important providers of government funded health care services in Australia. This chapter reports on the performance of each State and Territory's public hospital system, and in particular focuses on acute care services.

A profile of public hospital systems is contained in section 5.1. Policy developments in performance measurement of public hospitals are outlined in section 5.2. A framework of performance indicators and the key performance indicator results for public hospitals are outlined in section 5.3. The performance indicator framework and key results for maternity services, a significant component of a public hospital's activity, are discussed in section 5.4 and future directions in reporting are covered in section 5.5. Terms and definitions are summarised in section 5.6. The performance of public hospitals in delivering a range of health care is also examined in other chapters of this Report. Referrals to hospitals for specific conditions by general practitioners is a subject of chapter 6. The performance of public hospitals in delivering breast cancer treatment and mental health care services is examined in chapter 7. In many jurisdictions, the delivery of patient transport and aged care services depend on the activity of public hospitals; the performances of these are examined in chapters 11 and 12 respectively.

This year, improvements have been made in the reporting of capital costs and casemix adjusted relative length of stay. Also, data are reported for the first time on maternity services.

### *Supporting tables*

Supporting tables for chapter 5 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as `\Publications\Reports\2001\Attach5A.xls` and in Adobe PDF format as `\Publications\Reports\2001\Attach5A.pdf`.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 5A.3 is table 3 in the electronic files). They may be subject to revision. The most up-to-date versions of these files can be found on the Commission's Review web page ([www.pc.gov.au/service/gsp/2001/](http://www.pc.gov.au/service/gsp/2001/)). Users without

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Internet access can contact the Secretariat to obtain up-to-date versions of these tables (see details on the inside front cover of the Report).

## 5.1 Profile of public hospital systems

### Definition

A key objective of government is to provide public hospital services to ensure the population has access to cost effective health services, based on clinical need and within clinically appropriate times, regardless of geographic location. Public hospitals provide a range of services, including:

- acute care services to admitted patients;
- sub- and non-acute services to admitted patients (for example, rehabilitation or palliative care, or long stay maintenance care);
- emergency, outpatient and community care services to non-admitted patients;<sup>1</sup>
- mental health services, including services provided to admitted patients by designated psychiatric/psychogeriatric units, as well as community based services;
- public health services; and
- teaching and research activities.

This chapter focuses on acute care services provided to admitted patients and emergency services provided to non-admitted patients in public acute care hospitals. These services comprise the bulk of public hospital activity, and in the case of acute care services to admitted patients, have the most reliable data available. However, some data include sub- and non-acute care services where they cannot yet be separately identified from acute care. Hence, the performance of a range of other hospital services is not yet covered in this Report. Stand-alone psychiatric hospitals are also included in the profile section of the chapter, although their role is diminishing in accordance with the National Mental Health Strategy. Under the Strategy, the provision of psychiatric treatment is shifting away from specialised psychiatric hospitals to public acute hospitals and the community sector. Some common health terms relating to hospitals are defined in box 5.1.

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<sup>1</sup> Community care services comprise care provided by hospital staff offsite in clinics or in the home.

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## Box 5.1     **Some common health terms**

### **Patients**

*Admitted patient:* a patient who has formally undergone an admission process into a public hospital to begin an episode of care. Admitted patients may receive acute, sub-acute or non-acute care services.

*Non-admitted patient:* a patient who has not undergone an admission process to receive an acute, sub-acute or non-acute episode of care.

### **Types of care**

*Acute care:* clinical services provided to patients, including performing surgery, relieving symptoms and/or reducing the severity of illness or injury, and performing diagnostic and therapeutic procedures. Most episodes involve a relatively short hospital stay, although acute care services may also be provided to non-admitted patients.

*Ambulatory services:* services provided by hospitals to non-admitted patients.

*Sub-and non-acute care:* clinical services provided to admitted and non-admitted patients suffering from *chronic* illnesses or recovering from such illnesses. They include planned geriatric care, palliative care, geriatric care evaluation and management, and services for nursing home-type patients. Clinical services delivered by designated psychiatric or psychogeriatric units, designated rehabilitation units, and mothercraft services are also considered to be non-acute.

### **Hospital outputs**

*Separation:* the discharge, transfer, death or change of episode of care of an admitted patient. For measuring a hospital's activity, separations are used in preference to admissions because diagnoses and procedures can be more accurately recorded at the end of a patient's stay and patients may undergo more than one separation from the time of admission. Admitted patients who receive same day procedures (for example, renal dialysis) are recorded in separation statistics.

*Casemix adjusted separations:* the number of separations is often adjusted to account for differences across hospitals in the complexity of their episodes of care. Casemix adjustment is an important step to achieving comparable measures of efficiency across hospitals and jurisdictions.

*Non-admitted occasions of service:* a hospital's total number of clinical services provided to non-admitted patients. Services include emergency department visits, pathology, counselling, group therapy and community health consultations. Hospital non-admitted occasions of service have not yet been adjusted for the relative differences in the complexity of services provided.

(continued next page)

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Box 5.1 (continued)

**Other common health terms**

*Comorbidity*: the simultaneous occurrence of two or more diseases or health problems that affect the care of the patient.

*AR-DRG v4.1 (Australian Revised Diagnosis Related Group, version 4.1)*: a patient classification system that hospitals use to match their patient services (hospital procedures and diagnoses) with their resource needs. AR-DRG v4.1 is based on the ICD-10-AM classification and replaces the earlier AN-DRG v3.0/3.1.

*ICD-10-AM*: a classification of diseases and injuries, the Australian modification (AM) of the International Standard Classification of Diseases and Related Health Problems, Revision 10 (ICD-10). ICD-10-AM replaces the earlier ICD-9-CM (Australian Version of the International Classification of Diseases, Revision 9, Clinical Modification).

## Funding

Total recurrent expenditure on public hospitals (excluding depreciation) was \$13.7 billion in 1998-99 (1998-99 prices) (table 5A.1).<sup>2</sup> In real terms, this expenditure increased 2 per cent in the 1998-99 year (AIHW 2000a).

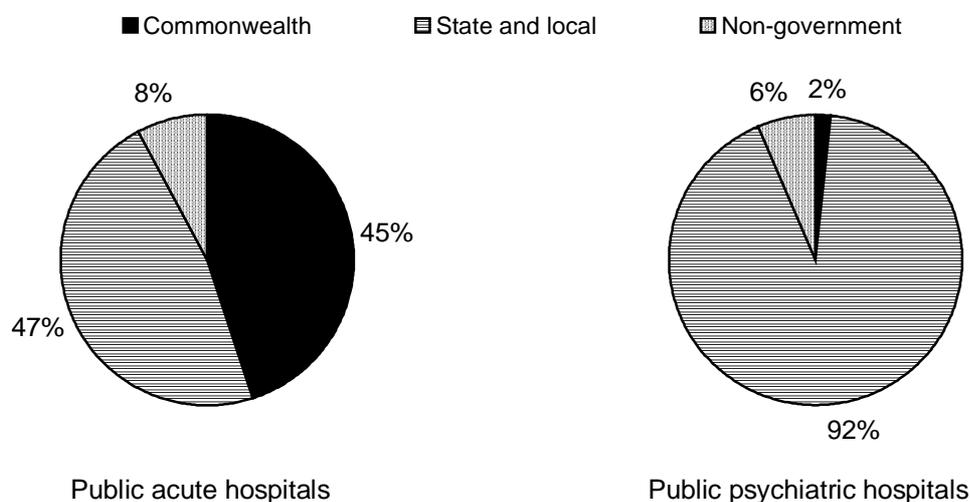
Commonwealth, State and Territory governments, health insurance funds, individuals, workers compensation and compulsory motor vehicle third party insurance cover, finance the expenditure on public hospitals. The most recent comparative data available on hospital expenditure by source of funds are for 1997-98 (figure 5.1 and table 5A.35).<sup>3</sup> 1997-98 is also the latest year for which data are available separately for public acute and psychiatric hospitals. In that year, around \$365 million was spent on public psychiatric hospitals and \$11.85 billion was spent on public acute hospitals (AIHW 2000b).

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<sup>2</sup> This figure includes spending on patient transport.

<sup>3</sup> The 1997-98 expenditure data (in figure 5.1) are not directly comparable with the 1998-99 expenditure data. The 1997-98 data have a broader scope. The more recent data exclude expenditure for population health, primary and community based services administered by hospitals and trust fund expenditure (AIHW 2000a).

Figure 5.1 **Expenditure on public hospitals, by source of funds, 1997-98 (per cent)**



Source: table 5A.35.

Public hospitals accounted for 70.4 per cent of recurrent expenditure on health services by State and Territory governments in 1997-98. In contrast, public hospitals accounted for only 31.5 per cent of Commonwealth government recurrent spending on public acute hospitals (table 5A.35).

For selected public acute hospitals, expenditure on admitted patients (based on the inpatient fraction) comprised 70–80 per cent of total recurrent expenditure in 1998-99 (table 5A.24). Acute non-psychiatric admitted patients accounted for 68 per cent of hospital expenditure in NSW and 63 per cent in Victoria (table 5A.25).

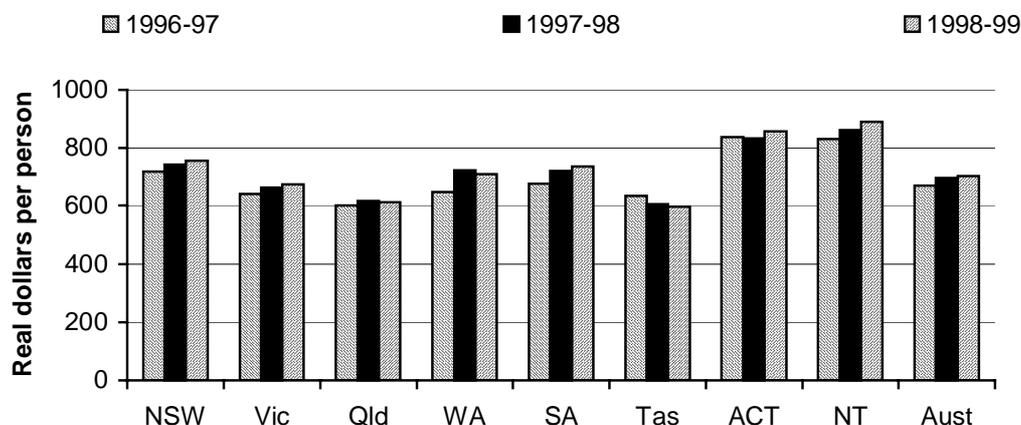
In 1998-99, per capita government recurrent expenditure on public hospitals was \$701 for Australia, ranging from \$597 in Tasmania to \$888 in the NT (1997-98 prices). Real expenditure per capita across Australia increased over time, from \$668 to \$701 between 1996-97 and 1998-99 (figure 5.2 and table 5A.2). Not all states followed this trend.

## Size and scope of sector

### *Hospitals*

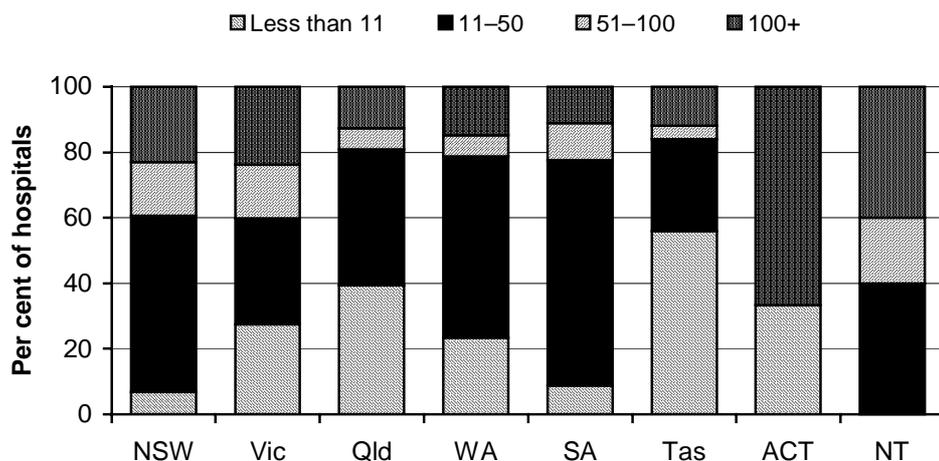
In 1998-99, Australia had 755 public hospitals (726 public acute care hospitals and 29 public psychiatric hospitals) with 53 885 beds (AIHW 2000a). The median size of public hospitals was 28 beds. In all States and Territories, except the ACT, most hospitals tended to have less than 100 beds (figure 5A.3 and table 5A.3).

Figure 5.2 Recurrent expenditure per person, public acute and psychiatric hospitals (1997-98 prices)



Source: table 5A.2.

Figure 5.3 Public acute care and psychiatric hospitals by size, 1998-99<sup>a, b, c</sup>



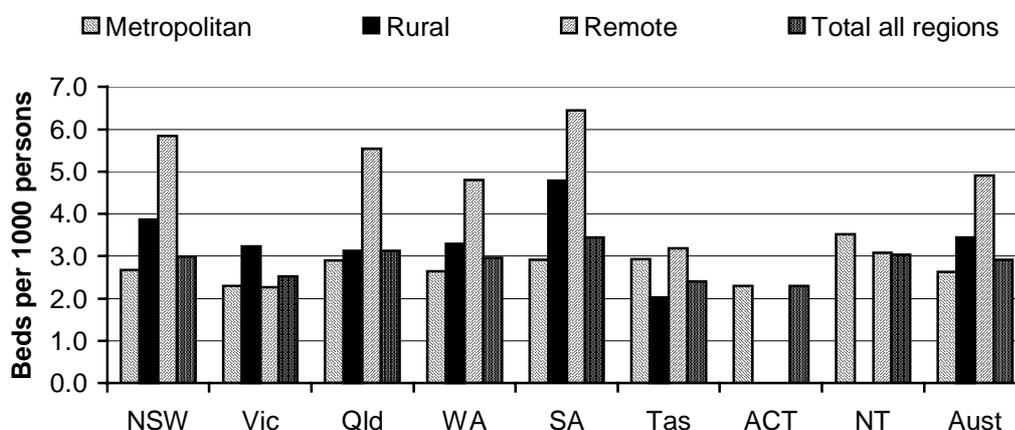
<sup>a</sup> The number of hospitals reported can be affected by administrative and/or reporting arrangements, and is not necessarily a measure of the number of physical hospital buildings or campuses. <sup>b</sup> Size is based on the number of available beds. <sup>c</sup> The count of hospitals in Victoria is a count of the campuses that separately report data to the Victorian Admitted Episodes Database.

Source: table 5A.3.

### Beds

On average, there were 2.9 beds per 1000 people in 1998-99 (figure 5.4 and table 5A.4). The number of beds per 1000 people was highest in SA (3.4) and lowest in the ACT, Tasmania and Victoria (2.3, 2.4 and 2.5 respectively). Nationally, more beds were available per 1000 people in remote areas. However, this does not provide an indication of regional access to particular types of service or of the distance required to travel to access these services.

Figure 5.4 **Number of available beds, by region, public acute and psychiatric hospitals 1998-99<sup>a</sup>**



<sup>a</sup> An 'available bed' is immediately available to be used by an admitted patient. A bed is immediately available if located in a suitable place for care, with nursing and auxiliary staff available within a reasonable period. Surgical tables, recovery trolleys, delivery beds, cots for normal neonates, emergency stretchers/beds not normally authorised or funded, and beds designated for same day non-admitted patient care are excluded (AIHW 2000c).

Source: table 5A.4.

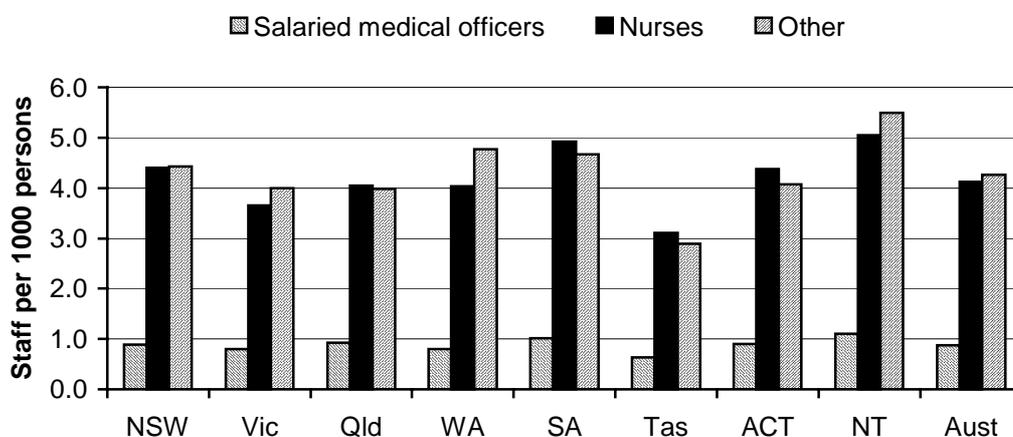
### Staff

There were 175 535 full time equivalent staff employed in Australian public acute care and psychiatric hospitals in 1998-99 (based on the average number of staff available for the year). Nurses comprised 45 per cent of staff (78 319) and salaried medical officers represented 9 per cent (16 458). Other staff (diagnostic and allied health professionals, other personal care staff, administrative and clerical staff, and domestic and other staff) made up the remainder (table 5A.5). Tasmania had the least staff per 1000 people (6.6) and the NT had the most (11.6) (figure 5.5 and table 5A.5).

### Activity

There were around 3.9 million acute, sub- and non-acute separations in public acute and psychiatric hospitals in 1998-99 (table 5A.6). Public psychiatric hospitals accounted for around 0.5 per cent of total separations in public hospitals, and around 45 per cent of separations in public acute care hospitals were for same day patients (table 5A.6). Ninety two per cent of separations were classified as episodes of acute care, along with 4 per cent as newborns and 2 per cent as rehabilitation care (table 5A.8).

**Figure 5.5 Average full time equivalent staff, public acute and psychiatric hospitals, 1998-99**



Source: table 5A.5.

Table 5.1 shows the ten AR-DRGs (for an explanation, see box 5.1) with the most separations (including same day separations) in public hospitals in 1998-99. These accounted for an average of 26 per cent of all acute separations. In the NT, they accounted for around 44 per cent, of which 32.7 per cent were renal dialysis. Renal dialysis, chemotherapy and vaginal delivery without complicating diagnosis were the most common types of acute care provided by public hospitals in all jurisdictions (17.5 per cent of acute separations Australia-wide).

Over 34 million occasions of care were provided to individual non-admitted patients in public acute and psychiatric hospitals in 1998-99 (table 5A.10). In addition to the services provided to individuals by public acute hospitals, 486 202 group sessions were delivered through these hospitals in that year (where a group session is defined as a service provided to two or more patients, but excludes services provided to two or more family members). Table 5.2 shows the seven most common types of occasion of care provided to individual non-admitted patients in public acute hospitals in 1998-99. The most common types were accident and emergency services (14.6 per cent) and pathology services (12.2 per cent). Other medical, surgical and obstetric services accounted for 33 per cent of occasions of service.

Differing admission practices among States and Territories and differences in the extent to which these types of service are provided in non-hospital settings will lead to variation among jurisdictions in the services reported in table 5.2.

**Table 5.1 Ten AR-DRGs with the most separations in public hospitals, 1998-99 (per cent of acute separations)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Renal dialysis	9.7	13.5	9.5	12.6	8.4	12.4	19.0	32.7	11.3
Chemotherapy	2.4	3.8	3.5	3.8	3.3	5.1	7.3	0.5	3.3
Vaginal delivery without complicating diagnosis	3.4	2.9	2.9	2.5	2.1	2.5	3.5	2.8	2.9
Other gastroscopy for non-major digestive disease, same day	1.6	1.7	1.7	2.1	1.7	2.0	1.9	1.2	1.7
Other colonoscopy, same day	1.7	1.3	1.6	2.2	1.5	1.5	1.8	0.8	1.6
Other antenatal admission with moderate or no complicating diagnosis	0.9	1.1	1.3	0.9	1.3	1.2	0.6	1.8	1.1
Oesophagitis, gastroenteritis and misc. digestive system disorders, age >9 <sup>b</sup>	1.2	0.9	1.2	1.0	1.2	0.8	0.4	0.5	1.1
Bronchitis and asthma, age < 50 <sup>c</sup>	1.2	0.8	1.1	1.1	1.2	0.6	0.7	0.7	1.0
Chest pain	1.2	1.0	1.0	0.6	1.0	0.5	0.7	0.7	1.0
Abortion with D&C, aspiration curettage or hysterotomy	0.8	1.1	0.6	0.8	2.0	1.1	0.6	2.3	1.0
Per cent of acute separations accounted for by ten AR-DRGs with most separations	24.1	28.1	24.4	27.6	23.7	27.7	36.5	44.0	26.0
<b>Total acute separations ('000)</b>	<b>1229</b>	<b>941</b>	<b>679</b>	<b>352</b>	<b>348</b>	<b>78</b>	<b>57</b>	<b>54</b>	<b>3742</b>

<sup>a</sup> Separations for which the type of episode of care was reported as acute, or newborn with qualified patient days, or was not reported. Includes same day separations. <sup>b</sup> Without catastrophic or severe complication or comorbidity. <sup>c</sup> Without complication or comorbidity.

Source: table 5A.9.

**Table 5.2 Seven most common types of non-admitted patient care, public acute hospitals, 1998-99 (per cent)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Accident and emergency	12	16	16	15	20	13	19	32	15
Pathology	14	10	13	16	..	17	7	18	12
Radiology and organ imaging	6	7	11	8	11	8	13	20	8
Other medical, surgical and obstetric	48	19	29	13	36	33	42	22	33
Mental health	8	12	2	2	1	0	1	..	6
Allied health	..	14	8	18	13	15	15	5	8
Community health	8	6	2	16	..	..	..	..	6
<b>Total occasions of service ('000)</b>	<b>12 420</b>	<b>6 878</b>	<b>7 321</b>	<b>3 974</b>	<b>2 333</b>	<b>554</b>	<b>438</b>	<b>333</b>	<b>34 251</b>

<sup>a</sup> Data are not fully comparable because there is some variation in reporting categories across States and Territories; for example, the SA categories do not fully align with the national categories. .. Not applicable.

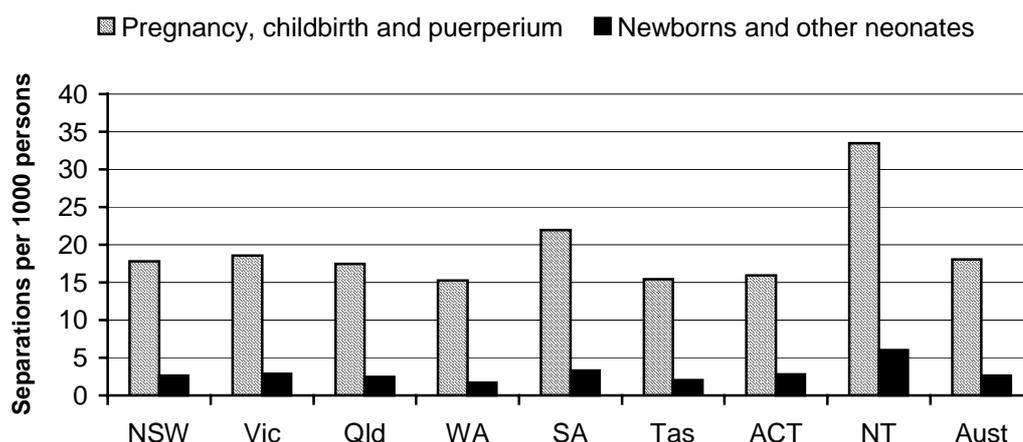
Source: table 5A.10.

## Maternity services

Maternity services (specifically, AR-DRGs relating to pregnancy, childbirth and the puerperium) accounted for the third highest number of separations in public hospitals in Australia in 1998-99 (after diseases and disorders of the kidney and urinary tract, and diseases and disorders of the digestive system) (AIHW 2000a). Maternity services separations accounted for just over 9 per cent of total acute separations in public hospitals, and contributed around 8 per cent to the total cost of all acute separations in public hospitals in 1998-99 (table 5A.26).

Figure 5.6 shows that the NT had the highest number of public acute separations per 1000 persons for pregnancy, childbirth and the puerperium (33.5) in 1998-99 and WA had the lowest (15.2).

Figure 5.6 **Separation rates for maternity services public hospitals, 1998-99<sup>a, b, c</sup>**



<sup>a</sup> The puerperium refers to the period of confinement immediately after labour (around six weeks).  
<sup>b</sup> Newborns and other neonates include babies aged less than 28 days or babies aged less than one year with admission weight less than 2500 grams. <sup>c</sup> Separations for which the type of episode of care was reported as acute, or newborn with qualified patient days, or was not reported.

Source: table 5A.27.

Vaginal deliveries without complicating diagnosis accounted for a significant proportion of the separations for pregnancy, childbirth and the puerperium (32 per cent) in 1998-99 and alone accounted for the third highest number of total acute separations in public hospitals in that year (table 5.1). Excluding same day separations, vaginal deliveries without complicating diagnosis accounted for the highest number of acute separations in public hospitals and the second highest cost in 1998-99 (\$253 million) (table 5A.28).

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Given the magnitude of separations and cost for maternity services, the Steering Committee has proposed, and is refining, a performance indicator framework (see section 5.4).

## 5.2 Policy developments

A number of jurisdictions have introduced policies aimed at improving the performance measurement of public hospitals.

The Victorian Government is developing hospital care performance indicators covering access, acceptability, appropriateness, effectiveness and safety, continuity of care, and the organisation of systems for quality improvement. Data collection systems need to be developed and refined before regular reporting occurs. In addition, the Victorian Government has agreed in principle, to recommendations of a national competition policy review of the *Health Services Act 1988 (Victoria)*, which specifies that the Commonwealth and States should cooperate to develop a set of nationally agreed performance indicators of the organisation and management of care by 1 July 2001.

Queensland Health will be undertaking a performance assessment of the Queensland public health system over the next three years, focusing on the acute sector in the short term and primary health care facilities in the medium term. Final indicator sets for effectiveness, appropriateness, safety, access and efficiency are expected to be available by early 2001, with performance information available from mid-2001. Final indicator sets for acceptability and continuity of care are expected to be available from mid-2001.

The ACT Department of Health, Housing and Community Care has substantially revised and standardised its 2000-01 purchase agreements with its major public acute hospitals. The purchase agreements provide for schedules on performance indicators and reporting requirements. The indicators focus on the dimensions of appropriateness and efficiency, requiring information on safety, quality, acceptability, demand management and responsiveness. In addition to the previous performance indicators on rates of unplanned re-admissions, returns to theatre and infections, new indicators have been included on: use of surgical, medical, paediatric, maternity and early onset psychosis pathways; complaints mechanisms and customer service improvement; numbers of operations cancelled more than twice; and throughput indicators. In cooperation with the hospitals, the department intends to benchmark on the performance indicators with other appropriate hospitals, as well as nationally, to examine performance trends over time.

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## 5.3 Public acute hospitals

### Framework of performance indicators

The primary focus of the performance indicator framework is on public acute hospitals (that is, excluding stand-alone psychiatric hospitals) and is based on the shared government objectives for public acute care hospitals (box 5.2). A long term objective of this framework is to effectively improve the reporting of admitted acute patients, whose statistics at times also include admitted other-than-acute and admitted psychiatric patients. The performance of psychiatric hospitals and psychiatric units of public acute hospitals is examined more closely in chapter 7.

#### Box 5.2 Objectives for public acute hospitals

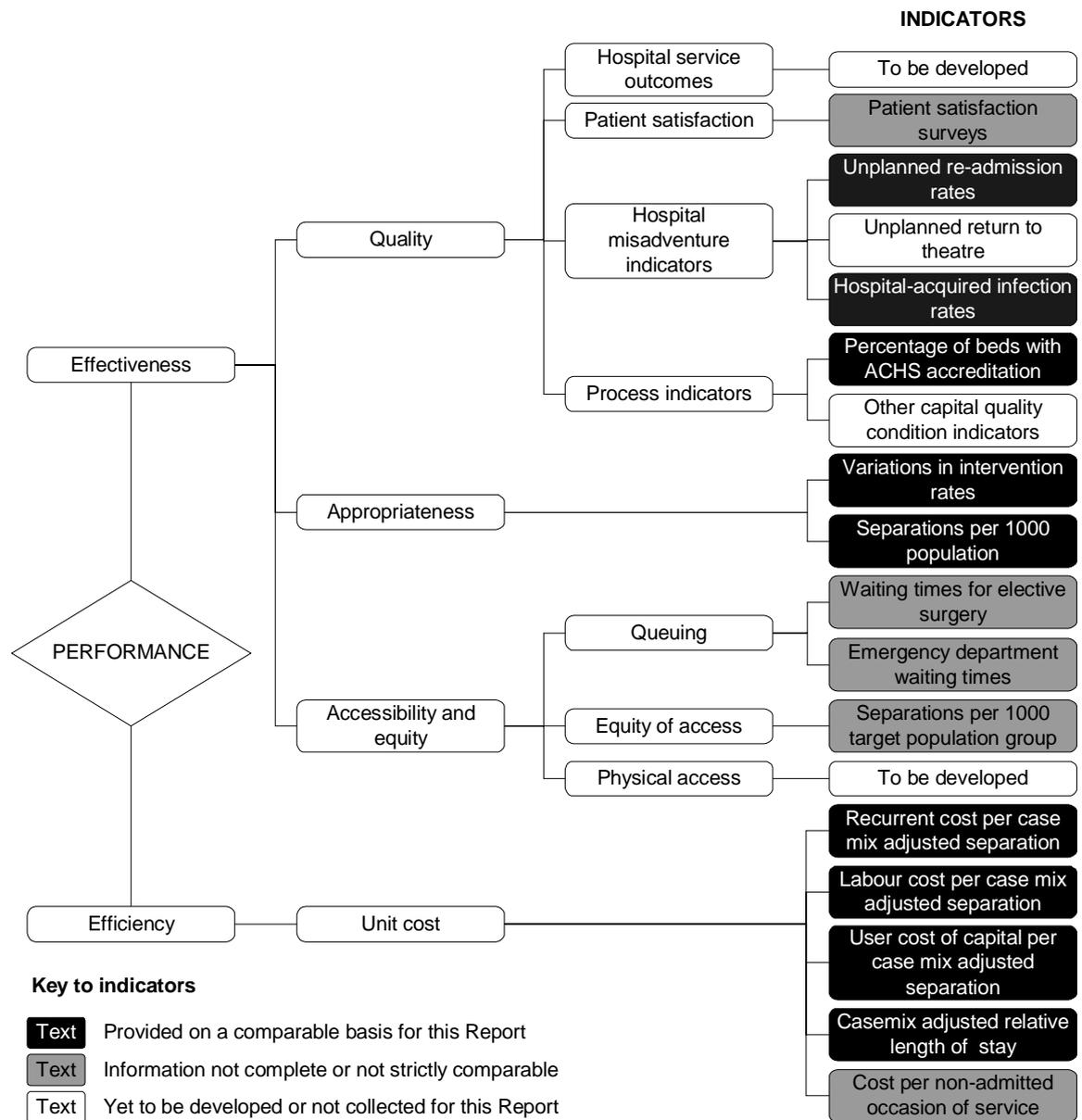
The common government objectives for public acute hospitals are to provide cost effective acute and specialist services that are:

- safe and of high quality;
- responsive to individual needs;
- accessible and equitable; and
- efficiently delivered.

The framework captures general aspects of the performance of public acute hospitals in providing health care services (figure 5.7). The effectiveness of services provided is reflected in terms of quality (as indicated by patient satisfaction, misadventures and accreditation), appropriateness (as indicated by the total separation rate and the rate for certain procedures) and access (as indicated by emergency department and elective surgery waiting times). Efficiency indicators include the cost per casemix-adjusted separation and the cost per non-admitted occasion of service. Casemix adjusted relative length of stay is reported for the first time this year.

The number of separations per 1000 persons in target group populations was added to the framework for this Report, following its adoption as an indicator of access for Indigenous people by the Australian Health Ministers Conference. Data on the type of separations and the cause of hospitalisations were only available for 1997-98 and 1998-99 respectively. In addition, all jurisdictions have provided elective surgery waiting times data for the second time since 1997. Care needs to be taken when comparing these data across jurisdictions and over time.

Figure 5.7 Performance indicators for public acute hospitals



### Key performance indicator results

Different delivery contexts, locations and types of client may affect the effectiveness and efficiency of health services. Appendix A of the Report contains detailed statistics and short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter.

As discussed in section 5.1, public hospitals provide a range of services to admitted patients, including some non-acute services such as rehabilitation and palliative

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care. The extent to which these non-acute treatments can be identified and excluded from the analysis differs across jurisdictions. Similarly, psychiatric treatments are being transferred to public acute hospitals at rates that differ across jurisdictions.

### *Quality*

All Australian governments and the users of health care services are interested in assessing and improving quality of care. There is no single definition of quality in health care, but the Institute of Medicine in the United States, defines quality, as ‘the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge’ (Lohr and Shroeder 1990, pp. 707-12). No single indicator can measure quality across all providers; an alternative strategy is to identify and report on *aspects* of quality of care.

There has been considerable debate and research to develop suitable indicators of the quality of health care, both in Australia and overseas. The Steering Committee reports data on the accreditation of public hospital beds, patient satisfaction and hospital misadventures (unplanned re-admission rates and hospital-acquired infection rates).

The value of clinical indicators, such as hospital misadventures, was evaluated in a research project undertaken in 1998 (box 5.3). The Steering Committee acknowledges the limitations of the current indicators, particularly given non-representative samples and other caveats for interpretation of the indicators outlined below, and agrees with the project’s recommendations for improving these indicators. Until improved data are available, the Steering Committee has decided to continue to report collected data on these indicators at the jurisdiction level, on the understanding that doing so is better than reporting nothing at all. As Boyce *et al.* (1997) state:

Most existing quality and outcome indicators are imperfect. ...We see the current generation of indicators as stepping stones to future better indicators. It will only be by their application in the health sector that indicators will improve (p. 3).

The quality indicators presented here are also reported elsewhere, including in the annual reports of the WA and Tasmanian health departments (Health Department of WA 1998; Tasmanian Department of Community and Health Services 1998). As noted earlier, the ACT Department of Health, Housing and Community Care has included a range of clinical indicators in its purchase agreements with its major public hospitals.

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### Box 5.3     **The Pilot Hospital-wide Clinical Indicators Project**

The Commonwealth Department of Health and Family Services funded the Pilot Hospital-wide Clinical Indicators Project as part of the National Hospital Outcomes Program in 1998. The project investigated the link between the selected clinical indicators (used in this Report) and an overall assessment of all aspects of the quality of clinical care, as determined by a panel of medical experts. The indicators evaluated were:

- the rate of unplanned hospital re-admission within 28 days of separation;
- the rate of hospital-acquired bacteraemia;
- the rates of post-operative wound infection following clean and contaminated surgery; and
- the rate of unplanned return to an operating room.

The last indicator could not be extracted from available databases easily, so was not included in the project's more detailed analysis.

The project set a high standard for each indicator, requiring it to reflect hospital-wide medical care accurately. The final report concluded that a clinically weak and statistically insignificant relationship existed between the indicators and the overall assessment of quality of care, and therefore that the indicators were unsuited as national performance measures of hospital quality. Thus, the indicators were not validated as measures of hospital wide care.

Questions remain about whether the indicators reflect the quality of more limited aspects of care — for example, do unplanned re-admissions reflect discharge planning procedures? Do wound infection rates reflect the standards of wound care during and immediately after surgery?

The project report recommended that 'there is a strong rationale for individual institutions to continue to monitor these indicators as part of a quality improvement program' (Ibrahim *et al.* 1998, p. xii). It urged caution in using these indicators for benchmarking purposes, but suggested that the indicators may be useful for identifying outliers or comparing the performance of hospitals with similar patient mix, rather than making close comparisons. The final report concluded that '(a) low incidence of surgical wound infection is highly desirable ... wound infection rates should continue to be monitored .... Institutions whose rates are very high compared with the average should seek an explanation for this' (Ibrahim *et al.* 1998, p. 43).

The project identified the lack of appropriate and widely recognised definitions and the absence of structured data collections as significant shortcomings of the indicators. The final report recommended that ideally future indicators should be constructed from planned collections of clinical data, and that clinical data collection within hospitals should be improved.

*Sources:* Ibrahim *et al.* (1998); pers. comm. Professor John McNeil, Head, Department of Epidemiology and Preventative Medicine, Monash Medical School.

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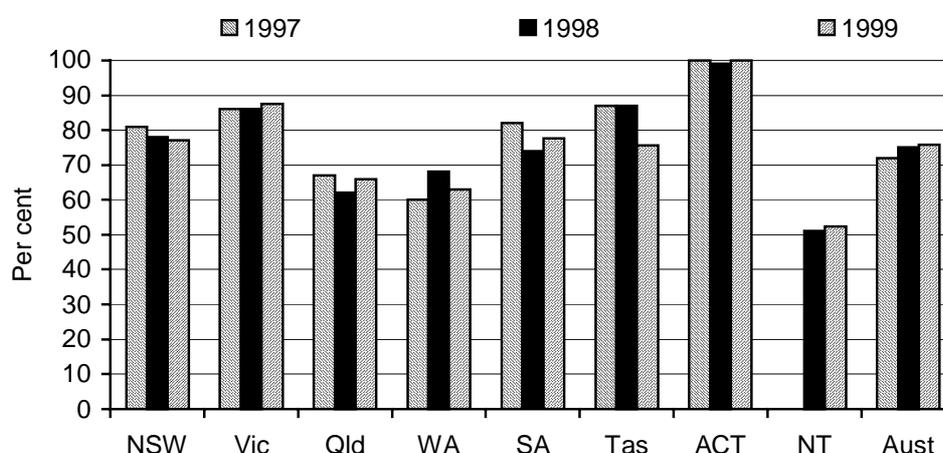
## *Accreditation*

Public acute and psychiatric hospitals may seek accreditation through the Australian Council on Healthcare Standards (ACHS) Evaluation and Quality Improvement Program, ISO 9000 Quality Management System or other equivalent programs. Jurisdictions apply specific criteria to determine which accreditation programs are suitable. The ACHS requires hospitals to demonstrate continual adherence to quality improvement standards to gain and retain accreditation. Accreditation is not limited to the ACHS process, but comparable data on proportions of hospital beds with ACHS accreditation are one of the few nationally available indicators of hospital quality.

Accreditation is an imperfect indicator of quality for several reasons. While it indicates that accredited parties have passed a series of quality tests, it is not possible to draw conclusions about the quality of care in those hospitals that do not have accreditation. Public hospital accreditation is voluntary in all jurisdictions except Victoria, where it is now mandatory for all public acute hospitals (excluding those which provide sub-acute rehabilitation, dental or mothercraft services). The costs of preparing a hospital for accreditation are significant, so a low level of accreditation may reflect cost constraints rather than indicate poor quality. Also, the cost of accreditation may not rise proportionally with hospital size. This would be consistent with larger hospitals being more active in seeking ACHS accreditation (because it is relatively less costly for them) than actually offering superior care. That said, accreditation provides some information about the proportion of hospital beds in institutions that have been subject to some independent evaluation.

Seventy-six per cent of public acute and psychiatric hospital beds were in ACHS accredited hospitals at 30 June 1999. Across jurisdictions, the proportion ranged from 52 per cent in the NT to 100 per cent in the ACT (representing both hospitals) (figure 5.8 and table 5A.11). In some jurisdictions, hospitals sought alternative forms of accreditation not reflected in figure 5.8. For example, in Victoria, one small hospital was certified ISO 9000 compliant. In NSW, 15 public hospitals, previously accredited by the ACHS, were working in 1998-99 under either the Australian Quality Council or the Community Health Accreditation and Standards Program administered by the Australian Community Health Association framework. If these alternative forms of accreditation are counted as accredited in addition to ACHS accreditation, 80 per cent of NSW public hospital beds would have been accredited at 30 June 1999 (rather than 77 per cent as reflected in Figure 5.8) (AIHW 2000a).

Figure 5.8 Proportion of ACHS accredited public hospital beds, public acute and psychiatric hospitals<sup>a, b</sup>



<sup>a</sup> At 30 June. <sup>b</sup> The NT commenced accreditation in September 1997.

Source: table 5A.11.

Given that this indicator is intended to reflect the performance of public acute hospitals, it is a long term objective of the Steering Committee to report on the accreditation of public acute and psychiatric hospitals separately. Accreditation of stand-alone psychiatric hospitals and co-located psychiatric units in public acute hospitals are reported in chapter 7.

### Patient survey results

Patient surveys have been used to assess the performance of hospitals in their delivery of clinical and non-clinical services. In the absence of other comparable indicators of quality, they provide a useful means of assessing the outcomes of hospital care. There is no agreement among jurisdictions on the best method of undertaking patient surveys and reporting the results. The timing and scope of patient satisfaction surveys also differ, so it is not possible to compare results across jurisdictions. Table 5.3 reflects the years in which patient satisfaction data have been provided by jurisdictions to the Review.

Table 5.3 Patient satisfaction data provided by jurisdictions, by SCRCSSP Report editions

Report edition	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
1995	✓	✓	✓	✓	✗	✗	✓	✗
1999	✗	✓	✗	✓	✗	✓	✓	✓
2000	✓	✓	✓	✓	✗	✓	✓	✗
2001	✓	✗	✗	✓	✗	✓	✓	✗

Sources: SCRSCCP (1995, 1999a and 2000).

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Jurisdictions reported the following developments this year.

- New South Wales conducted a survey of 26 936 households with a response rate of 65 per cent. 11 per cent of males and 15 per cent of females reported at least one overnight hospital admission in the past 12 months. Of these, 90 per cent of males and 91 per cent of females rated inpatient care as excellent, good or very good. Three per cent of respondents reported inpatient care as poor. Seventy per cent of males and 75 per cent of females said they would prefer to return to the same hospital, and 15 per cent in each case said they would prefer a different hospital (table 5A.48).
- The Victorian Government is developing a statewide patient satisfaction survey of admitted patients in Victorian public hospitals. The survey will be conducted at quarterly and monthly intervals according to hospital size. Results for 2000 will be available from 2001.
- In Queensland, there is no state based survey, but hospitals use a variety of standard and self developed survey instruments, undertaken at various intervals depending on the health care setting.
- Western Australia conducts annual statewide patient surveys. The 2000 survey, conducted between January and June, was mailed to over 16 000 people covering 85 hospitals. Adults and parents of children admitted for care, along with maternity patients and sub- and non-acute patients were surveyed. The response rate was 49 per cent. Overall levels of satisfaction were 81.5 per cent for adult overnight stays, 79.7 per cent for child overnight stays, 84.9 per cent for adult same day, 83.5 per cent for child same day, and 82.3 per cent for maternity services (table 5A.56).
- In March 2001, the SA Government plans to undertake a telephone survey of 2500 to 3000 discharged patients from all acute hospitals in SA. In addition, most individual hospitals undertake their own patient satisfaction surveys using a variety of survey instruments and approaches which are undertaken at various intervals depending on the health care setting.
- In 1999, Tasmania conducted a mailout survey of 900 hospital patients. The response rate was 56 per cent. The survey examined satisfaction with non-clinical aspects of patient care, with categories including: Care, treatment and communication; Staff; and Comfort/meals. Overall, 66 per cent of respondents indicated they were very satisfied and 3 per cent suggested they were quite dissatisfied. Seventy per cent of respondents indicated they would definitely recommend the hospital to family and friends, and 3 per cent said they definitely would not recommend the hospital (table 5A.60).
- In 1999-2000, the two public hospitals in the ACT conducted mailout surveys of 4400 patients. The response rate was 52 per cent. Inpatient services and Day

Surgery both reported an 86 per cent overall satisfaction rate, with the Emergency Department having an overall satisfaction rate of 81 per cent.

### *Unplanned re-admission rates*

The unplanned readmission rate is the total number of unplanned and unexpected re-admissions within 28 days of separation as a percentage of the total number of separations (excluding patient deaths) (table 5.4). (There is a more detailed definition of this indicator in table 5.14.)

Data is sourced for the first time this year from the ACHS (table 5.4). Over 300 private and public hospitals Australia-wide participated in the council's survey of unplanned re-admissions. The application of common definitions and counting rules means that the comparability of data has improved significantly from that collected for previous editions of the Report.

There are a number of caveats for the interpretation of this indicator. First, although the sample size was approximately 2 million separations, (ensuring that the reported rates are statistically significant for both public and private hospital totals), it is not clear to what extent differences between jurisdictions are due to casemix of hospitals or patient risk factors (ACHS 2000a). Second, there are some difficulties in identifying re-admissions that were unplanned (Ibrahim *et al.* 1998). A readmission is considered 'unplanned' or 'unexpected' if there was no documentation to verify that the re-admission was 'planned' and if the re-admission occurred through the accident and emergency department of a hospital (Ibrahim *et al.* 1998). Third, this indicator identifies only those patients readmitted to the same hospital, which may not always be the case.

**Table 5.4 Unplanned re-admissions, per 100 admissions**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>a</sup>	Public	Private
1998										
Rate	2.27	3.06	2.55	1.41	3.28	0.98	2.85	na	3.23	1.49
Standard error	0.15	0.18	0.22	0.35	0.37	0.43	0.47	na	0.11	0.13
1999										
Rate	2.22	2.10	2.24	1.99	2.35	1.68	2.86	na	2.97	1.33
Standard error	0.12	0.14	0.22	0.32	0.30	0.41	0.39	na	0.09	0.10

<sup>a</sup> NT data were not available because of the small number of hospitals. The NT government provided data on the emergency re-admission rate (5.6 per cent for 1998-99). The higher NT rate is more likely to reflect differences in definitions and application of counting rules than actual performance.

Source: table 5A.12.

The rate of unplanned re-admissions in 1998 and 1999 was approximately 2 per cent for most jurisdictions. The rate was highest in the ACT (2.86) in 1999 and

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lowest in Tasmania (1.68). The rate of unplanned re-admission was larger for public hospitals (2.97) than for private hospitals (1.33) in 1999. The standard error was relatively larger for smaller jurisdictions, and caution should be exercised when making comparisons across jurisdictions. The rate of unplanned re-admissions fell among jurisdictions between 1998 and 1999, except in WA and Tasmania where they were already relatively low. There was no significant difference in the rate of unplanned re-admissions between rural and metropolitan hospitals (table 5A.12). The rate for both metropolitan and rural hospitals was 2.24 per cent.

### *Hospital-acquired infection rates*

Three measures of hospital-acquired infection rates are reported here. 'Rates of post-operative wound infection' are defined for both clean and contaminated surgery. They are derived by dividing the number of inpatients with evidence of wound infection on or after the fifth post-operative day following clean (or contaminated) surgery, by the number of inpatients undergoing clean (or contaminated) surgery with a post-operative stay of at least five days. The 'rate of hospital-acquired bacteraemia' is the number of inpatients who acquired bacteraemia during the period under study, as a percentage of the total number of separations with a hospital length of stay of 48 hours or more during the time period under study. (There is a more detailed definition of this indicator in table 5.14). This indicator does not reflect infections that do not become apparent until post discharge.

Data is sourced for the first time this year from the ACHS (table 5.5). Between 210 and 250 public and private hospitals participated in the Council's survey of hospital-acquired infection rates. As with the unplanned re-admission rate, the application of common definitions and counting rules has improved the comparability of data reported here.

The rate of post-operative infection (following clean surgery) in public hospitals in 1999 was lowest in Victoria (1.88 per cent) and highest in SA (3.06 per cent) (table 5.5). In all jurisdictions, the rate of infection for public hospitals was twice as high as the total for public and private hospitals. Similarly, the rate of post-operative infection (following contaminated surgery) in public hospitals in 1999 was lowest in Victoria (1.94 per cent) and highest in SA (4.61 per cent) and the rate for public hospitals was higher than that for all hospitals. Finally, the rate of hospital-acquired bacteraemia in public hospitals in 1999 was lowest in WA (0.25 per cent) and highest in SA (0.66 per cent). For this indicator, the standard error for the smaller jurisdictions is relatively large. Data are also presented for metropolitan and rural hospitals (table 5A.13). Across Australia, rural hospitals generally experienced

higher levels of post-operative infection rates, but lower levels of bacteraemia infection.

**Table 5.5 Hospital-acquired infection, per 100 separations, 1999**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i> <sup>a</sup>	<i>ACT</i> <sup>a</sup>	<i>NT</i> <sup>a, b</sup>
Post-operative infection, following clean surgery								
Public hospitals								
Rate	1.99	1.88	3.02	2.38	3.06	na	na	na
Standard error	0.18	0.18	0.32	0.46	0.68	na	na	na
All hospitals								
Rate	1.19	0.71	1.67	1.14	0.90	1.00	na	na
Standard error	0.11	0.09	0.17	0.33	0.24	0.37	na	na
Post-operative infection, following contaminated surgery								
Public hospitals								
Rate	2.98	1.94	3.36	2.17	4.61	na	na	na
Standard error	0.23	0.19	0.37	0.50	0.77	na	na	na
All hospitals								
Rate	1.66	1.56	2.43	1.60	3.67	3.05	na	na
Standard error	0.13	0.13	0.21	0.44	0.47	0.67	na	na
Hospital-acquired bacteraemia								
Public hospitals								
Rate	0.49	0.48	0.30	0.25	0.66	na	na	na
Standard error	0.04	0.05	0.06	0.13	0.08	na	na	na
All hospitals								
Rate	0.41	0.29	0.28	0.22	0.58	0.31	0.39	na
Standard error	0.03	0.04	0.05	0.10	0.07	0.12	0.13	na

<sup>a</sup> Not all data for Tasmania and the ACT were available and no data were available for the NT, because of the small number of hospitals. <sup>b</sup> The NT government provided public hospital data for post-operative wound infection following contaminated surgery (7.8 per cent) and hospital-acquired bacteraemia (0.53 per cent) (table 5A.78). The higher NT rates are likely to reflect differences in definitions and counting rules.

Source: table 5A.13.

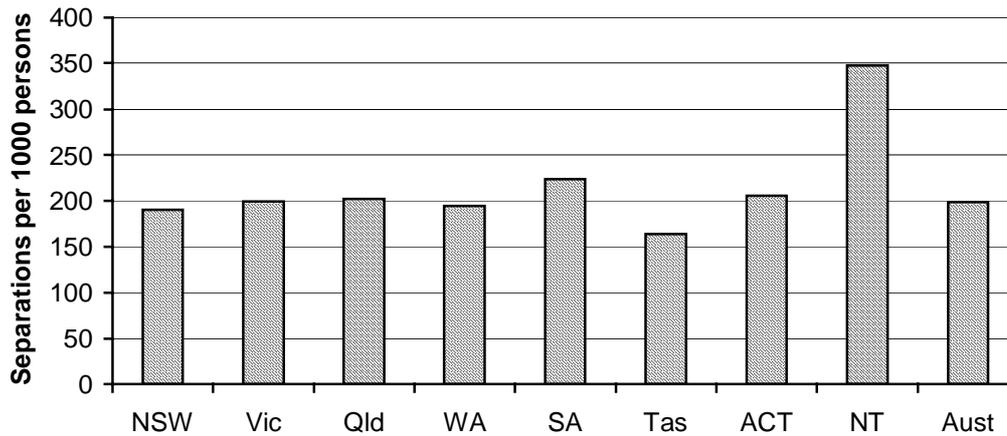
### *Appropriateness*

Two indicators are presented for the appropriateness of care provided by public acute hospitals: the number of separations per 1000 people (also known as the separation rate) and separation rates for certain procedures. Both indicators, however, are problematic. First, the measures do not reflect differences in casemix across jurisdictions. Second, there is no benchmark as to the appropriate share of same day separations. Third, the appropriate mix/level is unclear (for example, a relatively high level of separations may reflect better access *or* over servicing). Comparisons are also complicated by different access to substitutable services (for example, private hospitals). Therefore, jurisdictional comparisons are most useful for highlighting differences, noting that more detailed analysis may be required.

### Total separation rates

There were approximately 3.8 million separations from public acute hospitals in 1998-99 (table 5A.7). Nationally, this translated into nearly 199 separations per 1000 people, ranging from 164.1 per 1000 in Tasmania to 347.6 per 1000 in the NT (figure 5.9).

Figure 5.9 Separation rates in public acute hospitals, 1998-99<sup>a</sup>

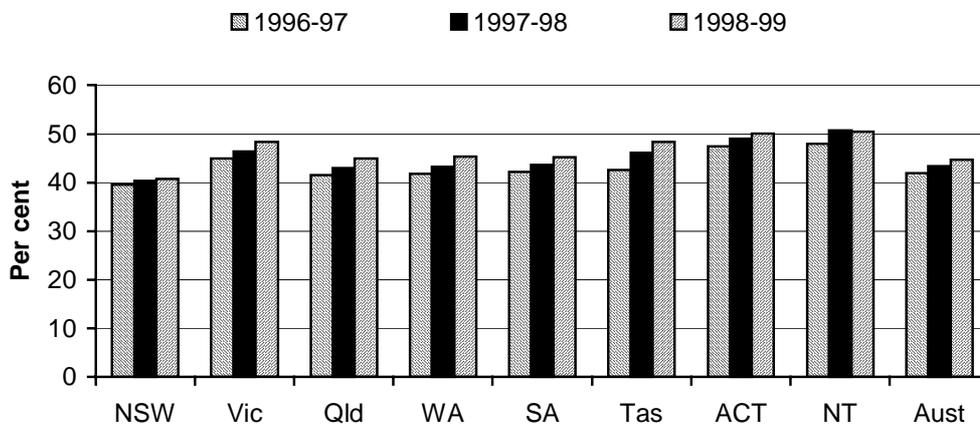


<sup>a</sup> Directly age standardised to the Australian population at 30 June 1991.

Source: table 5A.7.

Nationally, nearly 45 per cent of separations were same day separations in 1998-99. Between 1996-97 and 1998-99, the proportion of same day separations rose in all states except the NT (figure 5.10).

Figure 5.10 Proportion of separations that were same day, public acute hospitals



Source: table 5A.7.

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### *Separation rates for certain procedures*

Separation rates for certain procedures are used to indicate the appropriateness of hospital care, with procedures selected for their frequency and for being elective and discretionary (given the availability of alternative treatments) (table 5.6). Care needs to be taken when interpreting the differences in the separation rates of the selected procedures. Variations in rates may be attributable to variations in the prevalence of the conditions being treated, or to differences in clinical practice among States and Territories. Higher/lower rates are not necessarily associated with inappropriate care. High rates may be acceptable for certain conditions and not for others (table 5.6). Separation rates for tonsillectomy and myringotomy may reflect the performance of general practice at the primary care level (see chapter 6).

The data available are for all hospitals, so reflect the activities of both public and private health systems.<sup>4</sup>

Interpretation of table 5.6 is complicated by the staggered implementation of the new version of disease classification (the *International Statistical Classification of Diseases and Related Health Problems, Revision 10, Australian Modification — ICD-10-AM*). New South Wales, Victoria, the ACT and the NT used the ICD-10-AM classification from July 1998, with the other jurisdictions adopting it from July 1999. Table 5.6 is separated into the two groups of jurisdictions representing the different versions of the procedure classifications. There are some inconsistencies between the two codes, with the major differences in the data for arthroscopy and diagnostic gastrointestinal endoscopies (AIHW 2000a).

The most common procedures in 1998-99 were endoscopy, lens insertion and arthroscopic procedures (table 5.6). Separation rates for all procedures varied across jurisdictions, in some cases markedly (for example, for myringotomy). Table 5A.14 indicates whether the differences between the separation rate for a particular State and the rate for all other jurisdictions (excluding that State) are statistically significant.

Some of the selected procedures, such as angioplasty and coronary artery bypass graft, are alternative treatment options for people diagnosed with similar conditions. Statistically significant and material differences in the separation rates for these procedures may highlight variations in treatment methods across jurisdictions.

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<sup>4</sup> Data include public acute, public psychiatric, private acute, private psychiatric and private free standing day hospital facilities. Some private hospitals are excluded resulting in underreporting of some procedures, particularly those more likely to be performed in private hospitals. Thus, these types of procedure will be undercounted for some jurisdictions (AIHW 2000a).

Statistically significant differences from the average rates for these procedures in all other jurisdictions were recorded across all States and Territories (table 5A.14).

Table 5.6 **Separations per 1000 people, public and private hospitals by selected procedure, 1998-99<sup>a, b</sup>**

	ICD-10-AM				ICD-9-CM			
	NSW	Vic	ACT	NT	Qld	WA	SA	Tas
A relatively high rate may indicate more appropriate care								
Angioplasty	0.9	1.1	0.4	0.8	0.7	1.0	0.9	1.0
Coronary artery bypass	1.0	0.9	0.7	0.6	0.9	0.7	0.7	0.6
Hip replacement	1.0	1.1	1.5	0.5	0.9	1.2	1.1	1.2
Lens insertion	6.0	4.9	3.5	4.3	6.4	6.4	4.1	3.9
A relatively high rate may indicate over reliance on procedures								
Hysterectomy	1.6	1.6	1.6	0.8	1.7	1.9	1.9	1.8
Tonsillectomy	1.9	2.0	1.4	0.6	1.8	1.9	2.4	1.1
Myringotomy	1.7	2.3	1.5	0.6	1.8	2.2	3.3	1.3
Caesarean section separation rate <sup>c</sup>	2.9	2.9	2.4	2.9	3.3	3.3	3.4	3.0
Caesarean section separations per 100 in-hospital births	20	22	19	23	23	24	25	21
Implications of a high or low rate are unclear								
Appendicectomy	1.4	1.5	1.4	1.2	1.5	1.6	1.3	1.3
Cholecystectomy	2.3	2.2	1.6	1.3	2.3	2.1	2.3	1.8
Arthroscopy <sup>d</sup>	0.8	1.9	0.7	1.5	4.1	5.5	7.9	4.8
Arthroscopic procedures (includes arthroscopies)	4.9	5.3	4.2	3.2				
Endoscopy	23.6	24.8	11.7	12.9	27.3	23.4	21.7	20.5

<sup>a</sup> Separation rates per 1000 people are age and sex standardised to the Australian population at 30 June 1991. <sup>b</sup> Exclude multiple procedures during the same separation within the same sentinel group. <sup>c</sup> The number of caesarean sections depends on the birth rate as well as the population, thus it is useful to express the rate per birth as well as per population. <sup>d</sup> The inclusion of arthroscopy codes as well as arthroscopic procedure codes reflects mapping problems from the old to the new classification system. There are two possible interpretations of the ICD-9-CM codes (AIHW 2000a). The AIHW concludes that there were coding problems for Victorian arthroscopy data.

Source: table 5A.14.

## Accessibility and equity

### Emergency department waiting times

This indicator measures the proportion of patients seen within the time limits set according to the urgency of treatment required. Waiting times measure the time elapsed from presentation to the emergency department to commencement of

service by a treating medical officer or nurse. A 1997 study recommended two emergency department waiting time indicators for national reporting (Whitby *et al.* 1997). One of these indicators relates waiting times to the urgency of treatment required (the triage category):

- triage category 1: patients needing resuscitation — seen immediately;
- triage category 2: emergency — patients seen within 10 minutes;
- triage category 3: urgent — patients seen within 30 minutes;
- triage category 4: semi-urgent — patients seen within 60 minutes; and
- triage category 5: non-urgent — patients seen within 120 minutes.

Data for all jurisdictions are presented in table 5.7 for 1998-99. The data include both public and private patients. There are nationally agreed definitions but, as with the elective surgery data, differences in how the data are collected may exist, and great care should be taken in interpreting these data. Data may vary across jurisdictions as a result of differences in clinical practices (for example, on the allocation of cases to urgency categories). Other data issues to be investigated include any differences in when the elapsed time commences (for example, when the patient arrives at the triage desk, or when a triage category is allocated) and the precision with which the starting time of treatment is recorded. Other issues arise with the use of benchmarks. A patient in triage category 2 who waits 11 minutes, for example, is recorded the same as one waiting 18 minutes, even though the latter event may be of much greater concern.

**Table 5.7 Emergency department waiting time to service delivery, 1998-99 (proportion of patients seen within triage category)<sup>a</sup>**

<i>Triage category</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld<sup>b</sup></i>	<i>WA<sup>c</sup></i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT<sup>d</sup></i>
1 – Resuscitation	96	100	97	93	97	95	100	99
2 – Emergency	76	82	72	82	72	80	87	47
3 – Urgent	63	76	63	72	63	69	80	66
4 – Semi-urgent	68	58	68	69	65	79	69	54
5 – Non-urgent	89	82	88	87	91	95	81	74
Data coverage								
Estimated proportion of emergency visits	79	na	na	100	na	100	100	93
Number of hospitals	51	na	na	na	8	4	na	na

<sup>a</sup> Nationally agreed definitions exist but differences in how data are collected may exist and care should be taken in interpreting these data. <sup>b</sup> Period January to June 2000. Based on hospitals with a role delineation of 4 or greater. <sup>c</sup> WA data cover only the Metropolitan Health Service. <sup>d</sup> The high percentage of category 2 patients recorded as not seen within the timeframe is not a true reflection of clinical practice.

Source: tables 5A.15.

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### *Waiting times for elective surgery*

The proportion of elective surgery patients waiting longer than the accepted standard is a nationally recognised indicator of access to public acute hospitals (Health Department of WA 1998). Hospitals also collect waiting time data for internal management purposes.

The three generally accepted urgency categories (see table 5.13 for complete definitions) for elective surgery are:

- category 1, for which admission is desirable within 30 days;
- category 2, for which admission is desirable within 90 days; and
- category 3, for which admission at some time in the future is acceptable.

Category 1 and category 2 patients waiting longer than desirable are usually described as ‘overdue’, while category 3 patients waiting longer than one year are subject to an ‘extended wait’ (AIHW 1999a). For simplicity, the term ‘extended wait’ is also used here to describe ‘overdue’ patients. There is no specified or agreed desirable wait for category 3 patients, so the term ‘extended wait’ is used for patients waiting for longer than 12 months. Under the 1998–2003 Australian Health Care Agreements, the States and Territories report to the Commonwealth the number of category 3 patients who, on admission, have waited longer than 12 months for elective surgery.

Where patients experience a change in their clinical condition leading to a review of their urgency category, waiting times are recorded as the period in the most recent urgency category and in any previous more urgent categories. This is with the exception of Victoria, which records the time waiting in the most recent urgency category.

Elective surgery waiting times are difficult to measure objectively, and the data can be complex to interpret. The two widely accepted measures of waiting times are the proportion of patients on waiting lists with extended waits (at a census date) and the proportion of patients admitted after extended waits (based on throughput data). Both present conceptual and data issues.

From a patient’s perspective, the relevant question is, ‘If I need surgery, what is the likelihood that I will have to wait longer than is considered desirable?’ To develop strictly comparable data to answer this question, clinical judgements about need for surgery, and allocations by surgeons into the three categories of urgency, would need to be consistent across jurisdictions. Current data collections assume there is some standardisation across Australia in how these ratings are allocated, but the definitions remain relatively broad (Clover *et al.* 1998). As a result, systemic differences in clinical practices across jurisdictions (such as differences in the

complexity of cases treated as admitted patients), as well as in the performance of hospital systems, may affect reported results. Differences in the scope of the collections (including the proportion of hospitals and elective admissions covered) may also affect comparisons across jurisdictions.

The proportion of patients subject to extended waits for elective surgery at public hospitals is reported for each urgency category in table 5.8. It indicates the proportion of those patients waiting on that date, who have been waiting an extended time. Generally it will overstate the likelihood of an extended wait, because patients who wait for long periods are more likely to be counted at census points (AIHW 1995).

An alternative indicator based on admissions data — that is, the proportion of patients admitted with extended waits — also has some shortcomings. Those who were on a waiting list but were never admitted (because they became emergency cases, decided to be treated in a private hospital or died) are not counted (AIHW 1995). In addition, some patients waiting may not be admitted because their condition improved sufficiently to make treatment unnecessary, or because they declined treatment for other reasons (Lee *et al.* 1987).

Queensland, WA, SA, the ACT and the NT provided data on patients on waiting lists by clinical speciality for 1998-99 (tables 5A.52, 55, 59, 63 and 64), as well as waiting times for all clinical categories. Victoria, Queensland and Tasmania provided aggregated data for all clinical categories (table 5.8).

**Table 5.8 Proportion of elective surgery patients with extended waits, 1998-99<sup>a</sup>**

<i>Clinical urgency category</i>	<i>NSW</i>	<i>Vic<sup>b</sup></i>	<i>Qld</i>	<i>WA<sup>c</sup></i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Per cent of patients on waiting lists with extended waits, 30 June 1999								
Category 1	na	0.2	2.1	na	26.8	44.1	34.0	8.9
Category 2	na	29.6	12.3	na	19.0	64.4	45.0	12.0
Category 3	na	20.2	27.3	na	9.4	35.9	26.0	2.9
Per cent of patients admitted from waiting lists with extended waits, 30 June 1999								
Category 1	na	1.3	4.4	12.4	9.7	22.0	14.0	55.0
Category 2	na	14.2	9.2	25.7	11.3	36.3	37.0	41.0
Category 3	na	5.6	9.0	17.4	2.4	15.8	15.0	16.0
Data coverage								
Coverage of elective admissions	na	na	95.0	na	na	na	na	100

<sup>a</sup> The data include both public and private patients. <sup>b</sup> Victorian waiting times recorded as the period in the most recent urgency category. <sup>c</sup> Data for WA are for tertiary hospitals only. There were 215 354 admissions in tertiary hospitals for 1998-99 of which 125 433 were elective admissions. Estimates for waiting list admissions based on a sample of 26 299 waiting list admissions.

Source: table 5A.16.

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Elective surgery waiting time data provide some information on access, but public acute hospital services are provided on the basis of clinical need, and elective surgery is only one aspect of the care they provide. Therefore, the assessment of access would not be based on only the waiting lists for elective surgery because these do not capture the needs of patients requiring services for acute and chronic medical conditions (Hall 1999).

Victoria uses a significantly different definition to calculate the number of elective surgery patients on waiting lists. It classes patients waiting for elective surgery as 'booked patients' and 'waiting list patients'. Booked patients have been given a definite admission date (within six weeks) and unbooked patients are still waiting for a date. Patients who have been booked longer than six weeks are reclassified as waiting list patients. Victoria also publishes the number of elective surgery patients waiting longer than desirable. Waiting time includes time on the waiting list and/or the booking list. Data for Victoria were available in aggregate only.

### *Separations by target group*

Equity of access to hospital services is another measure of accessibility and hence of the effectiveness of the health sector. Without a patient's appropriate access to hospital services, the consequences of any injury or illness are more likely to result in either permanent disability or premature death. Equity of access has been measured using data on Indigenous and non-Indigenous separations.

Data on Indigenous people are limited by the completeness with which Indigenous people are identified in hospital records and completeness is likely to vary across States and Territories. The Australian Bureau of Statistics (2000a) noted that studies of a limited number of individual hospitals suggest that the proportion of Indigenous people correctly identified in hospital records ranges from less than 50 per cent to close to 100 per cent. It found that for 1998-99, the quality of data on Indigenous hospitalisations was considered acceptable only in the NT, SA and WA (AIHW 2000a). National reporting on data quality in hospitals is expected in 2002. In the meantime, few jurisdictions have data of consistent quality — with the exception of the NT (ABS 2000a, *Condon et al.* 1998). In addition, difficulties in estimating the size of the Indigenous population limits the comparability of data over time.

Descriptive data on Indigenous and non-Indigenous separations in public hospitals in 1998-99 are provided in table 5.9. Indigenous separations accounted for around 4 per cent of total separations in 1998-99, although Indigenous people represented around 2 per cent of the total population in 1998 (AIHW 2000a). Most Indigenous separations occurred in public hospitals (98 per cent). The low proportion of private

hospital separations for Indigenous people may partly be due to a lower proportion of Indigenous patients being correctly identified in private hospitals and partly to a lower usage of private hospitals (ABS 2000a). Data in table 5.9 should be interpreted cautiously and are considered acceptable only for the NT, SA and WA (AIHW 2000a).

**Table 5.9 Separations by Indigenous status, public hospitals, 1998-99<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT<sup>b</sup></i>	<i>Aust</i>
Number of public hospital separations ('000)									
Indigenous	29	6	45	34	11	0	0	32	157
Non-Indigenous	1245	964	638	324	337	27	57	22	3613
Not-reported	0	0	26	0	8	53	1	1	90
Total	1273	970	709	358	356	81	59	55	3860
Separations in public hospitals as a proportion of total separations (per cent)									
Indigenous	96	95	99	98	98	91	95	na	98
Non-Indigenous	69	66	69	63	70	69	78	na	68

<sup>a</sup> Identification of Aboriginal and Torres Strait Islander patients is not complete, and completeness varies across jurisdictions. <sup>b</sup> Includes only public hospitals.

Source: table 5A.17.

A performance indicator of Indigenous access to hospitals is given by the rate of separations per 1000 people. Data on separation rates for Indigenous people and all people by State and Territory for all hospitals (both public and private) are presented in table 5.10. Once again, data in this table should be interpreted with care

**Table 5.10 Estimates of separations per 1000 people from all hospitals by reported Indigenous status<sup>a, b, c</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1997-98									
Indigenous people	398	367	543	785	703	139	392	904	540
Total population	277	293	311	283	313	268	266	341	291
1998-99									
Indigenous people	357	361	597	816	691	na	na	887	562
Total population	278	301	321	301	314	259	267	352	296

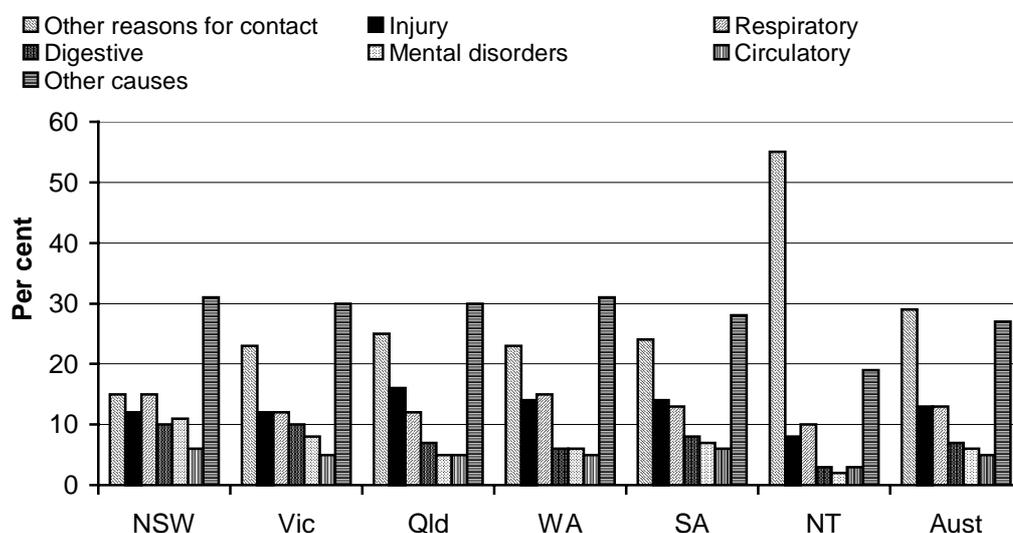
<sup>a</sup> The rates were directly age-standardised to the Australian population at 30 June 1991. <sup>b</sup> Only public hospitals in the NT. <sup>c</sup> Identification of Indigenous people is not always complete and varies across jurisdictions. Incomplete identification of Indigenous people means comparisons between the Indigenous population and the total population are preferable to using estimates of the non-Indigenous population. The total population estimates provide a valid comparison because the Indigenous population is a small proportion of the total (ABS 2000a). **na** Not Available because Aboriginal or Torres Strait Islander status was not reported for 69 per cent of separations in Tasmania, and there was known underreporting in the ACT.

Source: table 5A.18.

and are considered acceptable only for the NT, SA and WA (AIHW 2000a). Overall, on an age-standardised basis, 562 separations for Indigenous patients (including same day separations) were reported per 1000 Indigenous population (except Tasmania and the ACT) in Australia. This was markedly higher than the corresponding overall population figure of 296 per 1000 (table 5.10). The NT reported the highest rate of Indigenous separations (887 per 1000) even though its private hospital was not included. The rates for both Aboriginal and Torres Strait Islander people were higher than those for other patients in all age groups, and markedly so for patients aged over 34 years. The highest rates overall were recorded for Indigenous females in the 55–64 age group (AIHW 2000a).

Figures 5.11 and 5.12 show descriptive data on the most common reasons for hospital separations for Indigenous people in 1997-98. The most common reasons for males included other causes (such as dialysis), respiratory problems and injuries. The most common reasons for females included other causes (such as dialysis) followed by injuries.

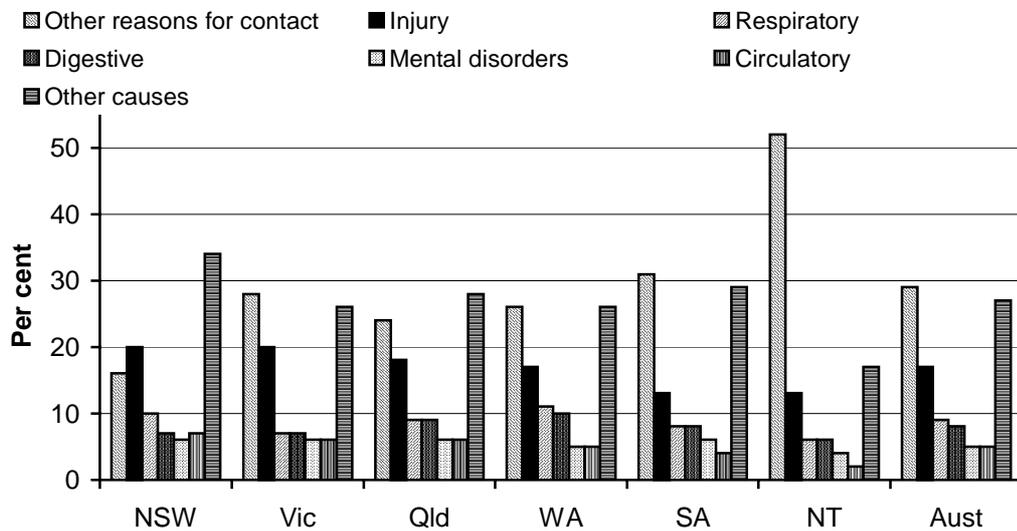
**Figure 5.11 Indigenous males: most common reasons for hospital separations, 1997-98<sup>a, b, c, d, e, f, g</sup>**



<sup>a</sup> Data are based on place of hospitalisation. Excluded are separations for which age and/or sex was missing. Data for Tasmania and the ACT are not presented due to relatively small numbers. Most common reasons for hospitalisation are based on ICD-9 chapters. <sup>b</sup> Data for Australia include Tasmania and the ACT. <sup>c</sup> Only public hospitals in the NT. <sup>d</sup> The quality of identification of hospital patients is likely to vary by State and Territory, although the level of underidentification is unknown in most hospitals. <sup>e</sup> No information on Indigenous status of patients was available for private hospitals. <sup>f</sup> Includes dialysis. 'Other reasons for contact' includes all ICD-9 V-codes, which is a supplementary classification used to indicate circumstances that influence health status or bring people into contact with the health care system but that do not fit into the main disease and injury coding system. <sup>g</sup> 'Other causes' includes all other ICD-9 chapters combined.

Source: table 5A.20.

Figure 5.12 Indigenous females: most common reasons for hospital separations, 1997-98<sup>a, b, c, d, e, f, g</sup>



<sup>a</sup> Data are based on place of hospitalisation. Excluded are separations for which age and/or sex was missing. Data for Tasmania and the ACT are not presented due to relatively small numbers. Most common reasons for hospitalisation are based on ICD-9 chapters. <sup>b</sup> Data for Australia include Tasmania and the ACT. <sup>c</sup> Only public hospitals in the NT. <sup>d</sup> The quality of identification of hospital patients is likely to vary by State and Territory, although the level of underidentification is unknown in most hospitals. <sup>e</sup> No information on Indigenous status of patients was available for private hospitals. <sup>f</sup> Includes dialysis. 'Other reasons for contact' includes all ICD-9 V-codes, which is a supplementary classification used to indicate circumstances that influence health status or bring people into contact with the health care system but that do not fit into the main disease and injury coding system. <sup>g</sup> 'Other causes' includes all other ICD-9 chapters combined.

Source: table 5A.20.

Table 5.11 shows age standardised separation rates for Indigenous people and for the total population in 1998-99 for selected diseases. Indigenous separation rates tend to be markedly higher — particularly female Indigenous separation rates. The widest differential was for diabetes. Separation rates across Australia for Indigenous people for diabetes were around five times as high as the total population for men and seven times as high for women. In WA, separation rates for diabetes for Indigenous people were eight times as high as the total population for men and 13 times as high for women.

The data in table 5.11 should be viewed with caution because of the identification problem. Data are considered acceptable only for WA, SA and the NT (AIHW 2000a). In addition, in 1998-99, there were two classifications in use in Australia for recording hospital diagnoses — ICD-10-AM was used by the NT, the ACT, NSW and Victoria and ICD-9-CM was used by the other States. While data for the four latter states are mapped to ICD-10-AM, comparability may be affected.

**Table 5.11 Separation rates for selected conditions by Indigenous status, all hospitals, 1998-99<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas<sup>b</sup></i>	<i>ACT<sup>c</sup></i>	<i>NT<sup>d</sup></i>	<i>Aust<sup>e</sup></i>
<i>Separation rate for Indigenous people per 1000<sup>f</sup></i>									
Acute myocardial infarction <sup>h</sup>									
Male	3.6	3.2	na	5.2	2.9	0.0	na	3.5	4.1
Female	1.7	2.0	na	3.7	1.8	0.0	na	1.5	2.4
Injury and poisoning									
Male	31.5	29.3	na	79.9	60.2	1.4	na	46.2	49.6
Female	22.1	21.8	na	71.6	40.2	1.6	na	44.7	38.5
Respiratory diseases									
Male	35.7	24.0	na	81.0	56.3	4.4	na	52.7	48.3
Female	40.3	27.9	na	80.3	50.2	1.5	na	51.6	46.5
Diabetes <sup>g</sup>									
Male	3.7	2.8	na	9.3	12.0	0.0	na	5.1	7.0
Female	4.0	2.9	na	14.4	13.3	0.0	na	3.5	8.1
Tympanoplasty <sup>i</sup>									
Male	0.2	0.6	na	0.9	1.4	0.0	na	0.4	0.5
Female	0.1	0.7	na	1.9	0.7	0.0	na	0.7	0.6
<i>Separation rate for all people per 1000<sup>f</sup></i>									
Acute myocardial infarction <sup>h</sup>									
Male	2.3	2.2	na	2.4	2.4	1.7	na	1.7	2.3
Female	1.0	0.9	na	1.0	0.9	0.9	na	1.0	1.0
Injury and poisoning									
Male	24.2	22.0	na	26.4	27.0	21.1	na	28.2	25.5
Female	16.2	15.8	na	18.8	18.4	14.4	na	23.2	17.3
Respiratory diseases									
Male	20.4	17.8	na	18.8	23.3	13.2	na	25.7	19.6
Female	16.3	14.4	na	15.9	19.4	10.9	na	23.2	15.9
Diabetes <sup>g</sup>									
Male	1.1	1.2	na	1.2	2.2	2.3	na	4.1	1.3
Female	0.9	1.1	na	1.1	1.8	1.4	na	1.6	1.1
Tympanoplasty <sup>i</sup>									
Male	0.2	0.2	na	0.4	0.3	0.1	na	0.3	0.2
Female	0.2	0.2	na	0.3	0.3	0.1	na	0.4	0.5

<sup>a</sup> Identification of Indigenous patients is not complete and completeness varies across jurisdictions. The quality of data is considered acceptable only for WA, SA and the NT. <sup>b</sup> Tasmanian data are likely to be statistically invalid. <sup>c</sup> ACT did not release data as they are incomplete. <sup>d</sup> Public hospitals only in the NT. <sup>e</sup> Totals for Australia based on data from all jurisdictions (including the ACT and Queensland). <sup>f</sup> The rates were directly age-standardised to the Australian population at 30 June 1991. <sup>g</sup> Separations for diabetes are likely to be underestimates because in many cases, hospitalisation is attributed to diseases associated with diabetes such as heart disease, renal disease, or eye problems. <sup>h</sup> Heart attack. <sup>i</sup> Surgical repair of the ear drum.

Source: table 5A.19.

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## *Efficiency*

Two approaches to measuring the efficiency of public hospital services are used in this Report. One is the cost per unit of output (the unit cost) and the other is the adjusted relative length of stay index, because costs are correlated with the length of stay at aggregate levels of reporting. Both measures have improved markedly since they were first reported in the 1995 Report.

The Review's approach is to report the full costs of a service where they are available. Where the full costs of a service cannot be measured accurately, the Review seeks to report estimated costs that are comparable. Where differences in comparability remain, the Review seeks to document the nature of those differences.

The Review has identified a range of financial reporting issues that have also affected the accuracy and comparability of unit costs for acute care services. These include the treatment of payroll tax, superannuation, depreciation and the user cost of capital.

Cost estimates for Tasmanian public hospitals exclude payroll tax, following recommendations contained in SCRCSSP (1999b). The superannuation expense for the NT in 1997-98 was estimated using the average for other jurisdictions; research by the Steering Committee suggested that this approach may understate the expense for the NT (SCRCSSP 1998).

Depreciation and the user cost of capital associated with buildings and equipment are included with estimates of unit costs. A number of issues remain to improve further the quality of these estimates. The inclusion of these capital costs improves the accuracy of the unit costs of acute care services.

Care should be taken when comparing the available indicators of efficiency across jurisdictions. Differences in counting rules, the treatment of various expenditure items (for example, superannuation) and the allocation of overhead costs have the potential to hinder comparisons across jurisdictions. Differences in the use of salary packaging may allow hospitals to lower their wage bills (and thus State or Territory government expenditure) while maintaining their staffs' after-tax income. No data were available for reporting on the effect of salary packaging and any variation in its use across jurisdictions.

Differences in the scope of services being delivered by public hospitals may also reduce the comparability of efficiency measures. Some jurisdictions admit patients who may be treated as non-admitted patients in other jurisdictions (AIHW 2000a).

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### *Recurrent costs per casemix adjusted separation*

The recurrent cost per casemix adjusted separation is an indicator of hospitals' cost performance for admitted patients. This indicator measures the average cost of providing care for an admitted patient (whether overnight stay or same day), adjusted for the relative complexity of the patient's clinical condition and of the hospital services provided (AIHW 1999b). It is a biased indicator because while all admitted patient separations and their costs are included in the calculations, cost weights are not available for non-acute admitted patients. Average cost weights for acute patients typically underestimate the costs of other-than-acute separations (including rehabilitation and non-acute) (AIHW 2000a).

Another problem is that the recurrent cost per casemix adjusted separation does not distinguish between separations of acute and other-than-acute patients. Jurisdictions differ in the rate at which the care of psychiatric patients is being transferred from stand-alone psychiatric hospitals to public acute hospitals and community based services. While other-than-acute admitted patients now comprise approximately 3 per cent of total admitted patient episodes, this is likely to grow over time.

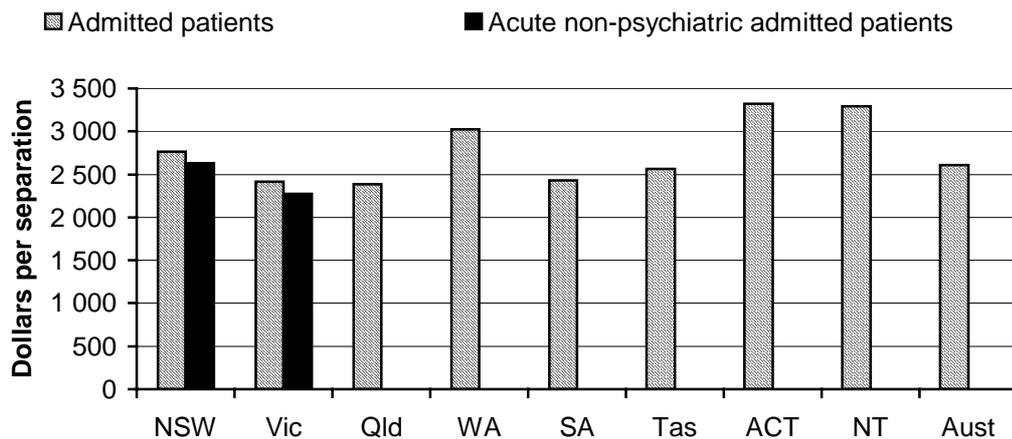
To address these problems, Victoria and NSW also report recurrent cost per casemix adjusted separation for acute non-psychiatric admitted patients. Other jurisdictions are expected to also be able to isolate acute care costs in the near future. These revised estimates more closely align with the cost estimates provided by Victoria in last year's Report. Both indicators are presented in figure 5.13 (tables 5A.24 and 5A.25).

The data for both versions of the indicator exclude spending on non-admitted patient care, the user cost of capital and depreciation, research costs and payroll tax. Victoria and NSW also excluded expenditure on other-than-acute and psychiatric patients for their estimates of recurrent cost per casemix adjusted separation for acute non-psychiatric admitted patients. Overnight stays, same day separations and private patient separations in public hospitals and private patient recurrent costs are included. The institutional scope excludes psychiatric hospitals, drug and alcohol services, rehabilitation hospitals, mothercraft hospitals, hospices, hospitals with fewer than 200 separations, acute metropolitan hospitals with fewer than 2000 separations (including dental hospitals), hospitals subject to major trauma, and small non-acute and multipurpose services. The 1998-99 data exclude hospitals that account for 4.2 per cent of total separations across Australia, although the proportion of separations excluded varies across jurisdictions (table 5A.24).

Refinements to the basis of excluding institutions mean that the institutional scope for this indicator differs over time. Thus, comparisons over time of recurrent cost per casemix adjusted separation should be treated with caution.

For all admitted patients, Queensland had the lowest recurrent cost per casemix adjusted separation (\$2390) in 1998-99, and the ACT and the NT had the highest (\$3326 and \$3297) (figure 5.13). The average for Australia was \$2611 in 1998-99. For acute non-psychiatric separations, the recurrent cost per casemix adjusted separation in 1998-99 was \$2275 in Victoria, and \$2631 in NSW.

Figure 5.13 Recurrent cost per casemix adjusted separation, 1998-99<sup>a, b, c, d</sup>



<sup>a</sup> Excludes the user cost of capital and depreciation. <sup>b</sup> Psychiatric hospitals, drug and alcohol services, mothercraft hospitals, unpeered and other, hospices, rehabilitation facilities, small non-acute and multi-purpose services excluded. <sup>c</sup> Tasmania is the only jurisdiction with a significant payroll tax burden. As a result, payroll tax has been estimated at 6.7 per cent of salary plus superannuation and removed. <sup>d</sup> NSW, Victoria, the ACT and the NT report in ICD-10-AM grouped to AR-DRG v4.1. Queensland, WA, SA and Tasmania report in ICD-9-CM grouped to AR-DRG v4.0. There are possibly slight differences as a result of this use of the different ICD classifications.

Source: table 5A.24 and table 5A.25.

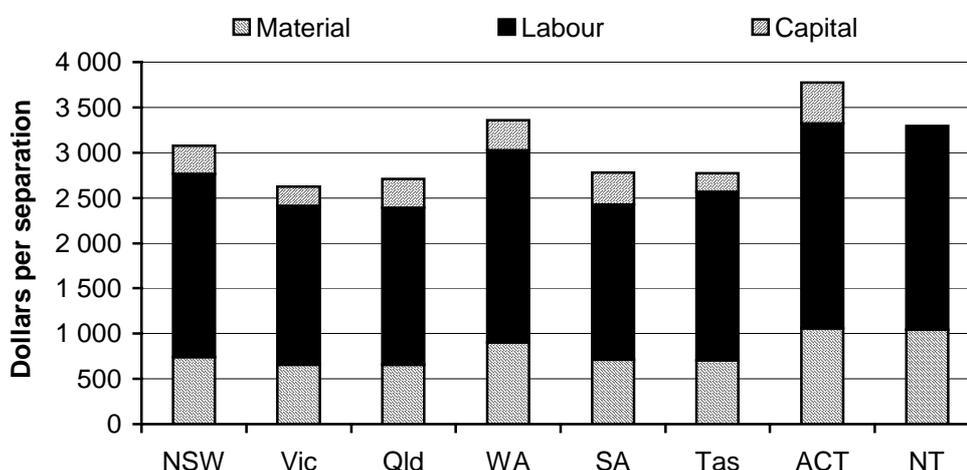
### *Inclusion of capital costs*

The estimated unit cost of admitted care services inclusive of capital costs is reported below. Total cost per casemix adjusted separation is defined as the recurrent cost per casemix adjusted separation plus the capital costs (the depreciation and the user cost of capital of buildings and equipment) per casemix adjusted separation. The indicator is reported only for admitted patients.

Depreciation is defined as the cost of consuming an asset's services, and is measured by the reduction in value of an asset over the financial year. The user cost of capital is the opportunity cost of the capital, and is equivalent to the return foregone from not using the funds to deliver other government services or to retire debt.

Recurrent costs should exclude interest payments if they are to be added to the user cost of capital to derive full costs. Interest payments have not been excluded in the analysis here. However, data separately reported on interest expenses showed that they varied from effectively zero for NSW, Victoria, the ACT and the NT, and 2 per cent of recurrent expenditure for WA. This amount was deducted directly from WA's capital costs to avoid double-counting. The NT is still operating on a cash expenditure basis and was unable to identify its depreciation or asset values. From the remaining jurisdictions, Victoria had the lowest total cost per casemix adjusted separation at \$2623, and the ACT had the highest at \$3772 (figure 5.14).

Figure 5.14 **Total cost per casemix adjusted separation, public acute hospitals, 1998-99** <sup>a, b, c, d</sup>



<sup>a</sup> 'Labour' includes medical and non-medical labour costs. 'Material' includes other non-labour recurrent costs. 'Capital' is defined to include the user cost of capital plus depreciation associated with the delivery of inpatient services in the public acute hospitals described in figure 5.14. <sup>b</sup> Excludes the user cost of capital associated with land. This is reported in table 5A.21. <sup>c</sup> Variation across jurisdictions in the collection of data suggests that the data should be treated as indicative. <sup>d</sup> NT is on a cash-accounting regime and was unable to provide user cost of capital or depreciation data.

Source: tables 5A.21 and 5A.24.

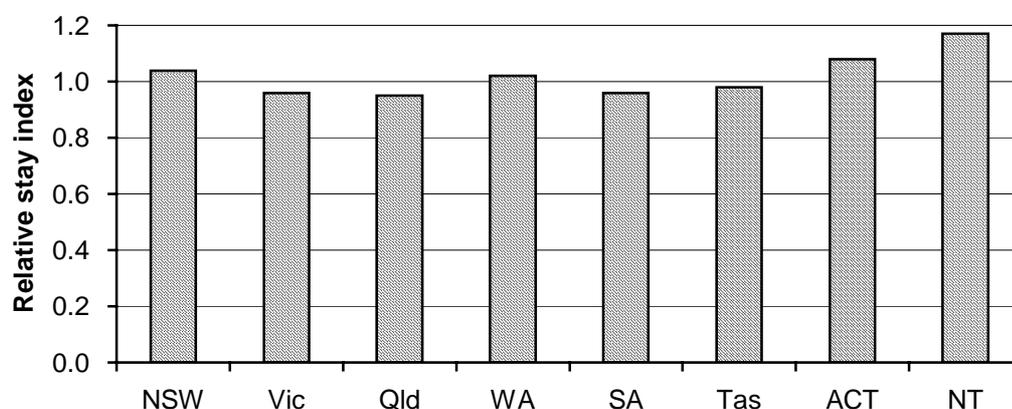
### *Casemix adjusted relative stay index*

Length of stay is adjusted for casemix for the first time this year. This is a considerable improvement on previous years, providing a more accurate reflection of differences across jurisdictions in length of stay. Without adjusting for casemix, hospitals with more complex patients will appear to have relatively higher lengths of stay. Since length of stay has a significant impact on costs, such hospitals may erroneously appear less efficient. The casemix adjusted measure is known as the 'relative stay index' and is defined as the actual number of acute bed days divided by the expected number of acute bed days adjusted for casemix. Same day dialysis

and chemotherapy patients have been excluded from the calculations. The relative length of stay for Australia is one. A relative stay index greater than one indicates that an average patient's length of stay is higher than would be expected given the jurisdiction's casemix distribution. A relative stay index of less than one indicates that the number of bed days used was less than would have been expected.

The index for public acute patients is presented for all jurisdictions for 1998-99 in figure 5.15. The NT is highest with an index of 1.17. Queensland is lowest with an index of 0.95.

Figure 5.15 **Casemix adjusted relative stay index, public acute patients, 1998-99<sup>a</sup>**



<sup>a</sup> Stays of 200 days and over are excluded. Index includes acute patients only. Same day dialysis and chemotherapy are excluded.

Source: table 5A.23.

### *Recurrent cost per non-admitted occasion of service*

The cost per non-admitted occasion of service is the proportion of expenditure allocated to patients who were not admitted, divided by the total number of non-admitted patient occasions of service. Occasions of service include examinations, consultations, treatments or other services provided to patients in each functional unit of a hospital. This measure does not adjust for complexity of service; for example, a simple urine glucose test is treated equally with a complete biochemical analysis of all body fluids (AIHW 2000c).

Cost per non-admitted occasion of service was provided by all jurisdictions except Victoria and the NT. The NT was unable to provide data for 1998-99. Victoria collects data on the basis of cost per encounter. An encounter includes the clinic visit and all ancillary services provided within a 30-day period either side of the clinic visit. Victoria recorded 1.01 million encounters at 21 public hospitals in

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1998-99. Based on cost data from 13 major hospitals in 1998-99, the average cost per encounter was \$114. This compared with an average cost per encounter of \$109 in 1997-98 (based on cost data from nine major hospitals) and \$104 in 1996-97 (based on cost data from seven major hospitals) (table 5A.50).

Other jurisdictions reported the following results for cost per occasion of service.

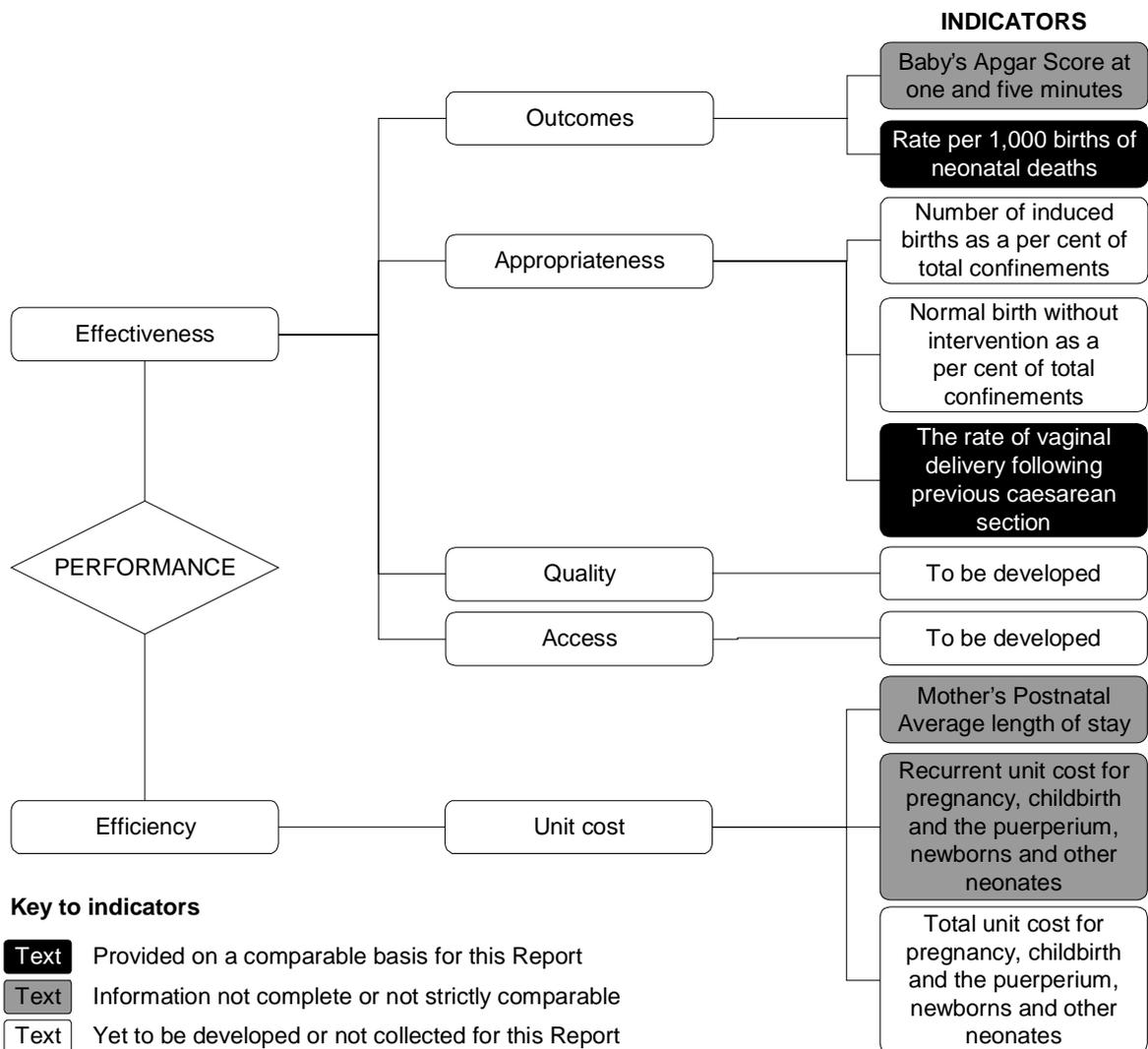
- New South Wales reported cost per occasion of service of \$109 in 1998-99, an increase from \$99 in 1997-98 (table 5A.47).
- Queensland reported cost per occasion of service of \$63 for public acute hospitals in 1998-99. Costs per occasion of service were higher in metropolitan areas than in non metropolitan areas (table 5A.51).
- In WA, costs per occasion of service for public acute hospitals were \$78 and for public psychiatric hospitals, \$41. Costs were higher in non metropolitan areas than in metropolitan areas (tables 5A.53 and 54).
- In SA, cost per occasion of service for public acute hospitals was \$122 in 1998-99, with reported costs higher in metropolitan than in non metropolitan areas (table 5A.58).
- Tasmania reported cost per occasion of service data for outpatients of \$123 in 1998-99 (table 5A.61).
- The ACT reported cost per occasion of service of \$183 for public acute hospitals in 1998-99 (table 5A.62).

## **5.4 Maternity services performance framework**

### **Framework of performance indicators**

The performance framework for maternity services is outlined in figure 5.16, and has the same objectives as for public acute hospitals in general. The framework is under development by the Steering Committee and, as with all the performance indicator frameworks, will be subject to regular review.

Figure 5.16 Proposed performance framework for maternity services<sup>a</sup>



<sup>a</sup> Normal birth without intervention refers to spontaneous vertex deliveries in which the baby's head is the presenting part.

## Key performance indicator results

### Outcomes

Two maternity service outcome indicators are included in the Report this year: the Apgar score, which indicates a baby's wellbeing soon after birth, and the neonatal death rate.

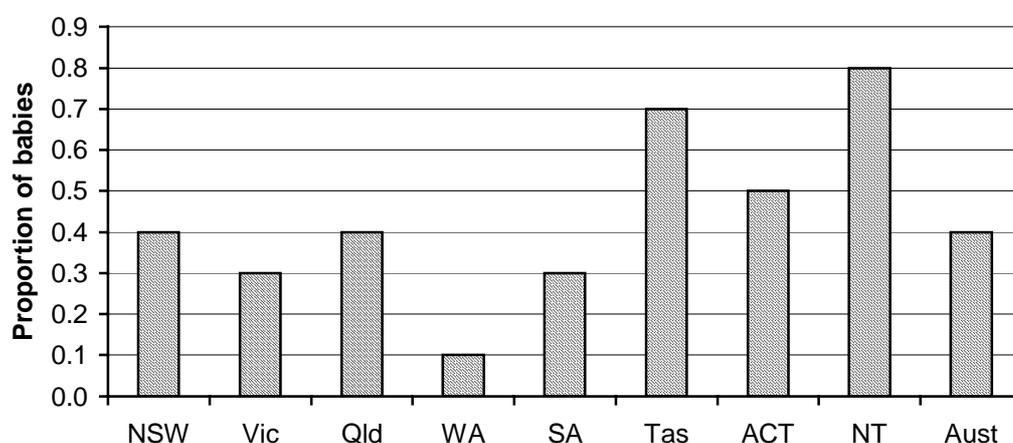
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## Apgar score

The Apgar score is a numerical score used to evaluate a baby's condition shortly after birth. It is based on an assessment of the baby's heart rate, breathing, colour, muscle tone and reflex irritability. Between 0 and 2 points are given for each of these five characteristics, and the total score may vary between 0 and 10. The Apgar score is routinely assessed at one and five minutes after birth, and subsequently at five-minute intervals if it is still low at five minutes (Day *et al.* 1999). Low Apgar scores of less than 4 are strongly associated with babies' birthweights.

Apgar scores for one and five minutes after birth for all live births for 1997 are presented in the attachment (table 5A.29) based on the latest available AIHW data. Over 97 per cent of confinements in 1997 occurred in hospitals, with nearly 70 per cent in public hospitals (Day *et al.* 1999). More recent data for Apgar scores for public hospitals for 1998 and 1999 sourced from the ACHS are also presented in the attachment (table 5A.29). Data from the ACHS are not available for Tasmania, the ACT and the NT because of the small number of hospitals, and reported data is subject to high standard errors.

Figure 5.17 **Proportion of babies with an Apgar score of 3 or less 5 minutes post delivery, 1997<sup>a</sup>**



<sup>a</sup> 'Low Apgar score' is defined as the number of babies born with an Apgar score of three or below at five minutes post-delivery. Foetal death in utero-diagnosed prior to commencement of labour is excluded.

Source: table 5A.29.

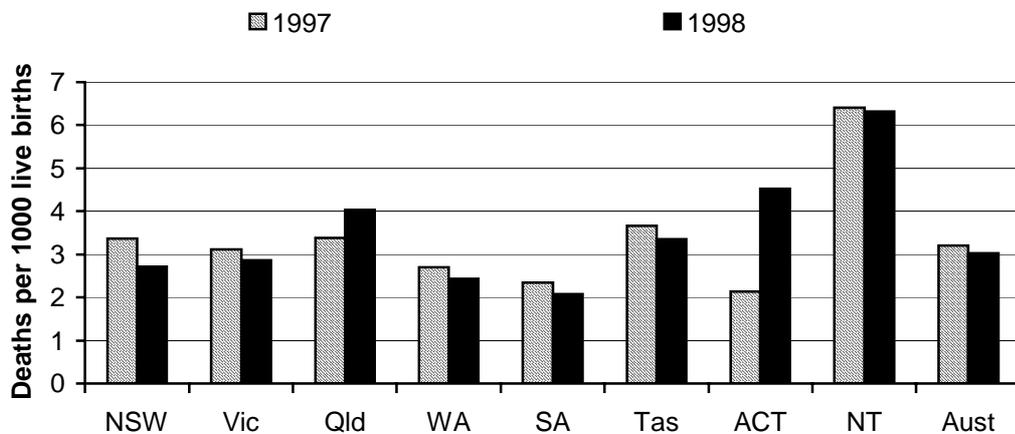
Comparable data are available for 1997 for both private and public hospitals. Table 5A.29 is not adjusted for birthweight. In 1997, low Apgar scores of 0–3 were recorded at five minutes in 0.4 per cent of live births (figure 5.17). The NT had the highest proportion of live births with low Apgar scores at five minutes (8 per cent) and WA the lowest (0.1 per cent).

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### Neonatal deaths

Neonatal death is the death of a live born infant within 28 days of birth. The rate of neonatal deaths is expressed per 1000 total live births (not just hospital live births). Australia-wide, the rate fell from 4.6 deaths per 1000 live births in 1990 to 3.0 deaths per 1000 live births in 1998 (table 5A.31). In 1998, the neonatal death rate was highest in the NT (6.3 deaths per 1000 live births) and lowest in SA (2.1 deaths per 1000 live births) (figure 5.18 and table 5A.31).

Figure 5.18 Neonatal death rate<sup>a</sup>



<sup>a</sup> Rate expressed as a proportion of total live births in Australia.

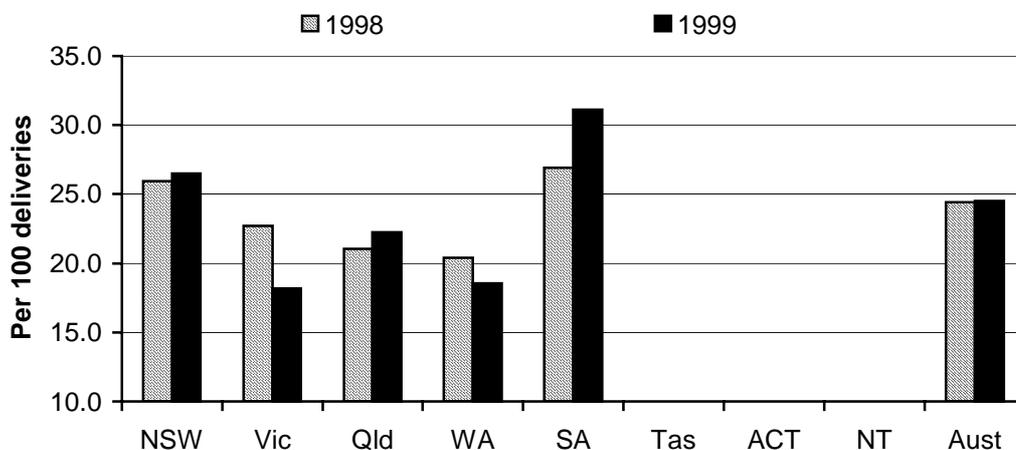
Source: table 5A.31.

### Appropriateness

One appropriateness indicator is reported this year: the rate of vaginal delivery following previous primary caesarean section. Variations in rates across jurisdictions may highlight differences in intervention rates that require more detailed analysis.

The rate of vaginal delivery following primary caesarean section is defined as the number of patients delivering vaginally following a previous primary (first) caesarean section, as a proportion of the total number of patients delivering who have had a previous primary caesarean section and no intervening pregnancies of greater than 20 weeks gestation (ACHS 2000b).

Figure 5.19 **Rate of vaginal delivery following primary caesarean (all hospitals) <sup>a, b</sup>**



<sup>a</sup> Defined as the number of patients delivering vaginally following a previous primary caesarean section divided by the total number of patients delivering who have had a previous primary caesarean section and no intervening pregnancies of greater than twenty weeks gestation. <sup>b</sup> Data for Tasmania, the ACT and the NT were not available because of the small number of hospitals.

Source: table 5A.32.

Data is sourced from the ACHS for 1998 and 1999. The rate of vaginal delivery in 1999 for Australia (all hospitals) was 24.5 per cent, and was highest in SA (31.1) and lowest in Victoria (18.2) (figure 5.19). The rate of vaginal delivery was higher in rural hospitals (28.2) than in metropolitan hospitals (23.7) in 1999 (table 5A.32). The rate was also higher in public hospitals than for all hospitals for the jurisdictions whose data were available (table 5A.32).

### *Efficiency*

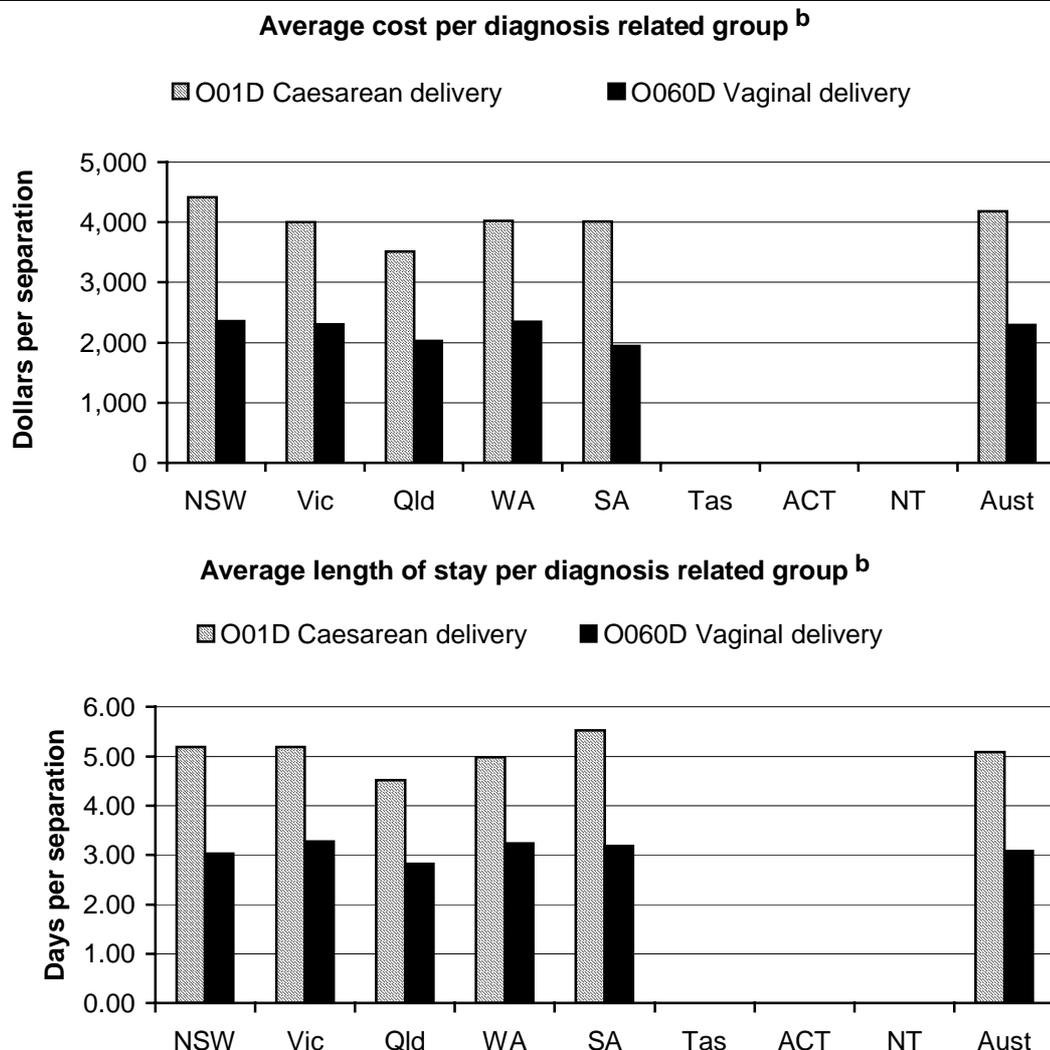
Two efficiency indicators are reported for maternity services — the cost per separation and the average length of stay. Figure 5.20 presents data for the two largest diagnosis related groups that account for the largest number of maternity separations. Data for a number of other delivery-related diagnosis related groups is given in table 5A.33.

Data are sourced from the National Hospital Cost Data Collection and are based on the AR-DRG classification version 4.1 (1998-99). The National Hospital Cost Data Collection is a voluntary annual collection coordinated by the Commonwealth Department of Health and Aged Care of hospital cost and activity data — including national and jurisdiction cost weights — covering the financial year prior to the collection period. Survey respondents comprise mostly larger hospitals, and as such,

cost estimates may tend to underestimate the real costs to a jurisdiction because of their scale economies.

Data were not available for Tasmania, the ACT and the NT because of the small number of hospitals. According to figure 5.20, the average cost for caesarean delivery without complications is \$4186 for Australia. The lowest cost was in Queensland (\$3512) and the highest was in NSW (\$4418). In contrast the average length of stay was 5.08 days for Australia, and the shortest stay was in Queensland (4.51 days) and the longest in SA (5.52 days).

Figure 5.20 **Cost and average length of stay for selected diagnosis related groups, public hospitals, 1998-99**<sup>a</sup>



<sup>a</sup> Data for Tasmania, the ACT and the NT were not available because of the small number of hospitals.

<sup>b</sup> Includes O01D Caesarean delivery without complicating diagnosis, and O060D Vaginal delivery without complicating diagnosis.

Source: Table 5A.33.

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The average cost for a vaginal delivery without complications was \$2292 for Australia. The lowest cost was in Queensland (\$2027) and the highest cost was in NSW and WA (\$2355 and \$2345). The average length of stay was 3.08 days for Australia, and the shortest length of stay was in Queensland (2.82) and the longest in WA (3.24).

## **5.5 Future directions in performance reporting**

Key challenges for the Steering Committee in future years are to:

- improve the reporting of hospital services delivered to special needs groups;
- improve the reporting of indicators contained in the performance indicator frameworks and not currently reported; and
- better reflect ‘appropriateness’ of hospital and maternity services.

### **Provision of hospital services to people with special needs — Indigenous**

As indicated in chapter 2, a priority for the Review is to improve the reporting of the access of Indigenous Australians to mainstream hospital services. This is likely to involve identifying the range of hospital services accessed by Indigenous Australians.

Data presented in this Report describe the separation rates for Indigenous people for a range of conditions. However, this information provides only a partial indication of Indigenous people’s access to hospital services, because:

- there is an underreporting of patients’ Indigenous status. This results in an underestimation of Indigenous people’s access to acute care admitted services;
- the Report does not collect data on the delivery of non-admitted patient services to Indigenous persons; and
- data have not been reported on the costs associated with providing admitted and non-admitted services to Indigenous clients.

There are also no data on what is the appropriate level of hospital care to Indigenous clients. The ‘Health preface’ reports on the relatively high level of public hospital expenditure on Indigenous people. This expenditure may be in part the consequence of the pattern of health care services delivered at the primary level (GPs and community health services), the low levels of Indigenous access to other Commonwealth programs (such as access to listed pharmaceuticals), as well as an

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underlying susceptibility to certain diseases and injuries. Conversely, the lack of data on distances travelled to access hospital services may reveal that Indigenous clients are not receiving sufficient hospital care.

It is the Steering Committee's long term strategy to improve reporting of Indigenous access to hospital services, and in particular:

- distances travelled to access hospital services. The refined Australian Health Ministers' Advisory Council endorsed National Performance Indicators for Aboriginal and Torres Strait Islander Health includes access indicators based on the distance to primary care services and acute hospital services (indicators 16, 17 and 18); and
- the cost of accessing hospital services.

### **Improving the reporting of indicators**

Significant improvements have been achieved this year with the reporting of cost per casemix adjusted separations and the casemix adjusted relative stay index. The Steering Committee is examining whether differences in the counting and measurement of assets has a material impact on the cost of capital in hospitals. Any refinements as a result would have the potential to improve the measurement of efficiency. Significant improvements can also be made to the data collected on patient views and patient safety.

#### *Patient views*

Patient surveys are increasingly used as a means of assessing the outcomes of hospital services. While surveys are potentially useful if they are implemented correctly, survey data at present are neither sufficiently comparable over time nor across jurisdictions to be used as performance indicators.

Some information on client views of health care is also available via complaints systems. All States and Territories have independent health complaints bodies that investigate and conciliate complaints and recommend improvements to health care services (box 5.4). Complaints information is reported to parliaments annually, but differences in data definitions are preventing comparisons across jurisdictions.

#### Box 5.4 Northern Territory complaints mechanism

The NT Health and Community Services Complaints Commission was formed with the enactment of the *Health and Community Services Complaints Act 1998*. The Act requires public and private health providers to submit statistics on customer complaints. Territory Health Services was a major public health provider submitting a return. Two years of statistical returns are available since Territory Health Services complaints handling was upgraded and began collecting uniform data.

During the first year of the Commission's operation, Territory Health Services complaint numbers increased 28 per cent from the previous year. From 1998-99 to 1999-2000, numbers declined from 575 to 555. Based on occasions of service, less than 1 per cent of service users registered complaints.

#### Nature of the complaints

Category	1998-99		1999-2000	
	no.	per cent	no.	per cent
Access to services	168	29	192	35
Privacy	104	18	81	15
Quality of treatment	80	14	107	19
Communication	51	9	65	12
Standards	20	3	11	2
Decision-making	18	3	8	1
Other	134	24	91	16
Total	575	100	555	100

There are no national benchmarks for numbers of complaints handled in the public health sector to which Territory Health Services might be compared.

Outcomes of the complaints were also reported by Territory Health Services. In 1999-2000, 170 (30.5 per cent) complaints involved an explanation to be provided, 139 (24.9 per cent) complaints involved providing the service to the client, and 109 (19.4 per cent) complaints required providing an apology or registering the client's concern. For 35 complaints, Territory Health Services took more serious action. For these, procedures were changed, conciliation offered, disciplinary action undertaken, refund provided, policies developed or changed, and compensation paid.

Source: NT Government.

The National Health Complaints Information Project — established by the Australasian Council of Health Complaints Commissioners and initially funded by the Commonwealth Government — is developing national standards for health complaint data to overcome this problem. The National Health Complaints Information Project is also developing a national database of health complaint

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information for quality improvement purposes. The Project is in the process of seeking funding.

### *Patient safety monitoring*

Patient safety is an important policy issue for public hospitals. A number of studies have indicated that the incidence of ‘adverse’ events (sometimes referred to as ‘misadventures’) is potentially high (Wilson *et al.* 1995, Thomas *et al.* 1999 and 2000) and the costs of preventable adverse events can be considerable. In the US, total national costs (lost income, lost household production, disability and health care costs) of preventable adverse events (medical errors resulting in injury) have been estimated at between US\$17 billion and US\$29 billion (Kohn *et al.* 1999).

There is no nationally consistent, reliable or comprehensive system of quantitative measurement of the incidence of preventable medical misadventures in Australia. While some incident reporting mechanisms exist (for example, the Australian Incident Monitoring Study of the Australian Patient Safety Foundation), reporting is voluntary and benchmarks of ‘acceptable’ levels of preventable risk have not yet been developed.

Published data of hospital separations due to misadventures during surgical and medical care, and medical device incidents are available (AIHW 2000d). Data published include injuries and poisoning from medical misadventures such as foreign objects accidentally left in the body during surgical care, failure of sterile precautions, mismatched blood used in transfusion and performance of an inappropriate operation (ICD-10-AM classifications Y60–Y82). Around 1300 separations in Australian hospitals in 1998-99 were attributed to these types of medical misadventures (table 5.12). Data published also represent surgical or other medical procedures that cause abnormal reactions or complications recorded after the procedure was undertaken (classifications Y83–Y84). Over 58 000 separations were attributed to these types of misadventures in 1998-99 (table 5.12).

These data are not necessarily comparable across hospitals and jurisdictions because differences in casemix affect the risk of misadventures occurring and there are differences between hospitals and jurisdictions in the coding of misadventures arising during surgery. In addition, the data reflect a small portion of the full spectrum of potential medical errors and are likely to suffer from the collection and measurement problems outlined above.

**Table 5.12 Separations due to misadventures during surgical and medical care, medical device incidents, all hospitals, 1998-99<sup>a, b</sup>**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>c</sup>	Total
<i>Number of separations</i>									
Y60–Y82	400	700	73	66	50	12	4	3	1308
Y83–Y84	18 904	15 061	9 495	7 184	5 297	1 694	381	262	58 278
<i>Rate per 100 000 separations<sup>d</sup></i>									
Y60–Y82	21.7	47.8	6.5	12.1	9.9	9.4	5.3	5.5	22.8
Y83–Y84	1 027.4	1 027.5	847.8	1 319.2	1 045.6	1 326.7	504.7	477.4	1 016.2
Total	1 049.1	1 075.2	854.3	1 331.3	1 055.5	1 336.1	510.0	482.8	1 039.0

<sup>a</sup> Includes ICD-10-AM codes 'Y60–Y68 misadventures during surgical and medical care, medical device instruments'. Does not include 'Y40–Y59 drugs, medicaments, biological substances in therapeutic use, and 'Y85–Y98 sequelae and supplementary factors'. <sup>b</sup> In 1998-99, NSW, VIC, the ACT and the NT reported using the new ICD-10-AM classification while Queensland, WA, SA, and Tasmania reported using the old ICD-9-CM classification. This may affect comparability. <sup>c</sup> Public hospitals only. <sup>d</sup> Rate is not adjusted for differences in casemix.

Source: AIHW (2000a).

In addition, WA provided some data in the 2000 Report for hospital misadventures among admitted patients as a proportion of total separations for 1997-98 (table 5A.57). For public hospitals, 0.106 per cent of separations involved a misadventure.

A national reporting system for errors that result in serious injury and death of patients in the health care system is a key priority for the Australian Council for Safety and Quality in Health Care. The Council was established in January 2000 by Commonwealth, State and Territory governments with funding of \$50 million for five years, and reports to the Australian Health Ministers' Conference. The Council is to lead national efforts to promote systemic improvements in the safety and quality of health care in Australia with a particular focus on minimising the likelihood and effects of error.

#### *Non-admitted patient classification*

It is the long term aim of the Review to expand the coverage of this chapter. This includes improving the reporting of non-admitted services delivered by public acute hospitals (especially clinical services such as pathology and emergency departments). An important step is the development of a non-admitted patient classification system.

Several States are working on systems for improved reporting of non-admitted patients by classification. National agreement on definitions, like those for acute admitted patients with AN-DRGs, will be needed before comparable reporting can commence.

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The Victorian Department of Human Services has developed a system for measuring outputs for (and funding) non-admitted patient services in major hospitals. The activities of outpatient departments are classified into 45 clinical specialties grouped under nine headings: medical; surgical; dental; orthopaedic; psychiatric related; obstetrics and gynaecology; paediatrics; emergency medicine; and allied health. The categories relate to major areas of clinical practice and achieve levels of resource homogeneity similar to those for AN-DRGs. Hospitals are funded on the basis of patient encounters within the 45 clinical specialties, plus other fixed components. A patient encounter incorporates the clinic visit and associated ancillary services (pharmacy, pathology, radiology) provided to the patient 30 days either side of the visit. The 30 day window was chosen to capture the majority of services for a particular visit, and to enable a reasonable and practical period for reporting and funding. The Victorian Ambulatory Classification System was implemented in 1999-2000, with the cost weights for the study being determined on the basis of a three-year, rolling average cost.

The Queensland Ambulatory Casemix Classification System for public hospitals is based on a costing study commissioned in 1996. Since implementation in 1996-97, some minor modifications have been made. The system has 64 clinic types, which are amalgamated, into seven broad areas for Commonwealth reporting purposes. The system incorporates new, repeat and age split variables. The counting unit is occasions of service. The system is now well established among Queensland facilities for which payment modelling is carried out.

The South Australian ambulatory classification system was implemented across all South Australian public hospitals in 1999-2000. The outpatient and emergency patient classification systems and related cost weights were derived as part of the *Outpatient Costing and Classification Study* undertaken in 1998 and commissioned by the then Commonwealth Department of Health and Family Services and South Australian Health Commission. Fifteen of the thirty study sites were from South Australia and the data provided by these hospitals was used to develop local South Australian cost weights. The study has national significance. The outpatient clinic and emergency department classifications developed through the study formed the basis of the current national classifications and the costing data from the study were used to develop national outpatient and emergency services weights (used extensively in the National Hospital Cost Data Collection). The classification system consists of 11 emergency department categories based on triage score and disposition and 79 outpatient classes based on areas of clinical practice (outpatient clinics and allied health disciplines). Teaching, metropolitan non-teaching, large rural, small rural and specialist hospital categories were established with separate cost weights for each category. This accounted for the different cost structures of the hospitals, in particular the different payment arrangements for medical staff.

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Telephone, telemedicine and group encounters attract separate funding (from face-to-face encounters). Funding for patient encounters incorporates the ancillary services (imaging, pathology and dispensed pharmaceuticals) provided to patients 14 days either side of the visit.

### **Better reflecting ‘appropriateness’ of hospital services**

At present, ‘appropriateness’ is measured according to the number of separations per 1000 people, the proportion of separations that were same day, and variations in ‘intervention rates’ for certain procedures (measured as separation rates). While these indicators lack accepted benchmarks for comparison, they do attempt to describe differences in hospital activity across jurisdictions.

Another aspect of appropriateness is whether hospital acute care services can be delivered by some other means even if the procedure may not differ. Services can be substituted via changing labour (for example, greater use of nurses or GPs), or identifying opportunities to do the same procedure in a different environment (that is, at home or in a purpose-built facility other than a hospital). For any given procedure, alternative forms of delivery may better suit certain types of patients. For example, Caplan *et al.* (1999) found that hospital-in-the-home may be preferable for older people. The aim of service substitution is to increase the patient’s welfare and/or lead to improved cost effectiveness.

Box 5.5 outlines a number of service delivery alternatives which could substitute for acute care services.

#### **Box 5.5 Service delivery alternatives**

‘Day surgery’ refers to same day separations either in a hospital or freestanding clinic. It is a substitute to the admission of patients overnight. The Report currently collects data on the proportion of separations that were same day.

‘Hospital-in-the home’ involves provision of acute care in non-hospital accommodation such as the patient’s own residence.

‘Step-down facilities’ are where patients are transferred out of the acute ward into an adjacent facility where their progress can be monitored in a less intensive setting.

‘Coordinated care programs’ recognise patients at high risk of hospital admission (for example, asthmatics, diabetics, patients with heart disease) and intervene to lower admission rates by providing incentives for better patient management.

*Source:* DHAC (1999).

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Opportunities for reporting on service substitution in the near future exist because:

- same day procedures are an increasingly common activity of public acute hospitals;
- hospital-in-the-home has been implemented (at varying rates) in most jurisdictions. NSW provided funding in 1998 for a number of rural hospitals to develop pilot programs, and 42 Victorian public hospitals offer hospital-in-the-home services. Queensland, SA, Tasmania, the ACT and the NT all offer established hospital-in-the-home programs, while in WA, a pilot project, Homeward 2000, has been operating since November 1998; and
- Australian Coordinated Care Trials may be forthcoming with data.

## 5.6 Terms and definitions

**Table 5.13 Terms**

<i>Term</i>	<i>Definition</i>
Aboriginal concept of health	'Not just the physical wellbeing of an individual, but ... the social, emotional and cultural wellbeing of the whole community in which each individual is able to achieve their full potential as a human being thereby bringing about the total wellbeing of their community. It is a whole of life view and includes the cyclical concept of life-death-life (NACCHO 1997).
Aboriginal concept of community control	'A process which allows the local Aboriginal community to be involved in its affairs in accordance with whatever protocols or procedures are determined by the Community' (NACCHO 1997).
Accessibility index	A measure of hospital access equity, primarily for Indigenous people.
Acute care episode	Clinical services provided to patients, including performing surgery, relieving symptoms and/or reducing the severity of illness or injury, and performing diagnostic and therapeutic procedures. Most episodes involve a relatively short hospital stay, although acute care services may also be provided to non-admitted patients.
Acute care hospital	A hospital that provides at least minimum medical, surgical or obstetric services for admitted patient treatment and/or care, and around-the-clock, comprehensive, qualified nursing services and other necessary professional services.
Admission	The process by which an admitted patient commences an episode of care.
Allied health (non-admitted)	All occasions of service to non-admitted patients where services are provided at units/clinics providing treatment/counselling to patients. These include units primarily concerned with physiotherapy, speech therapy, family planning, dietary advice, optometry, occupational therapy.
Ambulatory services	Services provided by an acute care hospital to non-admitted patients.
Apgar score	Numerical score used to evaluate a baby's condition after birth.
Average length of stay	Equal to the arithmetic mean of the length of stay for all patient episodes, estimated by dividing total occupied bed days by total episodes.
Bulk billed services	Attendances for which the medical practitioner bills the Commonwealth Government directly
Caesarean section	Operative birth through an abdominal incision.
Casemix adjustment	Adjustment of data on cases treated to account for the number and type of cases. Cases are sorted into diagnosis related groups (AN-DRGs) which represent a class of patients with similar clinical conditions requiring similar hospital services.
Case weight	The relative costliness of a particular AN-DRG, determined so that the average case weight for all AN-DRGs is 1.00
Catastrophic	An acute or prolonged illness usually considered to be life threatening or with the threat of serious residual disability. Treatment may be radical and is frequently costly.

(continued next page)

Table 5.13 (continued)

<i>Term</i>	<i>Definition</i>
Comorbidity	The simultaneous occurrence of two or more diseases or health-problems.
Community health services	Health services for individuals and groups delivered in a community setting, rather than via hospitals or private facilities.
Community health (non-admitted)	Occasions of service to non-admitted patients provided by designated community health units within the establishment. Such units include baby clinics, immunisation units, aged care assessment teams etc. Some community health care may involve a hospital employee providing a service away from his or her hospital establishment.
Complication	Additional medical problems that develop following a procedure, treatment or illness. Complications are usually directly or indirectly related to a procedure (risk of the procedure), treatment (side effect or toxicity) or illness.
Emergency department waiting times to service delivery	The time elapsed for each patient from presentation to the emergency department to commencement of service by a treating medical officer or nurse.
Emergency department waiting times to admission	The time elapsed for each patient from presentation to the emergency department to admission to hospital.
General practice	The organisational structure in which one or more GPs provide and supervise health care for a 'population' of patients. This definition includes medical practitioners who work solely with one specific population such as women's health and Indigenous health.
Inpatient fraction (IFRAC)	The ratio of inpatient costs to total hospital costs.
Length of stay	The period from admission to separation less any days spent away from the hospital (leave days).
Medicare	The Commonwealth Government funding of private medical and optometrical services (Medicare Benefits Schedule). Some users use the term to include other forms of Commonwealth Government funding: selected pharmaceuticals (Pharmaceutical Benefits Scheme); and public hospital funding (Australian Health Care Agreements), which provide public hospital services free of charge to public patients.
Neonate	A live birth less than 28 days old. The neonatal period is exactly 28 completed days commencing on the date of birth (day 0) and ending on the completion of day 27.
Non-acute episode of care	Involves clinical services provided to admitted and non-admitted patients, including planned geriatric respite, palliative care, geriatric evaluation and management and services for nursing home-type patients. Clinical services delivery by designated psychiatric or psychogeriatric units, designated rehabilitation units, and mothercraft services are also considered non-acute.
Non-admitted patient services	Services provided to non-admitted patients of the kind defined in the <i>National Health Data Dictionary</i> version 6, data element no. 231 'Type of non-admitted patient care'. Services include: emergency services; outpatient services; and other non-admitted patient services.

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**Table 5.13 (continued)**

<i>Term</i>	<i>Definition</i>
Opportunity cost	The return forgone on the next best investment. Calculated as eight per cent of depreciated replacement value of buildings, equipment and land.
Overdue patient	A patient whose wait has exceeded the time determined as clinically desirable in relation to the urgency category to which he or she has been assigned for elective surgery.
Primary care	Essential health care based on practical, scientifically sound and socially acceptable methods made universally accessible to individuals and families in the community
Private patient medical costs (estimated)	The sum of salary/sessional and visiting medical officer payments divided by the number of public patient days multiplied by the number of private patient days.
Public hospital	A hospital that provides free treatment and accommodation to eligible admitted persons who elect to be treated as public patients. It also provides free services to eligible non-admitted patients and may provide (and charge for) treatment and accommodation services to private patients. Charges to non-admitted patients and admitted patients on discharge may be levied in accordance with the Australian Health Care Agreements (e.g. aids and appliances).
Puerperium	The period or state of confinement after labour.
Qualified/unqualified newborn	A newborn patient day is qualified if the infant: is the second or subsequent live born infant of a multiple birth whose mother is an admitted patient; is admitted to an intensive care facility in a hospital; or is admitted to, or remains in, hospital without its mother. A newborn patient day is unqualified if the infant does not meet any of these three criteria. Unqualified patient days are excluded from measurement of patient days for newborn episodes of care.
Real expenditure	Actual expenditure adjusted for changes in prices.
Same day patients	A patient whose admission date is the same as the separation date.
Sentinel procedures	Procedures that are the most common surgical operations, provided by acute care hospitals during a given period of time.
Separation	The discharge, transfer or death of a patient admitted to hospital.
Spontaneous vertex	Vaginal birth without intervention in which the baby's head is the presenting part.
Triage category	The urgency of the patient's need for medical and nursing care: category 1 — resuscitation ie immediate (within seconds) category 2 — emergency ie within 10 minutes category 3 — urgent ie within 30 minutes category 4 — semi-urgent ie within 60 minutes category 5 — non-urgent ie within 120 minutes.
Unreferred attendances	GP services, emergency attendances after hours, other prolonged attendances, group therapy and acupuncture.
Urgency category for elective surgery	category 1 patients — admission within 30 days is desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency.

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**Table 5.13 (continued)**

<i>Term</i>	<i>Definition</i>
	category 2 patients — admission desirable within 90 days for a condition causing some pain, dysfunction or disability, but that is not likely to deteriorate quickly or become an emergency.
	category 3 patients — admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, that is unlikely to deteriorate quickly and that does not have the potential to become an emergency.

**Table 5.14 Indicators**

<i>Indicator</i>	<i>Definition</i>
Apgar score	The definition used by the Australian Council on Healthcare Standards is the number of babies born with an Apgar score of four or below at five minutes post-delivery or an Apgar score of six or below ten minutes post-delivery as a proportion of the total number of babies born. Foetal death in utero prior to commencement of labour is excluded.
Average length of stay	The average of the lengths of stay for a group of admitted patients in a hospital or group of hospitals.
Condition of capital	Ratio of depreciated replacement value to total replacement value.
Cost per casemix adjusted separation	Recurrent expenditure * inpatient fraction/total number of casemix adjusted separations + estimated private patient medical costs.
Cost per non-admitted occasion of service	Recurrent expenditure * (1–inpatient fraction)/total number of non-admitted occasions of service.
Elective surgery waiting times	The time elapsed for a patient on the elective surgery waiting list, from the date he or she was added to the waiting list for a procedure to a designated census date.
Emergency department waiting times to service delivery	The time elapsed for each patient from presentation to the emergency department to commencement of service by a treating medical officer or nurse.
Hospital-acquired infection – bacteraemia	The total number of inpatients who acquire bacteraemia during the time period under study divided by the total number of separations with a length of stay of 48 hours or more during the time period under study. Hospital-acquired bacteraemia is defined as positive blood culture for inpatients who were afebrile on admission – that is, those with a temperature less than 37.4 degrees Celsius, who become febrile 48 hours or more after admission.
Hospital-acquired infection – wound infection	The number of inpatients having evidence of wound infection on or after the fifth post-operative day following clean (contaminated) surgery during the time period under study divided by the total number of inpatients undergoing clean (contaminated) surgery with a post-operative length of stay equal to or greater than five days. All endoscopies are excluded as are intra-cavity procedures such as oral, aural, nasal, urethral, vaginal and anal operations. Clean surgery – those operations performed in a sterile field. Contaminated surgery include those operations which breach the gastro-intestinal, respiratory and genito-urinary tracts or where a break in aseptic technique occurs; and traumatic wounds

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**Table 5.14 (continued)**

<i>Indicator</i>	<i>Definition</i>
Mortality rate	The number of deaths per 100 000 people.
Labour cost per casemix adjusted separations	((Salary and wages)*(inpatient fraction) + visiting medical officer payments)/total number of casemix adjusted separations.
Neonatal death rate	Number of deaths of live born infants within 28 days of birth divided by the total number of live births.
Percentage of facilities accredited with the Australian Council on Healthcare Standards	The ratio of accredited beds to all hospital beds in the jurisdiction.
Separations per 1000 population	The rates of hospital separations per 1000 population.
Unplanned hospital re-admissions	The total number of unplanned and unexpected re-admissions within 28 days of separation, during the time period under study, divided by the total number of separations (excluding deaths) for the same time period. Unplanned hospital re-admission refers to an unexpected admission for further treatment of the same condition for which the patient was previously hospitalised; an unexpected admission for treatment of a condition related to one for which the patient was previously hospitalised; or an unexpected admission for a complication of the condition for which the patient was previously hospitalised. Day stay patients are included in both the numerator and the denominator. This indicator addresses patients readmitted to the same organisation.
User cost of capital per casemix adjusted separation	(Depreciation + opportunity cost)/casemix adjusted separations.
Vaginal delivery following primary caesarean section	The number of patients delivering vaginally following a previous primary (first) caesarean section as a proportion of the total number of patients delivering who have had a previous primary caesarean section and no intervening pregnancies greater than twenty weeks gestation.

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## 6 General Practice

General practice is a major component of Australia's healthcare system. It accounts for a large number of services provided to the community and general practitioners (GPs) form part of the primary health care system. For these reasons, support to general practice is an important part of government strategy to improve health outcomes in Australia.

Descriptive information about services provided in general practice is contained in section 6.1. Policy developments in general practice are discussed in section 6.2, a framework of performance indicators is presented in section 6.3, and key results are discussed in section 6.4. Future directions for reporting are covered in section 6.5 and relevant terms are defined at section 6.6. Indicators for outcomes and quality have been refined in this year's Report.

### *Supporting tables*

Supporting tables for chapter 6 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as `\Publications\Reports\2001\Attach6A.xls` and in Adobe PDF format as `\Publications\Reports\2001\Attach6A.pdf`.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 6A.3 is table 3 in the electronic files). They may be subject to revision. The most up-to-date versions of these files can be found on the Commission's Review web page ([www.pc.gov.au/service/gsp/2001/](http://www.pc.gov.au/service/gsp/2001/)). Users without Internet access can contact the Secretariat to obtain up-to-date versions of these tables (see details on the inside front cover of the Report).

### **6.1 Profile of general practice**

#### **Definitions, roles and responsibilities**

General Practitioners form part of the medical practitioner workforce. The medical practitioner workforce comprises doctors trained in a specialty — including general

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practice — and other medical practitioners (OMPs). All GPs trained since 1996 must undertake the general practice specialist training program. The Royal Australian College of General Practitioners (RACGP) defines a GP as: “a medical practitioner who provides primary, comprehensive and continuing care to patients and their families within the community”, (Britt *et al.* 1999, p. XXXV). For the purposes of Medicare, ‘recognised’ GPs are those who are vocationally registered under section 3F of the *Health Insurance Act 1973 (Cth)*, hold fellowship of the Royal Australian College of General Practitioners or equivalent, or hold a recognised training placement (Britt *et al.* 1999). A summary of common health terms is provided at section 6.6.

General Practitioners are an important source of primary health care in Australia.<sup>1</sup> They also play a pivotal role in providing continuity of care. The services provided by GPs include: diagnosing and treating illness (both chronic and acute); providing preventive care through to palliative care; referring patients to consultants, allied health professionals, community health services, and hospitals; and acting as gatekeepers for other health care services (DHFS 1996). They may also be involved in teaching and research.

While the majority of GPs are private practitioners who provide services as part of a general practice (funded by the Commonwealth Government), they may also be employed by hospitals. In some parts of rural Australia, GPs provide a range of services to admitted patients, and rural and urban GPs staff emergency departments, although this latter role is declining (DHAC 2000a). Services provided by visiting medical officers or salaried doctors to public patients in public hospitals, and visiting medical and other primary health care services provided in rural and remote areas, are funded by State and Territory governments. State and Territory governments are also responsible for registering and licensing GPs in their jurisdiction. Commonwealth, State and Territory governments provide incentives for GPs to locate in rural and remote areas.

## Funding

Almost all of the services provided by private GPs are funded by the Commonwealth Government through Medicare and the Department of Veterans’ Affairs (DVA). This is illustrated by the *Bettering the Evaluation and Care of Health* (BEACH) study of general practice activity in Australia (Britt *et al.* 2000). About 1000 GPs participate in the BEACH study each year, with each participant

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<sup>1</sup> Primary care refers to the care provided at the patient’s first point of contact with the health care system. Other examples of primary care include services provided by community health centres, pharmacists in local pharmacies, nurses in the home and a number of other health providers in non-institutional settings.

recording details of 100 consecutive encounters. (Britt *et al.* (2000) define an ‘encounter’ as any professional interchange between a patient and a GP.) The BEACH study found that, in 1999-2000, 93 per cent of all encounters with GPs were for services funded by Medicare or DVA (table 6.1).

Table 6.1 **Encounters by source of funding, 1999-2000<sup>a, b</sup>**

	Number	Rate per 100 encounters <sup>c</sup>	95% LCI <sup>d</sup>	95% UCI <sup>d</sup>
GPs participating in the BEACH study	1 048	..	..	..
Total encounters for which BEACH data were recorded	104 856	..	..	..
Encounters with missing data	4 054	..	..	..
Direct consultations <sup>e</sup>	97 436	96.7	96.3	97.0
No charge	1 345	1.4	0.9	1.7
Medicare paid <sup>f</sup>	93 698	93.0	92.4	93.5
Workers compensation	2 005	2.0	1.7	2.3
Other paid	1 236	1.2	0.0	2.8
Indirect consultations <sup>g</sup>	3 367	3.3	2.8	3.8

<sup>a</sup> April 1999 to March 2000. <sup>b</sup> Britt *et al.* (2000) define an ‘encounter’ as any professional interchange between a patient and a GP. <sup>c</sup> Missing data for 4054 encounters removed. Percentage base (N=100 802) <sup>d</sup> UCI= upper confidence interval; LCI= lower confidence interval. <sup>e</sup> Categories do not add up to total direct consultations because there is overlap in some cases. <sup>f</sup> Medicare paid includes Commonwealth payments made through DVA. <sup>g</sup> Indirect consultations are those at which the patient is not seen by the GP but which generate a prescription, a referral, a certificate or other service. They are usually the result of a phone call by a patient. . . Not applicable.

Source: table 6A.1.

Medicare fee for service payments comprised 82 per cent of Commonwealth expenditure on GPs in 1998-99 (and 64 per cent of total expenditure on GPs) (figure 6.1 and table 6A.2). The Commonwealth also provided payments for GPs through the DVA local medical officer arrangements,<sup>2</sup> the Divisions of General Practice Program, the Practice Incentive Payments Program and the GP Immunisation Incentive Scheme (DHAC 2000a). Non-government sources contributed 23 per cent of total expenditure on GPs in 1998-99, comprising payments by health insurance schemes (including workers compensation and third party insurance) and by private individuals.

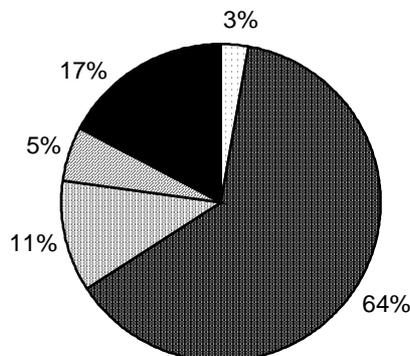
<sup>2</sup> Local medical officers are GPs who are registered with the Department of Veterans’ Affairs to provide services to veterans and other DVA beneficiaries.

**Figure 6.1 Sources of funding for GPs, 1998-99**

Department of Veterans Affairs
  Medicare
  Other Commonwealth

Out of pocket
  Other non-government

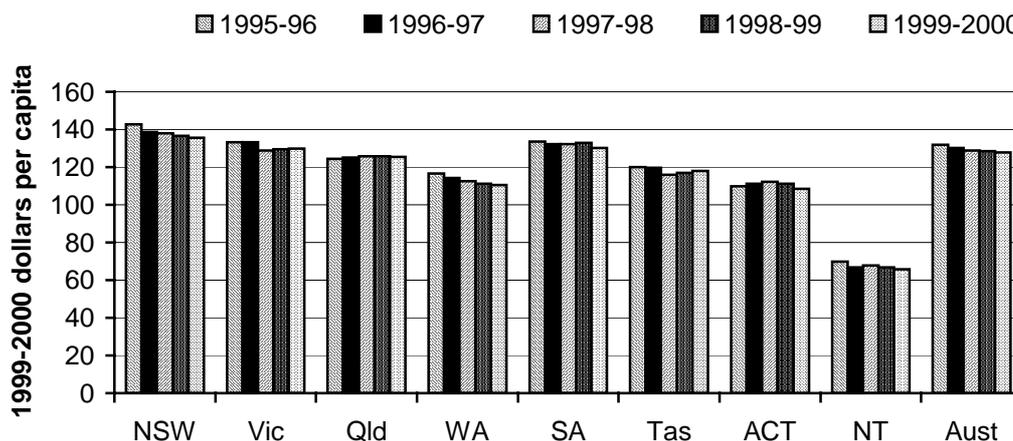
Health Insurance Funds



Source: table 6A.2.

Medicare data suggest the cost to the Commonwealth Government of all unreferral attendances to, or consultations with, GPs was approximately \$2.4 billion in 1999-2000. This was equivalent to expenditure of \$128 per person in 1999-2000 (unchanged from 1998-99) (figure 6.2 and table 6A.3). This is likely to underestimate Commonwealth Government expenditure on GPs, however, as it does not include non-Medicare expenditure.

**Figure 6.2 Commonwealth Government real expenditure per person on unreferral consultations (1999-2000 dollars)**



Source: table 6A.3.

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## Size and scope of sector

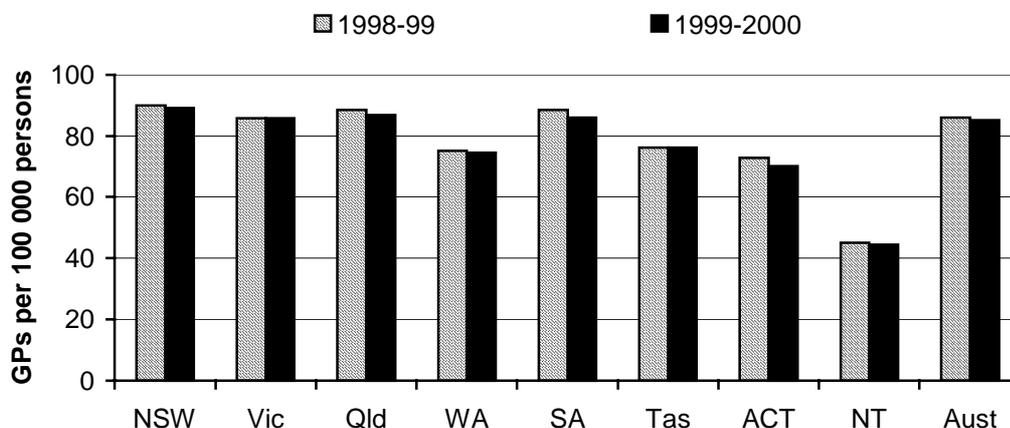
In 1998-99, there were 24 176 vocationally registered GPs and OMPs billing Medicare in Australia (nearly 130 per 100 000 people) (table 6A.4). In contrast, 5478 doctors worked as non-specialist clinicians (mainly residents and interns) in hospitals in December 1998. These head counts of doctors billing Medicare should be interpreted with caution, however. Not all OMPs are GPs. In addition, some GPs provide only small numbers of services attracting Medicare benefits and there are substantial numbers of doctors working in medicine part-time.

Figure 6.3 presents the distribution of full time workload equivalent GPs across jurisdictions. A full time workload equivalent is calculated for each doctor by dividing the doctor's Medicare billing (schedule fee value of claims processed by the Health Insurance Commission during the reference period) by the mean billing of full-time doctors. The data exclude services provided by medical practitioners working with the Royal Flying Doctor Service, some doctors working in Aboriginal Medical Services, and salaried doctors working in public hospitals without the right of private practice. In addition, the data are based on doctors' Medicare claims which for some doctors, particularly in rural areas, represents only part of their workload. GPs in rural or remote areas spend more of their time working in local hospitals than those in metropolitan centres.

The data in Figure 6.3 should be viewed with caution as OMPs are included with vocationally registered GPs. (The data are disaggregated in table 6A.4.) Australia wide in 1999-2000, there were 85 full time workload equivalent GPs per 100 000 people. NSW had the highest number per 100 000 (89) and the NT had the lowest (44).

Figure 6.3 **GPs per 100 000 persons (full time workload equivalent)**

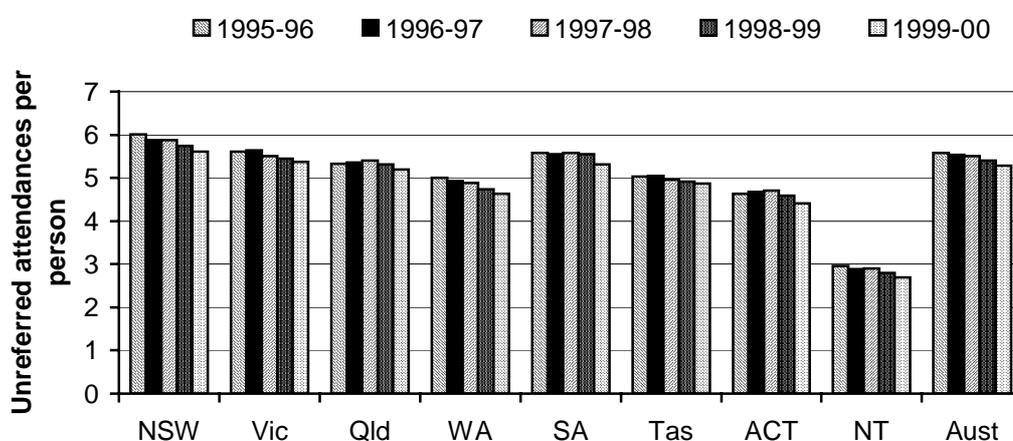
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Source: table 6A.4.

Consulting a GP was the second most common health related action of Australians in 1995 (the last year for which data are available), after use of medications (ABS, 1997). In 1999-2000, Australians consulted a GP on average 5.3 times per person (DHAC 2000c). Consultations per person in 1999-2000 were highest in NSW (5.6) and lowest in the NT (2.7) (figure 6.4 and table 6A.5); and were highest in capital cities and lowest in remote areas — declining with population density (table 6A.6). The data reflected in figures 6.3 and 6.4 measure GPs differently and are not therefore consistent.

Figure 6.4 Unreferred attendances to GPs, per person



Source: table 6A.5.

The most common reasons given by patients for visiting a GP in 1999-2000 are outlined in table 6.2. General Practitioners participating in the *Bettering the Evaluation and Care of Health* study were asked to record at least one, and up to three, patient reasons for the encounter, reflecting the patient's reasons for consulting the GP (Britt *et al.* 2000). Reasons for encounter reflect the patient's demand for care and can indicate service use patterns.

**Table 6.2 Most frequent patient reasons for encounter, 1999-2000<sup>a, b</sup>**

<i>Patient reason for encounter</i>	<i>Number</i>	<i>% of total reasons for encounter</i>	<i>Rate per 100 encounters</i>	<i>95% LCI<sup>c</sup></i>	<i>95% UCI<sup>c</sup></i>
Check-up (all) <sup>d</sup>	13 223	9.3	13.7	13.0	14.3
Prescription	7 946	5.6	8.2	7.7	8.7
Cough	6 019	4.3	6.2	5.8	6.6
Immunisation/vaccination (all) <sup>e</sup>	4 742	3.4	4.9	4.4	5.4
Throat complaint	3 696	2.6	3.8	3.5	4.1
Back complaint	3 435	2.4	3.6	3.3	3.8
Test results	3 306	2.3	3.4	3.1	3.7
URTI <sup>f</sup>	2 794	2.0	2.9	2.5	3.3
Rash	2 539	1.8	2.6	2.4	2.8
Hypertension/high blood pressure	2 452	1.7	2.5	2.1	3.0
Abdominal pain	2 174	1.5	2.2	2.1	2.4
Depression	2 047	1.4	2.1	1.9	2.3
Total	141 766	100.0	146.3	144.6	148.0

<sup>a</sup> Figures do not sum to 100 as more than one reason for encounter can be recorded at each encounter. <sup>b</sup> An encounter is defined as any professional interchange between a patient and a GP. <sup>c</sup> UCI= upper confidence interval; LCI= lower confidence interval. <sup>d</sup> 'Check-up (all)' includes all medical examinations or health evaluations complete or partial, irrespective of whether the type was specified or the request was very general. <sup>e</sup> 'Immunisation/vaccination (all)' includes flu vaccination requests as well as those for childhood immunisation, hepatitis, etc. <sup>f</sup> Upper respiratory tract infection.

Source: table 6A.7.

Depression was one of the most common reasons patients gave for visiting a GP in 1999-2000. General Practitioners are important mental health service providers — 29 per cent of people with a mental disorder contacted a GP in relation to their problem in 1997 (ABS 1998). Mental health is discussed in chapter 7.

More than one problem is often managed by a GP at a single encounter. Problems managed reflect the GP's understanding of the health problem presented by the patient. The top ten health problems managed by GPs are listed in table 6.3. Hypertension was the most common problem managed followed by upper respiratory tract infection (a cold) (Britt *et al.* 2000).

**Table 6.3 Top ten health problems managed, 1999-2000<sup>a</sup>**

<i>Problem Managed</i>	<i>Number</i>	<i>Per cent of total problems</i>	<i>Rate per 100 Encounters<sup>b</sup></i>	<i>95% LCI<sup>c</sup></i>	<i>95% UCI<sup>c</sup></i>
Hypertension <sup>d</sup>	8 821	5.7	8.4	7.9	8.9
URTI <sup>e</sup>	7 527	4.9	7.2	6.7	7.7
Immunisation/vaccination all <sup>d</sup>	4 818	3.1	4.6	4.2	5.0
Depression <sup>d</sup>	3 595	2.3	3.4	3.2	3.6
Asthma	3 365	2.2	3.2	3.0	3.4
Acute bronchitis/bronchiolitis	3 319	2.2	3.2	2.9	3.4
Back complaint <sup>d</sup>	2 880	1.9	2.8	2.6	2.9
Diabetes <sup>d</sup>	2 808	1.8	2.7	2.5	2.9
Lipid disorder	2 765	1.8	2.6	2.4	2.9
Osteoarthritis <sup>d</sup>	2 346	1.5	2.2	2.0	2.4
<b>Total problems</b>	<b>153 857</b>	<b>100.0</b>	<b>146.7</b>	<b>144.9</b>	<b>148.6</b>

<sup>a</sup> Problems managed reflect the GP's understanding of the health problem presented by the patient. <sup>b</sup> Figures do not total 100 per cent as more than one problem can be managed at each encounter. <sup>c</sup> UCI= upper confidence interval; LCI= lower confidence interval. <sup>d</sup> Multiple primary care classification codes. <sup>e</sup> Upper respiratory tract infection.

Source: table 6A.8.

The most common form of patient management undertaken by GPs in 1999-2000 was prescribing, advising or supplying medication (110.1 per 100 encounters) (table 6.4).

**Table 6.4 Summary of patient management, 1999-2000**

<i>Management type</i>	<i>Number</i>	<i>Rate per 100 encounters</i>	<i>95% LCI<sup>a</sup></i>	<i>95% UCI<sup>a</sup></i>
Medications	115 432	110.1	107.8	112.4
Prescribed	98 372	93.8	91.5	96.2
Advised, over the counter	9 842	9.4	8.6	10.2
GP supplied	7 218	6.9	5.8	7.9
Other treatments	48 194	46.0	44.1	47.8
Clinical	35 102	33.5	31.8	35.2
Procedural	13 092	12.5	11.9	13.0
Referrals	11 760	11.2	10.8	11.7
Emergency department	87	0.1	0.0	0.4
Hospital	744	0.7	0.5	0.9
Specialist	7 639	7.3	7.0	7.6
Allied Health	3 290	3.1	2.9	3.4
Pathology	27 613	26.3	25.2	27.5
Imaging	7 841	7.5	7.1	7.8

<sup>a</sup> UCI= upper confidence interval; LCI= lower confidence interval.

Source: table 6A.9.

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## 6.2 Policy developments

In response to a recommendation by the General Practice Strategy Review, work has commenced on reviewing, identifying and developing a comprehensive set of indicators and associated minimum data set to measure quality in general practice.

There is no systematic measurement by government of patient satisfaction or patient safety in general practice. Further, some independent health complaints commissions, established in all States and Territories, do not cover the private sector and GPs (DHAC 2000a). A number of studies, however, have recorded patient views and experiences of general practice, including research funded by the Commonwealth Government in 1992 (DHAC 2000a). In addition, the Australian General Practice Accreditation Limited accreditation process incorporates a requirement for patient feedback which is commonly achieved through a survey instrument such as that developed by the Royal Australian College of General Practitioners, or other instruments such as interviews or other culturally appropriate methods.

Some programs aim to improve access to primary care services by target groups. For example, the Rural Incentives Program — administered by Rural Workforce Agencies under contract with the Commonwealth and also funded by State and Territory governments — encourages recruitment and relocation of GPs to rural and remote areas. Reporting on outcomes by rural/remote area is increasing.

The National Performance Indicators for Aboriginal and Torres Strait Islander Health endorsed by the Australian Health Minister's Advisory Council contain a group of nine indicators (numbers 15–24) covering various aspects of access to services. These refer to: the number of community controlled services;<sup>3</sup> distance from primary care and acute hospital care; Indigenous health workforce numbers; training and health issues; and Indigenous culture and management of key medical conditions.

## 6.3 Framework of performance indicators

The performance indicator framework is based on the shared government objectives for general practice, which reflect the primary care role of GPs (box 6.1).

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<sup>3</sup> The Aboriginal Community Controlled Health Services are autonomous primary health services, planned and governed by local Aboriginal communities through their elected Aboriginal board of directors. Many such services employ GPs as part of a multi-disciplinary health team (DHAC 2000a).

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**Box 6.1 Objectives for general practice**

General practice aims to promote the health of Australians by:

- acting as a main point of entry to the health care system;
- providing health care which promotes changes in lifestyle behaviour and prevents possible illness;
- coordinating and integrating health care services on behalf of clients; and
- providing continuity of care

in an equitable and efficient manner.

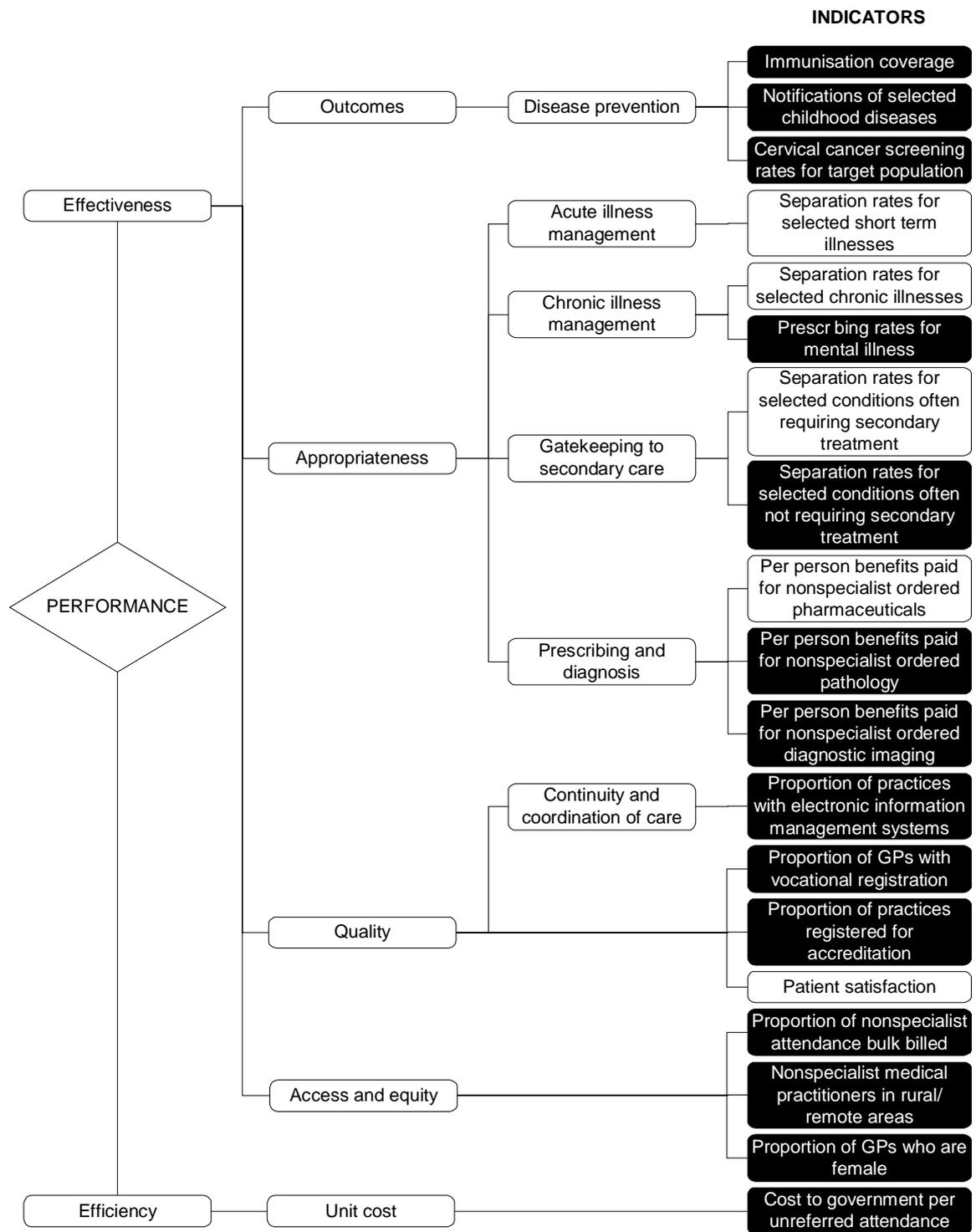
The performance indicator framework aims to inform analysis of the effectiveness and efficiency of policies targeted at services of general practice (figure 6.5). The framework is based on research conducted in Australia and the United Kingdom to develop performance indicators for primary care aspects of general practice services. The framework will change over time as better indicators are developed and as the focus and objectives for general practice change.

Effectiveness indicators relate to four broad categories: outcomes; appropriateness; quality; and access and equity. The outcome indicators focus on disease prevention — that is, immunisation coverage, notification of selected childhood diseases and cervical cancer screening rates.

The level of immunisation coverage has been included in the framework because GPs are encouraged to achieve high immunisation coverage levels under the General Practice Immunisation Incentives Scheme. The Scheme provides incentives for the immunisation of children in the 0-6 age group. General Practitioners see 93 per cent of children in the age group of 0–6 years seven times a year on average (DHAC 1999a). The aim is to have full immunisation of 90 per cent of all children attending 90 per cent of all general practices (DHAC 1999a). However, the introduction of the Scheme has had different impacts in different States and Territories depending on the structure of service provision (table 6.5).

Similarly, notification rates for selected childhood diseases (measles, pertussis (whooping cough) and Haemophilus influenzae type b) have been included because the activities of GPs can influence the level of these diseases. The debilitating effects of these diseases can be long term or even life threatening. The complications from measles, for example, can be very dangerous, and pneumonia occurs in one in 25 cases. As part of the Immunise Australia Seven Point Plan, Australia has embarked on a strategy to eliminate measles. This year, the notification rate will be reported for 0-14 year olds as a proportion of the population aged 0–14 years.

Figure 6.5 Performance indicators for general practice



**Key to indicators**

- Text** Provided on a comparable basis for this Report
- Text** Information not complete or not strictly comparable
- Text** Yet to be developed or not collected for this Report

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The appropriateness indicators focus on four aspects: acute illness management; chronic illness management; gatekeeping to secondary care; and prescription and diagnosis. Acute illness management is measured by standardised hospital separation rates for some short term illnesses for which hospital admission is generally avoidable: severe ear/nose/throat infection; cellulitis; kidney/urinary tract infection; and gastroenteritis. Separation rates significantly greater than the average for these illnesses may demonstrate issues of primary care delivery that need to be further explored, and publishing these data is a means of promoting discussion.

Two indicators measure GP performance in chronic illness management: prescribing rates for mental illness and standardised hospital separation rates for some chronic illnesses. The prescribing rates for mental illness have been included in the framework, although it is not clear whether this represents an over reliance on the use of prescription drugs — benchmark data have yet to be defined — or whether the availability of a new range of prescription pharmaceuticals allows a range of conditions to be treated by GPs. Major programs, such as the Pharmaceutical Education Program are aimed at promoting alternative management approaches to anxiety and depression (Royal Australian College of General Practitioners 1999). The National Health System in the United Kingdom also has recommended using the ‘volume of benzodiazepines’ as an indicator of effective delivery of services by GPs for mental disorders as part of the ‘high level performance indicators’.

People suffering from certain chronic conditions such as asthma, diabetes and epilepsy sometimes require hospitalisation. Ongoing management of these conditions can be provided by GPs. High levels of separations for these conditions may indicate a need to encourage GP management and self management of these conditions.

Standardised separation rates for conditions often not requiring hospitalisation — for example, myringotomy (insertion of grommets) and tonsillectomy — are indicators of the GP’s role as the gatekeeper to secondary care services. High separation rates for myringotomy and tonsillectomy may indicate inappropriate care by GPs, because conditions requiring these treatments often can be managed at the primary care level.

Per person benefits paid by the Commonwealth Government for pharmaceuticals, pathology tests and diagnostic imaging ordered by GPs, are used as indicators of the appropriateness of prescribing and diagnosis. While high levels of benefits may indicate overreliance on these methods of treatment by GPs, it is not possible to determine what the appropriate levels might be. Reporting these data contributes to discussion of such issues.

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The quality of general practice services is reflected by the proportion of full time workload equivalent GPs with vocational registration, patient satisfaction and the proportion of practices with electronic information management systems. The proportion of practices that are registered for accreditation is also used as a quality indicator.

Vocational registration of GPs has been included as a quality indicator because it establishes the framework within which other quality initiatives have occurred in general practice. It defines general practice as a distinct discipline of medicine, and emphasises the importance of formal training and the development of professional accountability through mandatory improvement (DHFS 1996).

Levels of practice accreditation are also a measure of quality practice. The accreditation of practices has two major components: setting acceptable minimum standards for general practice; and establishing an effective and objective process for assessing practices against these standards.

The proportion of practices with electronic information management systems is included as a quality indicator because information management/technology is recognised as a useful tool for helping GPs provide and maintain a high quality of care to patients. The use of clinical software and data interchange between GPs and organisations (such as divisions of general practice, pathology laboratories and hospitals) are examples (DHAC 2000e). Electronic information management systems also support directions and reforms in health care that focus on an integrated and evidence based health system. Under the Practice Incentives Program, a payment is made to those practices where the majority of GPs prescribe electronically, and/or where the practice has either an Internet connection or an email account.

Access and equity are measured by the proportion of non-specialist attendances that are bulk billed (thereby alleviating any financial barriers to accessing GPs); full time workload equivalent GPs per 100 000 people by region (capital city, rural and remote); and by female full time workload equivalent GPs per 100 000 females by jurisdiction. The latter recognises that some female patients may be uncomfortable discussing health matters with a male GP. The last two indicators were presented differently in last year's Report (as the proportion of full time workload equivalent GPs in rural/remote areas, and the proportion of full time workload equivalent GPs who are female).

The cost to government of unreferral attendances is the only suggested efficiency indicator for GP services at this stage.

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## 6.4 Key performance indicator results

Different delivery contexts, locations and types of client may affect the effectiveness and efficiency of health services. Appendix A contains detailed statistics and short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter.

### Outcomes

#### *Disease prevention — immunisation*

The level of immunisation coverage of children is the first outcome indicator of GP performance in providing primary care. Child immunisation services are delivered by many providers (table 6.5). The Australian Childhood Immunisation Register records suggest that since data were first collected in 1996, GPs have played a major role in immunising children under seven years of age in NSW, Queensland, WA, SA and Tasmania. In Victoria, local governments share the main immunisation provider role with GPs, whereas Territory governments are the main providers both in the ACT, and also in the NT through community health centres (table 6.5 and table 6A.10).<sup>4</sup>

Table 6.5 **Proportion of valid episodes by immunisation provider, 1 January 1996 to 30 June 2000 (per cent) for children under seven years of age**

<i>Provider</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
GPs	81.7	48.3	83.3	61.7	69.4	84.1	39.5	2.8	68.8
Local government	7.3	50.7	8.2	8.8	18.9	15.4	—	—	19.5
State government	—	—	0.0	5.3	0.1	0.2	56.5	—	1.5
Flying doctor service	—	—	0.4	—	0.2	—	—	—	0.1
Public hospital	3.5	0.2	3.2	5.4	5.6	0.1	1.3	1.6	2.8
Private hospital	0.3	—	—	—	—	—	—	1.0	0.1
Aboriginal health service/worker	0.6	—	1.0	0.5	0.3	—	0.1	5.0	0.5
Community health centre	6.7	0.7	4.0	18.3	5.6	0.2	2.6	89.7	6.7

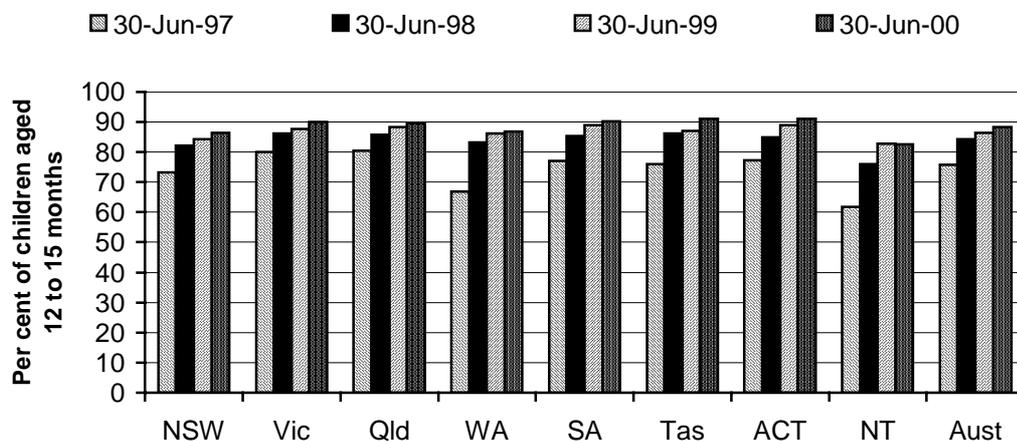
Source: table 6A.10.

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<sup>4</sup> Approximately 40 per cent of children aged 0-6 years in the NT are Indigenous, living in remote communities that are not serviced by a GP. Since GPs provide immunisation services to only a small proportion of children in the NT, immunisation coverage rates are a weak indicator of GP performance in the NT.

Around 88 per cent of Australian children turning 12 months of age by 31 March 2000 were assessed as fully immunised against diphtheria, tetanus, whooping cough, polio and Haemophilus influenzae type b (figure 6.6 and table 6A.11). The NT had the lowest proportion (83 per cent) and Tasmania the highest (92 per cent) (figure 6.6). The NT Childhood Immunisation Database estimate of vaccination coverage for children aged 12 months on 31 March 2000 was 89 per cent. Australian Child Immunisation Register (ACIR) records of immunisation for children in the NT are affected by difficulties in matching NT immunisation records with Medicare-generated ACIR records.

Figure 6.6 Proportion of children aged 12 to 15 months who were fully immunised (per cent)<sup>a, b, c</sup>

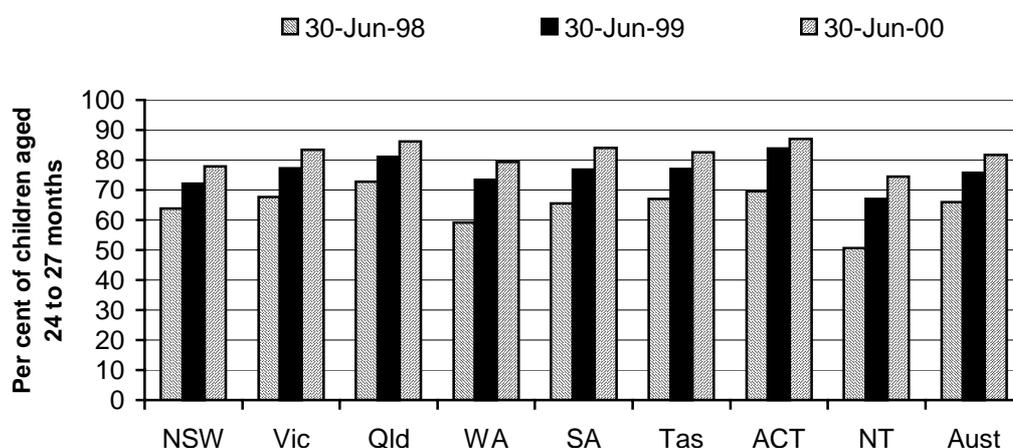


<sup>a</sup> Coverage measured at 30 June for children turning 12 months of age by 31 March. <sup>b</sup> The Australian Child Immunisation Register (ACIR) includes all children under seven years of age who are registered with Medicare. By the age of 12 months, over 98 per cent of Australian children have been registered with Medicare (NCIRS 2000). <sup>c</sup> There may be some underreporting by providers. Therefore vaccine coverage estimates calculated using ACIR data should be considered minimum estimates (NCIRS 2000).

Source: table 6A.11.

Nearly 82 per cent of children turning 24 months of age by 31 March 2000 were assessed as being fully immunised against diphtheria, tetanus, whooping cough, polio, Haemophilus influenzae type b and measles, mumps and rubella (figure 6.7 and table 6A.12). Once again, the NT recorded the lowest proportion (75 per cent), while the ACT recorded the highest (87 per cent). ACIR records of immunisation for children in the NT are affected by difficulties in matching NT immunisation records with Medicare-generated ACIR records.

Figure 6.7 **Proportion of children aged 24 to 27 months who were fully immunised (per cent) <sup>a, b, c</sup>**



<sup>a</sup>Coverage measured at 30 June. <sup>b</sup>The Australian Child Immunisation Register includes all children under seven years of age who are registered with Medicare. By the age of 12 months, over 98 per cent of Australian children have been registered with Medicare (NCIRS 2000). <sup>c</sup>There may be some underreporting by providers. Therefore, vaccine coverage estimates calculated using ACIR data should be considered minimum estimates (NCIRS 2000).

Source: table 6A.12.

### *Disease prevention — notifications of selected childhood diseases*

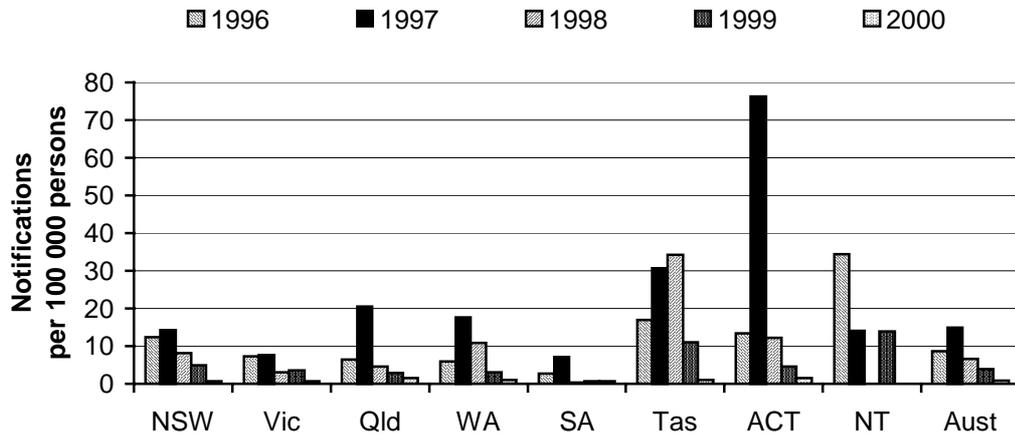
The indicator for the rate of notifications for selected childhood diseases now reflects the number of notifications for 0–14 year olds per 1000 people in that age group.

The Immunise Australia Seven Point Plan, organised outside general practice and implemented by the immunisation sector, including GPs, has resulted in a large fall in the number of notifications of measles. To September 2000, the notification rate for measles for 0–14 year olds was 0.9 per 100 000 children in that age group. This represents a large decline from the high levels of the early to mid-1990s (table 6A.14). To September 2000, notification rates for 0–14 year olds for measles were highest in the ACT and Queensland (1.5) and lowest in the NT (0.0) (figure 6.8).

A severe outbreak of pertussis (whooping cough) occurred in 1997 (figure 6.9 and table 6A.15) within the identified pattern of pertussis epidemics in three year cycles. The notification rate for Australia in that year was 154.1 notifications for 0–14 year olds per 100 000 persons aged 0–14 years. As a result of the increased incidence of pertussis, the then Commonwealth Department of Health and Family Services decided to encourage the immunisation of all children against the disease. To September 2000, the notification rate for 0–14 year olds Australia was 34.7. The

ACT was highest in that year with 124.7 notifications for 0–14 year olds per 100 000 children aged 0–14 years. WA was lowest with a notification rate of 3.0.

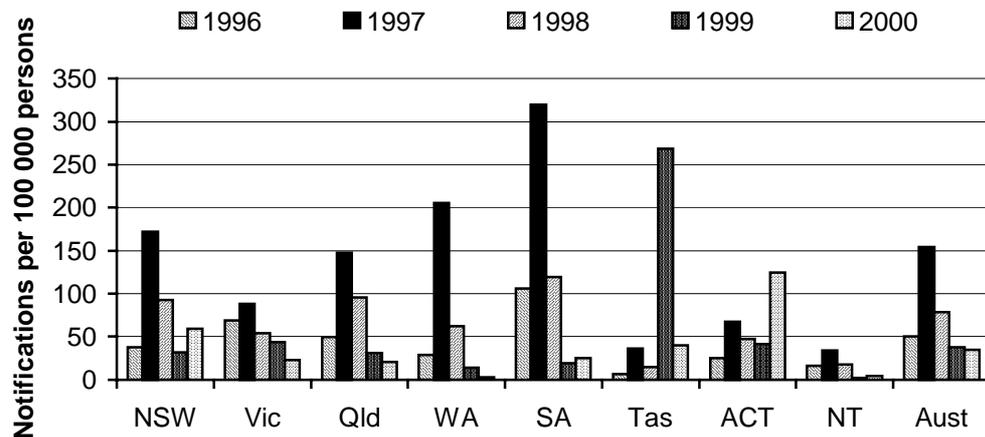
Figure 6.8 Notification rates for measles among persons aged 0-14 (per 100 000 persons aged 0-14 years)<sup>a</sup>



<sup>a</sup> Notifications for 2000 to September only.

Source: table 6A.14.

Figure 6.9 Notification rates for whooping cough (pertussis) among persons aged 0-14 (per 100 000 persons aged 0-14 years)<sup>a</sup>

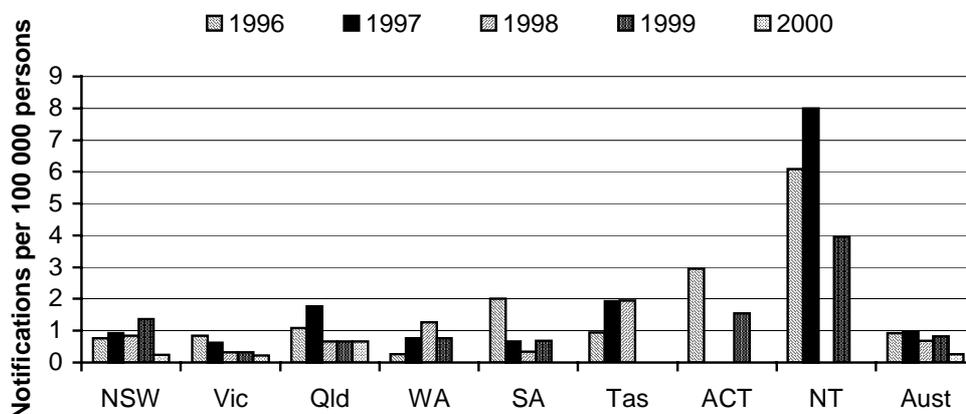


<sup>a</sup> Notifications for 2000 to September only.

Source: table 6A.15.

In recent years, notification rates for Haemophilus influenzae type b have remained relatively low (figure 6.10 and table 6A.13). In 2000 (to September), the notification rate Australia-wide was 0.3 (per 100 000 children aged 0–14 years). WA, SA, Tasmania, the ACT and the NT all had zero notifications.

Figure 6.10 Notification rates for Haemophilus influenzae type b among persons aged 0-14 (per 100 000 persons aged 0-14 years)<sup>a</sup>



<sup>a</sup> Notifications for 2000 to September only.

Source: table 6A.13.

### *Disease prevention — cervical cancer screening*

The third outcome indicator for primary care services provided by GPs is the screening rate for cervical cancer. Like child immunisation, cervical cancer screening tests (that is, Pap smears) are offered by a range of health care providers under the National Cervical Cancer Screening Program — GPs, gynaecologists, family planning clinics and hospital outpatient clinics. Caution should be used when interpreting the results as the level of participation in the program reflects the activities of all health care providers — not only GPs.

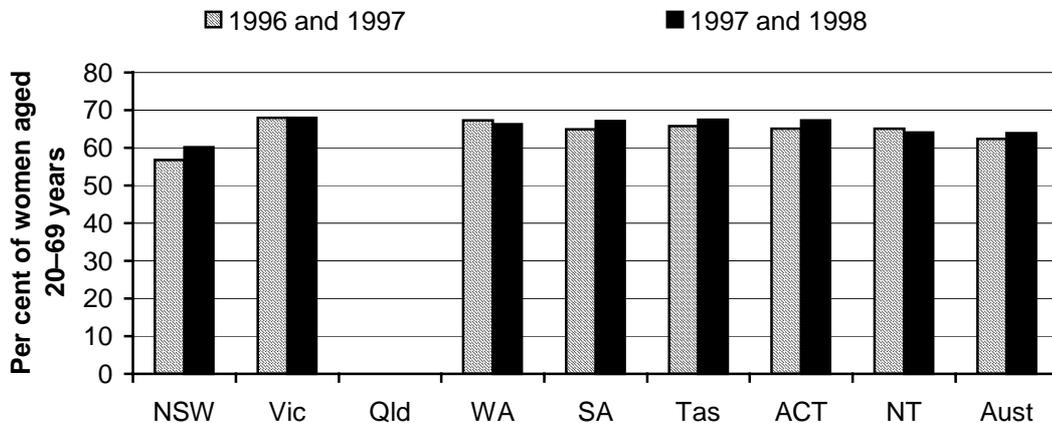
The National Cervical Cancer Screening Program is targeted at women aged 20–69 years. The screening interval is two years. Data for the 1998 and 1999 period will not be available until 2001. Figure 6.11 shows that in the 1997 and 1998 screening period, participation rates by women aged 20–69 years were highest in Victoria (68 per cent) and lowest in NSW (60 per cent). The Queensland Health Pap Smear Register did not start operating until February 1999, so no data were available for that State.

## **Appropriateness**

### *Chronic illness management — prescribing rates for mental illness*

General Practitioner prescribing rates for antidepressants and anxiolytics to people aged 15 years and over are reported here (figures 6.12 and 6.13). In 1998-99, Tasmania had the highest prescribing rates (599 scripts per 1000 people ordered by GPs for antidepressants and 346 scripts per 1000 people ordered by GPs for anxiolytics) and the NT had the lowest (206 and 57 respectively).

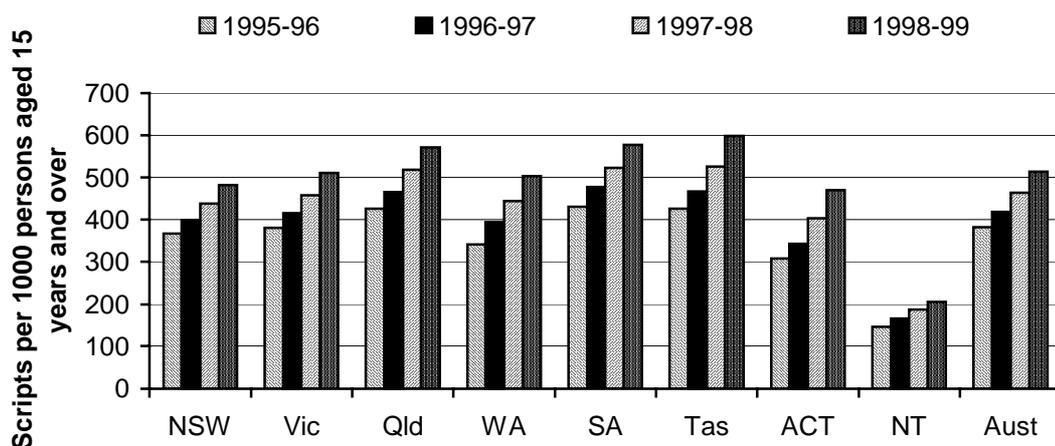
Figure 6.11 Participation rates of women aged 20–69 years in cervical cancer screening programs (per cent) <sup>a, b, c, d, e, f, g</sup>



<sup>a</sup> Rates are expressed per 100 000 women and are age standardised to the Australian 1991 population. <sup>b</sup> Rates cannot be calculated for women in the 85+ age group because hysterectomy fractions are not available for this age group. <sup>c</sup> Rates for Australia have been calculated excluding Queensland. <sup>d</sup> The NSW Register recently identified two laboratories had not been reporting Pap test data for women aged 70 years and over who were screened in 1997-98 is underestimated by approximately 10 per cent. <sup>e</sup> The Queensland Health Pap Smear Register did not start operating until February 1999. <sup>f</sup> All SA women aged 70 years or more are grouped together and for the purposes of this table they appear in the 70–74 age group. <sup>g</sup> The ACT register only registers women with an ACT address. <sup>h</sup> Participation rates differ from those published by the NT Pap Smear Register because the NT Pap Smear Register excludes Aboriginal women from the denominator. All women are included in the denominator here.

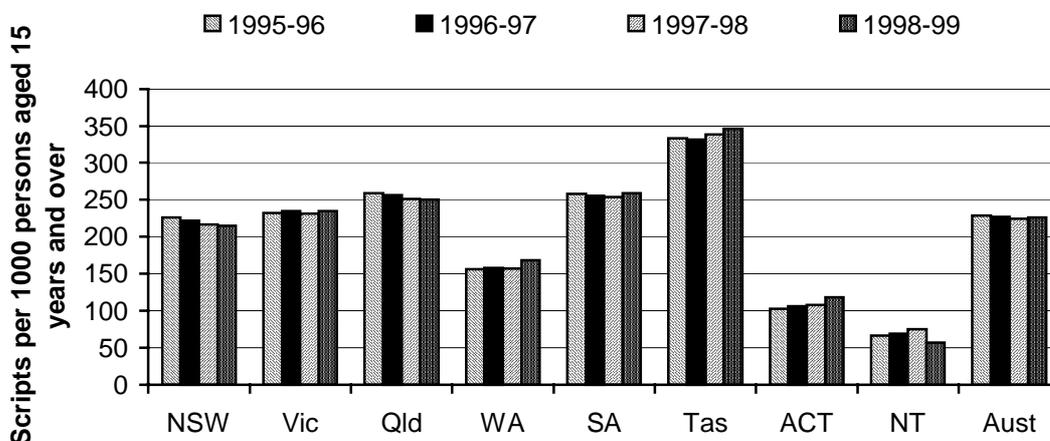
Source: table 6A.16.

Figure 6.12 Prescribing rates for antidepressants — GP ordered scripts per 1000 persons aged 15 years and over



Source: table 6A.17.

Figure 6.13 Prescribing rates for anxiolytics — GP ordered scripts per 1000 persons aged 15 years and over



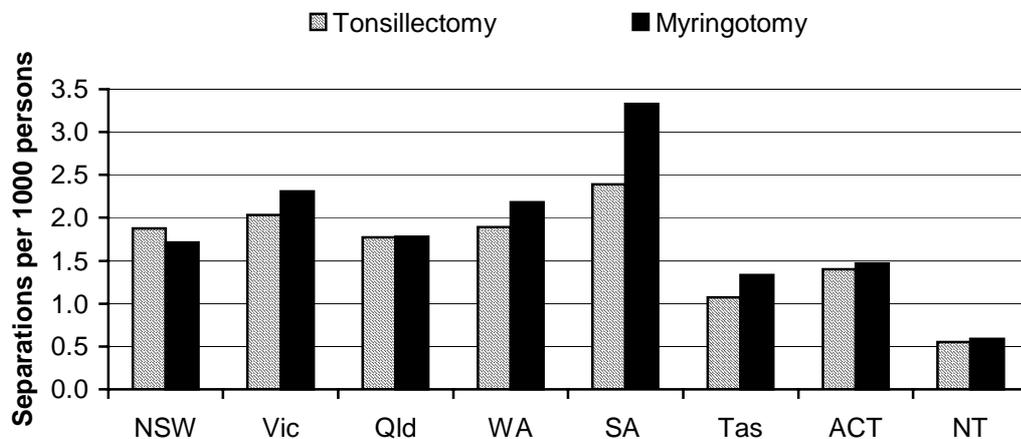
Source: table 6A.18.

### *Gatekeeping to secondary care*

Age and sex standardised separation rates for selected conditions often not requiring secondary treatment — myringotomy (insertion of grommets) for the treatment of acute otitis media in children and tonsillectomy (removal of tonsils) — are also indicators of the GP's role as the gatekeeper to secondary services. High separation rates may indicate that patients are not receiving appropriate care by GPs, because the conditions can often be managed at the primary care level, without recourse to surgical procedures.

For myringotomy, separation rates in 1998-99 were highest in SA (3.33 per 1000 people) followed by 2.31 per 1000 people in Victoria. The lowest separation rate was in the NT (0.59 per 1000 people). For tonsillectomy, similarly, separation rates in 1998-99 were highest in SA (2.39 per 1000 people) followed by 2.03 per 1000 people in Victoria. Again, the lowest separation rate was in the NT — 0.55 per 1000 people (figure 6.14 and table 6A.19). Comparability across jurisdictions and over time may be affected by differences in disease classification coding systems. In 1998-99, NSW, Victoria, the ACT and the NT define procedures using ICD-10-AM codes, whereas Queensland, WA, SA and Tasmania define procedures using ICD-9-CM codes.

Figure 6.14 Separation rates for selected conditions often not requiring secondary treatment, all hospitals, 1998-99<sup>a, b, c, d</sup>



<sup>a</sup> Separation rate was age and sex standardised to the Australian population at 30 June 1991. <sup>b</sup> Excludes multiple procedures during the same separation within the same sentinel group. <sup>c</sup> Excludes private hospitals in the NT. This may result in underreporting of procedure rates for some of the procedures. <sup>d</sup> NSW, Victoria, ACT and NT define procedures using ICD-10-AM codes. Queensland, WA, SA and Tasmania define procedures using ICD-9-CM codes.

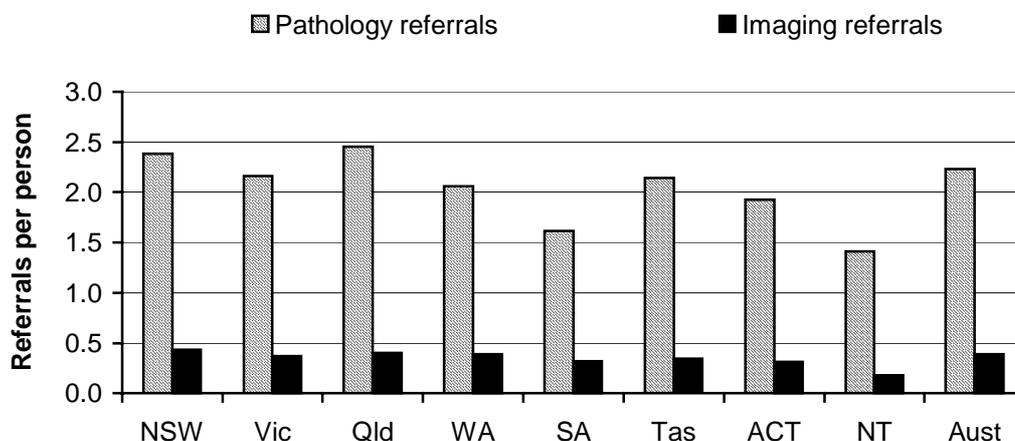
Source: table 6A.19.

### Prescribing and diagnosis

Per person benefits paid for GP-ordered pathology tests are used to report on the prescribing and diagnosis patterns of GPs. Differences across jurisdictions in the levels of benefits paid for pathology tests and diagnostic imaging ordered by GPs may indicate inappropriate use of these services in diagnosis and treatment. However, it is not possible to determine an appropriate benchmark level, and further exploration of these issues is necessary.

Figure 6.15 provides contextual information on referrals by GPs per person for pathology tests and diagnostic imaging in 1999-2000. The pathology data are for tests ordered through Medicare. Significant amounts of pathology (especially in SA) are ordered through State managed but Commonwealth funded health program grants. Hence, the data underestimate orders in some jurisdictions. For testing ordered through Medicare, Queensland had the highest rate of referrals for pathology testing (2.5 per person) and the NT the lowest (1.4). For diagnostic imaging, NSW had the highest number of referrals per person (0.4) and the NT had the lowest (0.2).

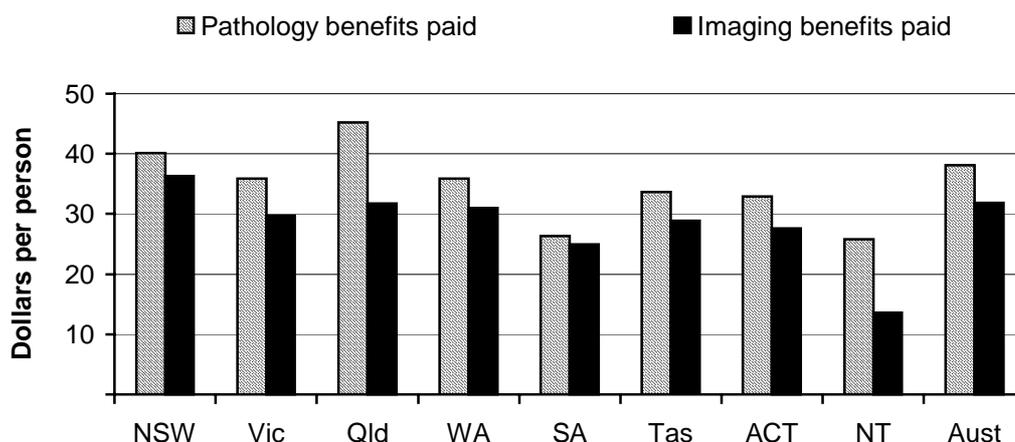
**Figure 6.15 Referrals per person for pathology tests and diagnostic imaging, 1999-2000**



Source: tables 6A.20 and 6A.21.

Overall, in 1999-2000 Commonwealth expenditure under Medicare on pathology tests was \$38.1 per person (an increase from \$35.5 per person in 1998-99) and on imaging was \$31.9 per person (an increase from \$31.7 per person in 1998-99). Figure 6.16 shows that benefits paid per person in 1999-2000 for pathology tests were highest in Queensland (\$45.2 per person) and lowest in the NT (\$25.8). Benefits paid per person for diagnostic imaging were highest in NSW (\$36.2) and lowest in the NT (\$13.6).

**Figure 6.16 Benefits paid per person for pathology tests and diagnostic imaging, 1999-2000**



Source: tables 6A.20 and 6A.21.

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## Quality

Three indicators of the quality of health care delivered by GPs are: the proportion of practices with electronic information management systems; the proportion of full time workload equivalent GPs with vocational registration; and the proportion of practices that are registered for accreditation.

### *The proportion of practices with electronic information management systems*

The proportion of practices with electronic information management systems is an indicator of quality which helps to identify the capacity for efficient handling of patient information, including management of screening and other preventive health activities, reminder systems, patient education, record management, data collection and analysis and practice business management (DHAC 2000a). Data on practices with electronic information management systems are available from the Practice Incentives Program (PIP).

The PIP structures payments to practices based on patients' ongoing health care needs rather than service volumes, promoting activities such as use of electronic information management systems (including prescribing software), after hours care and teaching medical students. While the PIP does not include all practices in Australia, PIP practices covered around 78 per cent of Australian patients (measured as standardised whole patient equivalents) in August 2000 (DHAC PIP Information Booklet).<sup>5</sup>

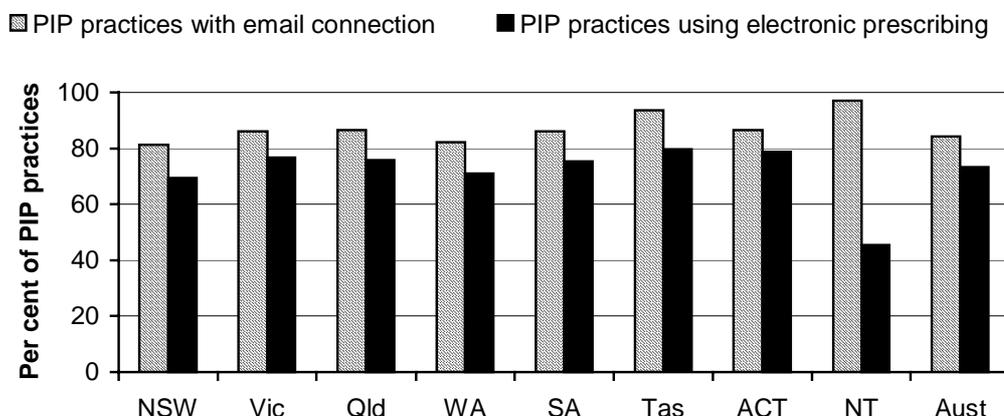
The data suggest that the proportion of PIP practices nationally that used electronic prescribing systems in August 2000 was 73 per cent (an increase from 51 per cent in August 1999) (table 6A.22). The proportion of PIP practices with an Internet connection or an e-mail account was 84 per cent in August 2000 (an increase from 68 per cent in August 1999) (table 6A.22).

At August 2000, PIP practices in Divisions of General Practice in the NT were most likely to have an e-mail connection and least likely to use electronic prescribing software (97 per cent and 45 per cent respectively). PIP practices in Divisions of General Practice in Tasmania were most likely to use electronic prescribing software (80 per cent) (figure 6.17 and table 6A.23).

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<sup>5</sup> A standardised whole patient equivalent is an indicator of practice workload based on the number of patients seen. A standardised whole patient equivalent is the sum of the fractions of care provided by doctors to their patients, weighted for the age and sex of each patient. Fractions of care are calculated by dividing the schedule fee value of all Medicare and Veterans' Affairs non-referred attendances provided by the doctor to the patient within the twelve month reference period, by the total schedule fee value of all non-referred attendances received by the patient within that reference period (DHAC unpublished).

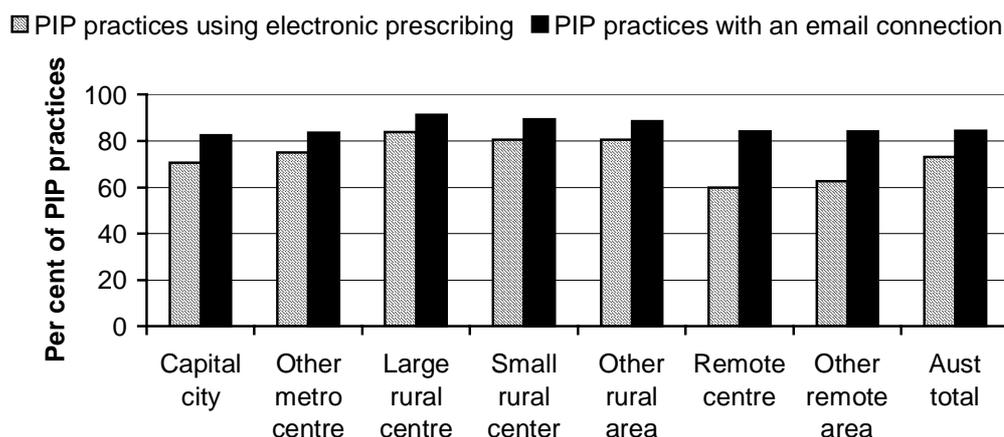
**Figure 6.17 Proportion of PIP practices using electronic prescribing systems or with access to the Internet, August 2000 (per cent)**



Source: table 6A.23.

PIP practices in rural areas were more likely to use electronic prescribing and be connected to the Internet in August 2000 than PIP practices in metropolitan areas or remote areas. PIP practices in remote areas were least likely to use electronic prescribing systems (figure 6.18 and table 6A.22). Remote practices in Indigenous communities in the NT have difficulty accessing the PIP which affects coverage of these data.

**Figure 6.18 Proportion of PIP practices using electronic prescribing software or with an email connection, August 2000 (per cent)<sup>a</sup>**



<sup>a</sup> Capital city – State and Territory capital city statistical divisions; Other metropolitan centre – one or more statistical subdivisions that have an urban centre with a population of 100,000 or more; Large rural centre – Statistical Local Areas (SLAs) where most of the population resides in urban centres with a population of 25,000 or more; Small rural centre – SLAs in rural zones containing urban centres with populations between 10,000 and 24,999; Other rural area – all remaining SLAs in the rural zone; Remote centre – SLAs in the remote zone containing populations of 5,000 or more; Other remote area – all remaining SLAs in the remote zone.

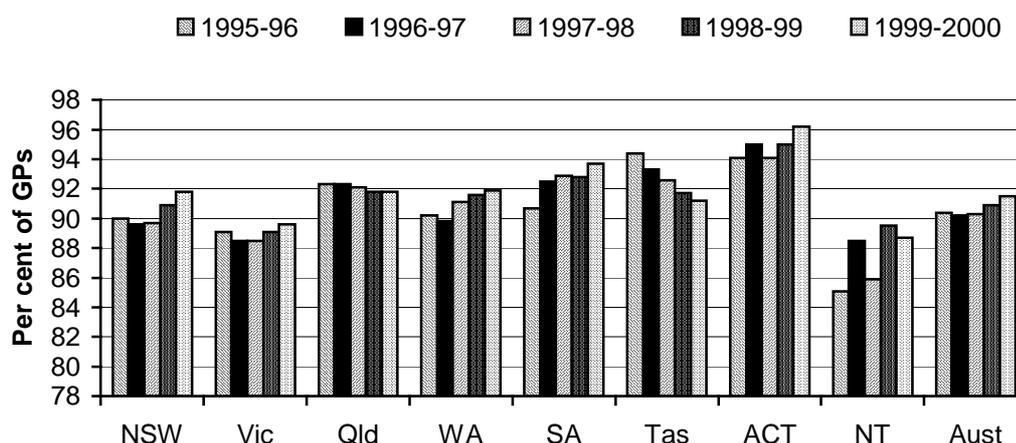
Source: table 6A.22.

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### Vocational registration

The proportion of full time workload equivalent GPs with vocational registration indicates the standard of appropriate training of GPs and their ability to deliver services of high quality. In 1999-2000, the ACT had the highest proportion (96 per cent) and the NT had the lowest proportion (89 per cent) (figure 6.19). While the proportion of full time workload equivalent GPs with vocational registration has increased Australia wide since 1996-97, this trend has not been experienced in all jurisdictions — most notably, in Tasmania (figure 6.19). The proportion of GPs with vocational registration is lower in remote centres and other remote areas (table 6A.25).

Figure 6.19 **Share of GPs with vocational registration (full time workload equivalent)**



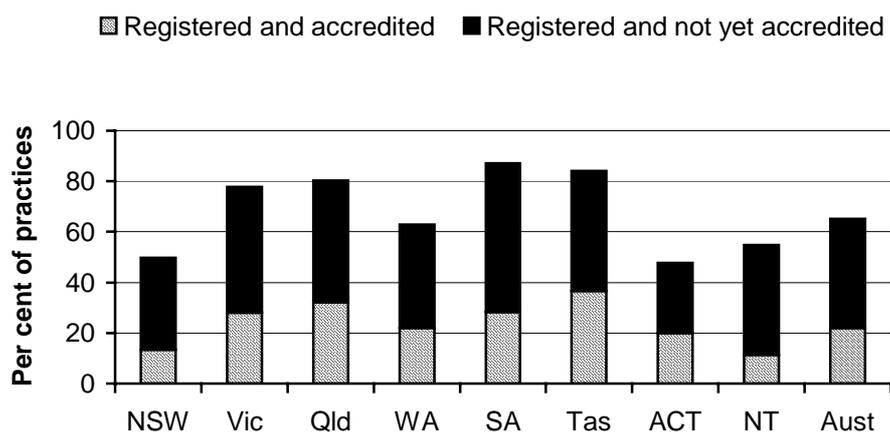
Source: table 6A.24.

### Accreditation

Accreditation of practices is a systematic way to help identify quality in general practice and to provide GPs with a framework for improving their practices over time. There are two agencies providing general practice accreditation services: Australian General Practice Accreditation Limited (AGPAL), which oversees a peer review process to assess general practices against the Royal Australian College of General Practitioners Standards for General Practices; and General Practice Australia. The latter is a for-profit private company and details of the scope of its activities are not available publicly. Australian General Practice Accreditation Limited data suggest that, at 11 August 2000, 3864 practices throughout Australia (65 per cent of all practices) were registered for accreditation with Australian General Practice Accreditation Limited. This compares with nearly 50 per cent in

October 1999. More than 80 per cent of practices were registered for accreditation in Queensland, SA and Tasmania in August 2000. The ACT had the lowest rate of registration for accreditation in August 2000 (around 48 per cent) (figure 6.20).

Figure 6.20 **Proportion of practices registered for accreditation with AGPAL, August 2000 (per cent)**



Source: table 6A.26.

## Access and equity

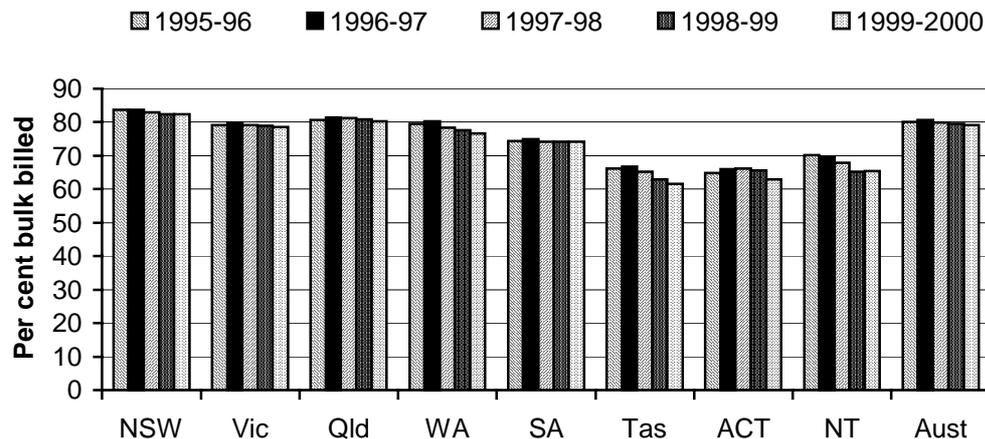
Three indicators are used to measure access and equity in GP service delivery: the proportion of total non-specialist unreferred attendances that are bulk billed; the number of full time workload equivalent GPs in rural/remote areas; and the proportion of full time workload equivalent GPs who are female.

### *Unreferred attendances that are bulk billed*

The proportion of total non-specialist unreferred attendances that are bulk billed indicates the affordability of GP services. Under Medicare, clients may pay the GP's consultation fee and seek reimbursement from the Commonwealth Government, or the GP may bill the Government directly and reduce out-of-pocket costs for patients. A high proportion of bulk billed services indicates a greater level of affordability. Visits to GPs are classed as unreferred attendances under Medicare, and these are further disaggregated into services provided by vocationally registered GPs and those provided by OMPs who are not vocationally registered. In 1999-2000, Tasmania had the lowest proportion of attendances that were bulk billed (62 per cent) and NSW had the highest (82 per cent). Australia-wide, the proportion was 79 per cent (figure 6.21).

Bulk billing rates are generally lower in rural areas and remote centres than in capital cities (table 6A.28).

Figure 6.21 **Unreferred attendances to GPs that were bulk billed as a proportion of all unreferred attendances (per cent)**



Source: table 6A.27.

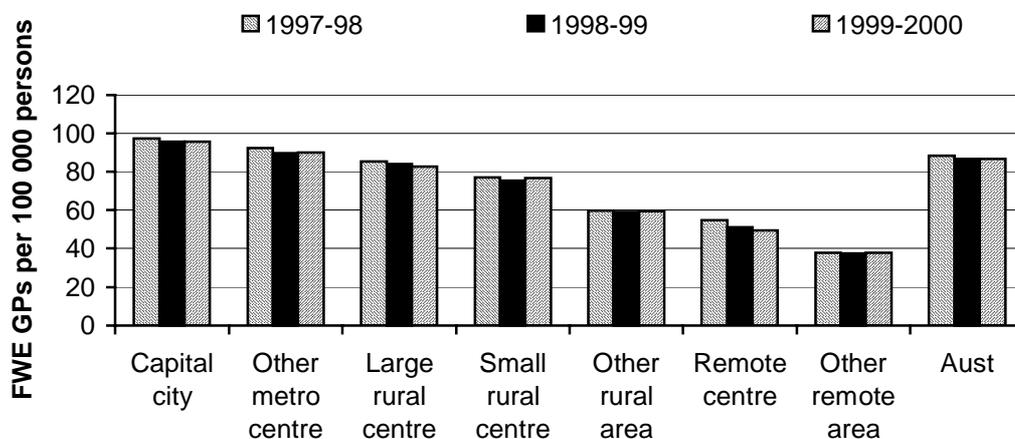
#### *Full time workload equivalent GPs in rural/remote areas*

Another important access issue is the ability of people in nonmetropolitan areas to access primary health care services provided by GPs. Commonwealth, State and Territory governments provide incentives for the recruitment and retention of GPs in rural and remote areas.

Many rural GPs provide a wide range of services in their own practices and in the public hospital system, including consultations, anaesthetics, obstetrics, psychiatric triage, emergency medicine, and relatively complex trauma procedures and operations. The comparatively low number of rural GPs per person means that they are often stretched in responding to their community's physical and mental health care needs (figure 6.22).

In 1999-2000 there were 87 full time workload equivalent GPs per 100 000 people in Australia — 96 per 100 000 in capital cities, 50 per 100 000 in remote centres and 38 in other remote areas (figure 6.22). The number of GPs per person by region has not changed substantially since 1997-98, except in remote centres, where the number of GPs per 100 000 people has fallen from 55 to 50.

Figure 6.22 Full time work load equivalent GPs per 100 000 people by region<sup>a</sup>



<sup>a</sup> Capital city – State and Territory capital city statistical divisions; Other metropolitan centre – one or more statistical subdivisions that have an urban centre with a population of 100,000 or more; Large rural centre – Statistical Local Areas (SLAs) where most of the population resides in urban centres with a population of 25,000 or more; Small rural centre – SLAs in rural zones containing urban centres with populations between 10,000 and 24,999; Other rural area – all remaining SLAs in the rural zone; Remote centre – SLAs in the remote zone containing populations of 5,000 or more; Other remote area – all remaining SLAs in the remote zone.

Source: table 6A.29.

### Full time workload equivalent GPs who are female

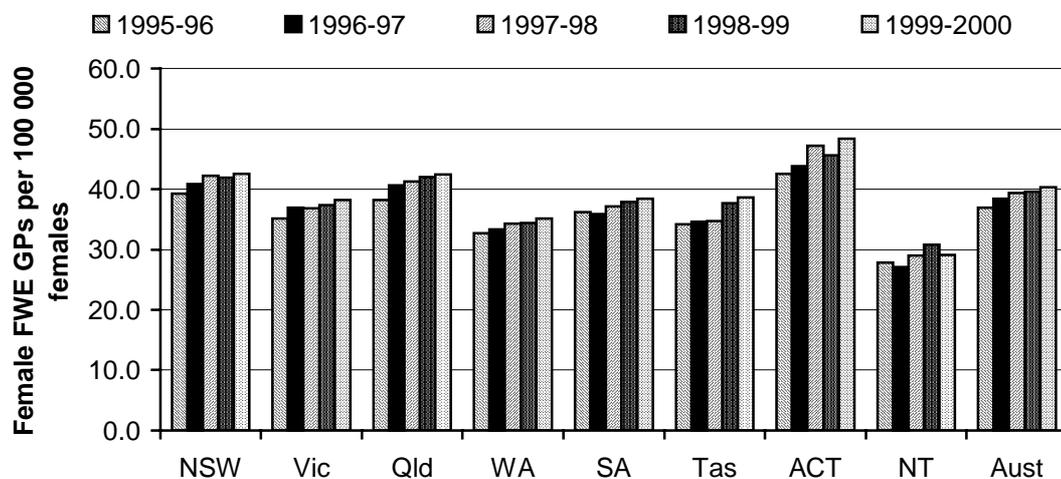
The final access indicator relates to full time workload equivalent GPs who are female per 100 000 females. This indicator differs from that presented last year which was female full time workload equivalent GPs as a proportion of all full time workload equivalent GPs. As a measure of access, this recognises that some female patients may be uncomfortable discussing health matters with a male GP. The number of female GPs per 100 000 females Australia wide has steadily increased from 37 in 1995-6 to 40 in 1999-2000. By contrast, in 1999-2000, there were 130 male GPs per 100 000 males. The ACT had the highest number of female full time workload equivalent GPs per 100 000 females (48) and the NT had the lowest (29) in 1999-2000 (figure 6.23).

## Efficiency

### Unit cost

It is an objective of the Review to report comparable estimates of costs. Comparability is maximised when the full range of costs to government is counted on a comparable basis. Where the full costs cannot be counted, comparability is achieved by estimating costs on a consistent basis.

Figure 6.23 Female full time workload equivalent GPs per 100 000 females



Source: table 6A.30.

The cost to government of total unreferred attendances to GPs per person is the only suggested efficiency indicator for GP services at this stage. This indicator should be interpreted with care, however, as a higher cost per person may reflect service substitution between primary care and acute hospital services or specialist services (the latter both potentially higher cost than primary care).

Nationally, the annual cost per person in 1999-2000 was \$128 (figure 6.2 and table 6A.3). Commonwealth expenditure in that year was highest in NSW and SA (\$136 and \$130 per person respectively) and lowest in the NT (\$66 per person). Since 1984-85, the real cost to the Commonwealth Government was highest in 1995-96 (\$132 per person) (figure 6.2 and table 6A.3).

## 6.5 Future directions

The key challenges for the Steering Committee in future years are to: improve the reporting of GP services delivered to special needs groups, especially Indigenous people; and improve the reporting of indicators in the performance indicator frameworks.

### Provision of GP services to people with special needs — Indigenous people

As noted in chapter 2, the Steering Committee decided to improve the reporting of Indigenous people's access to mainstream services. The discussion earlier in this chapter highlighted that GPs provide a diverse range of activities including

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identifying, treating and assisting in the ongoing management of health care problems, and with providing referrals to other secondary health care providers. Commonwealth, State and Territory government support for this role is not inconsiderable, accounting for approximately \$6.9 billion of recurrent expenditure in 1997-98. Yet estimates from Deeble *et al.* (1998) suggest that per person expenditure on Medicare services on non-Indigenous Australians is approximately five-times that expended on Indigenous Australians (table 5A.69). There is little other evidence of the level and type of services provided by GPs to Indigenous Australians. This represents a large gap in the understanding of Indigenous people's access to health services.

In future, the Review will seek to report against the access indicators endorsed by the Australian Health Minister's Advisory Council as part of the National Performance Indicators for Aboriginal and Torres Strait Islander Health (see 'Policy developments').

### **Existing indicators and framework**

There are a number of gaps remaining in the reporting framework relating to appropriateness. These include the reporting of:

- acute illness management (separation rates for selected acute illnesses, such as severe ear, nose and throat infections, cellulitis, kidney/urinary tract infection and gastroenteritis);
- chronic illness management (separation rates for selected chronic illnesses, such as asthma, diabetes, and epilepsy); and
- prescribing and diagnosis (per person benefits for pharmaceuticals).

For each indicator, there is no benchmark to determine what constitutes an appropriate rate. Similarly, there is no benchmark for an appropriate level of prescribing rates for antidepressants and anxiolytic drugs.

There are several health care providers participating in the National Cervical Cancer Screening program. Data are presented on the participation rate of women in cervical cancer screening, but what is not clear is the relative contribution of GPs in the provision of screening.

It is the objective of the Review to improve the reporting of these indicators in the future.

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## Quality

No routinely collected data relating to patient satisfaction as an indicator of the quality of GP services are available at present. Definitional problems surrounding this indicator still exist (box 6.2). Nevertheless, patients' views of, or complaints about, medical practice could be used as a proxy measure of dissatisfaction.

### Box 6.2 Measuring satisfaction in general practice

A report prepared by Hill and Draper (1995) for the Consumers' Health Forum explored the strengths and weaknesses of a range of consumer feedback mechanisms in general practice. A number of projects funded by the General Practice Evaluation Program sought to develop consumer satisfaction surveys that could be used as a surrogate measure of quality. The fact that most of these surveys found a high level of satisfaction caused some concern within the consumer group, not because consumers were generally not satisfied with general practice, but because this result meant that the mechanism could not contribute to an ongoing quality improvement process.

As Hill and Draper note, while satisfaction is an important issue, it is more important to discuss what troubles consumers and what causes dissatisfaction. They quote research showing that even small expressions of dissatisfaction translate into important factors affecting behaviour related to health care.

Some practical suggestions for improving satisfaction surveys included:

- asking about experiences rather than seeking judgements;
- conducting interviews rather than asking people to complete pre-coded questionnaires; and
- using discussion groups to develop questionnaires.

Finally it was recommended that feedback from surveys not be seen as a substitute by consumers in the planning and evaluation of service delivery.

While the quality movement is some way from the development of criteria for such a complex process, preliminary work has been undertaken to clarify and document consumer values and experiences.

*Source:* Hill and Draper (1995).

Patient safety is another potentially important source of quality data for general practice. There are no Australia-wide data available on the prevalence of harmful incidents in general practice, although some work has been done on the types of incidents occurring (box 6.3). The Steering Committee is hopeful that progress will be made in both these areas to enable future reporting.

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**Box 6.3      Analysing potential harm in Australian general practice: an incident monitoring study**

Between October 1993 and June 1995, a study was conducted in Australia to collect data on incidents of potential or actual harm to general practice patients and to evaluate the possible causes of these incidents.<sup>6</sup> A non random sample of 324 GPs participated in the study and submitted 805 incident reports.

According to the results, 76 per cent of the incidents reported were considered preventable and 27 per cent had potential for severe harm. Major immediate consequences were reported in 17 per cent of incidents and 4 per cent resulted in the patient's death.

Incidents were grouped into pharmacological, non-pharmacological, diagnostic and equipment. Pharmacological incidents (such as use of inappropriate drugs, prescription error or administering error) were the most frequent and largely preventable (51 per 100 incidents). In contrast, diagnostic events (such as missed or delayed diagnosis) were less preventable and potentially more harmful (34 per 100 incidents). Of the 38 deaths reported, 30 involved a diagnostic incident.

Ineffective communication was a frequent contributing factor, with patients with mental health problems or poor or no English language skills particularly at risk.

While the study does not indicate the prevalence of incidents of potential or actual harm to general practice patients, it demonstrates some of the types of incidents occurring in Australian general practice. Limitations to the validity of the data include the non random sample, limited recognition of incidents, selectivity in reporting incidents and the lack of an alternative perspective (such as the patient's view).

*Source:* Bhasale, A., Miller, G., Reid., S., Britt, H. (1998) Analysing potential harm in Australian general practice: an incident monitoring study, *Medical Journal of Australia*, V 169, 20 July, p.73.

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<sup>6</sup> An incident was broadly defined as 'an unintended event, no matter how seemingly trivial or commonplace, that could have harmed or did harm a patient'. This criterion included near misses where the harm may have been averted but the potential for harm existed.

## 6.6 Definitions

Table 6.6 Terms

<i>Term</i>	<i>Definition</i>
Age standardised	Removing the effect of different age distributions (across jurisdictions or over time) when making comparisons, calculated by weighting the age-specific rates for each jurisdiction by the national age distribution.
Ambulatory services	Services provided by an acute care hospital to non-admitted patients.
Casemix adjustment	Adjustment of data on cases treated to account for the number and type of cases. Cases are sorted into diagnosis related groups that represent a class of patients with similar clinical conditions requiring similar hospital services.
Community health services	Health services for individuals and groups delivered in a community setting, rather than in hospitals or private facilities.
Consultations	The different types of services provided by GPs.
Divisions of general practice	Geographically based networks of GPs who provide peer support and promote links with the local community and other health professionals. In 1998, there were 123 Divisions in Australia. The Divisions of General Practice Program (DGPP) evolved from the former Divisions and Projects Grants Program established in 1992. Priorities include providing infrastructure to link GPs with government and other health service providers and the recruitment and the retention of GPs in rural areas. Around \$64 million was provided by the Commonwealth in 1998-99 under the DGPP (DHAC 2000a, p.266).
Full time workload equivalents	A measure of medical practitioner supply based on claims processed by Medicare in a given period. The calculation is made by dividing the practitioner's Medicare billing by the mean billing of full time practitioners for that period. Full time equivalents (FTEs) are calculated in the same way as full time workload equivalents.
General practice	The organisational structure in which one or more GPs provide and supervise health care for a 'population' of patients. This definition includes medical practitioners who work solely with one specific population such as women's health and Indigenous health.
General practitioner	Medical practitioners who, for the purposes of Medicare, are vocationally registered under section 3F of the <i>Health Insurance Act 1973</i> (Cwlth), hold fellowship of the Royal Australian College of General Practitioners or equivalent, or hold a recognised training placement.
Health management	An ongoing process beginning with initial client contact and including all actions relating to a client. Includes assessment/evaluation; education of the person, family or carer(s); diagnosis and treatment; and problems associated with adherence to treatment; and liaison with or referral to other agencies.
Other medical practitioner	A medical practitioner other than a recognised general practitioner who has at least half of the schedule fee value of his/her Medicare billing from 'other non-referred attendance items'.
Other specialist	A medical practitioner not classified as general practitioner, other medical practitioner or recognised specialist who undertakes a majority of specialist work, but who is not formally recognised as a specialist by Medicare. Also includes specialists with recognition in one field but working in an unrelated field.

(continued next page)

**Table 6.6 (continued)**

Pap smear	A procedure for the detection of cancer and pre-cancerous conditions of the female genital tract.
Primary care	Essential health care based on practical, scientifically sound and socially acceptable methods made universally accessible to individuals and families in the community.
Prevalence	The proportion of the population suffering from a disorder at a given point in time (point prevalence) or during a given period (period prevalence).
Preventive interventions	Programs designed to decrease the incidence, prevalence and negative outcomes of disorders.
Public health	The organised, social response to protect and promote health and to prevent illness, injury and disability. The starting point for identifying public health issues, problems and priorities, and for designing and implementing interventions, is the population as a whole or population subgroups. Public health is characterised by a focus on the health of the population (and particular at-risk groups) and complements clinical provision of health care services.
Psychiatrist	Medical practitioner with specialist training in psychiatry.
Reasons for encounter	The expressed demand of the patient for care as perceived and recorded by the GP.
Recognised general practitioner	A vocationally registered general practitioner, a Fellow of the Royal Australian College of General Practitioners or equivalent, or a general practice registrar in a training placement.
Recognised immunisation provider	A provider recognised by the Health Insurance Commission as a provider of immunisation to children.
Recognised specialist	A medical practitioner classified as a specialist on the Medicare database earning at least half of his/her income from relevant specialist items in the schedule, having regard to the practitioner's field of specialist recognition.
Screening	The performance of tests on apparently well people to detect a medical condition at an earlier stage than would otherwise be possible without the test.
Unreferred attendances	GP services, emergency attendances after hours, other prolonged attendances, group therapy and acupuncture. All attendances for specialist services are excluded as these must be 'referred' to receive Medicare reimbursement.
Vocational registration	A formal training program that promotes quality in general practice. Vocationally registered GPs are registered separately from other non-specialist practitioners for Medicare purposes, and receive higher Medicare benefits for services.

**Table 6.7 Indicators**

<i>Indicator</i>	<i>Definition</i>
Immunisation coverage	A generic term indicating the proportion of a target population that is fully immunised with a particular vaccine or the specified vaccines from the Australian Standard Vaccination Schedule for that age group.

(continued next page)

**Table 6.7 (continued)**

<i>Indicator</i>	<i>Definition</i>
Fully immunised at 12 months	A child that has completed three doses of Diphtheria, Tetanus, Pertussis containing vaccine, three doses of Oral Polio Vaccine, three doses of HbOC (HibTITER) (or two doses of PRP-ONP (PedvaxHIB)) and one dose of measles, Mumps, Rubella.
Fully immunised at 24 months	A child that has received four doses of Diphtheria, Tetanus, Pertussis containing vaccine, three doses of Oral Polio Vaccine, four doses of HbOC (HibTITER) (or three doses of PRP-ONP (PedvaxHIB)) and one dose of Measles, Mumps, Rubella.
Notifications of selected childhood diseases	Number of cases of measles, pertussis and Haemophilus influenzae type b notified by State and Territory health authorities.
Cervical cancer screening rates for target population	Proportion of women screened against cervical cancer in the age group 20–60 years.
Prescribing rates for mental illness	Number of GP scripts per 1000 persons for anti depressants and anxiolytics.
Standardised separation rates for selected conditions often not requiring secondary treatment	Age and sex standardised hospital separation rates for myringotomy and tonsillectomy.
Standardised separation rates for selected conditions often requiring secondary treatment	Age and sex standardised hospital separation rates for hip replacements, lens insertion and angioplasty.
Per person benefits paid for GP-ordered pathology	Total benefits paid for pathology tests ordered by GPs divided by the population.
Per person benefits paid for GP-ordered diagnostic imaging	Total benefits paid for diagnostic imaging tests ordered by GPs divided by the population.
Proportion of practices with electronic information management systems	Number of practices with electronic prescribing and/or electronic connectivity, registered under the Practice Incentive Program, divided by the total number of practices registered.
Proportion of practices registered for accreditation	Number of practices that have registered for accreditation through Australian General Practice Accreditation Limited divided by the total number of practices in the Divisions of General Practice.
Proportion of GPs with vocational registration	Number of full time workload equivalent GPs who are vocationally registered divided by the total number of full time workload equivalent GPs.
Non-specialist attendances that are bulk billed	Number of unREFERRED attendances that are bulk billed and provided by non-specialist medical practitioners divided by the total number of unREFERRED attendances.
Non-specialist medical practitioners by region	Number of full time workload equivalent non-specialist medical practitioners practising in capital cities, other metropolitan centres and rural/remote areas, divided by the total number of FWE non-specialists.
Proportion of GPs who are female	Number of all full time workload equivalent GPs who are female divided by the total number of full time workload equivalent GPs.
Cost to government per unREFERRED attendance	Cost to the Commonwealth Government of total unREFERRED attendances by non-specialist medical practitioners per 1000 population.

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## 7 Health management issues

Health management is concerned with the management of diseases, illnesses and injuries using a variety of services (promotion, prevention/early detection and intervention) in a variety of settings (for example, public acute hospitals, community health centres and general practice). This chapter reports on the management of breast cancer and mental health, and represents only some of the activities of Commonwealth, State and Territory governments in health management.

An overview of health management is provided in section 7.1. Sections 7.2 and 7.3 report on the performance of breast cancer and mental health management respectively. Section 7.4 outlines the future directions for the chapter, and jurisdictions' comments in respect of all the health chapters are summarised in section 7.5. Definitions are listed in section 7.6.

Performance data are presented for the management of breast cancer and mental illness for the third time in this year's Report. A number of improvements have been made for this report, including:

- reporting the interval cancer rate, the ratio of benign to malignant biopsies, and the ratio of conservative surgery to radical surgery for breast cancer; and
- expanded reporting of outcomes data for Indigenous people for mental health.

### *Supporting tables*

Supporting tables for chapter 7 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as \Publications\Reports\2001\Attach7A.xls and in Adobe PDF format as \Publications\Reports\2001\Attach7A.pdf.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 7A.3 is table 3 in the electronic files). They may be subject to revision. The most up-to-date versions of these files can be found on the Review web page ([www.pc.gov.au/service/gsp/2001/](http://www.pc.gov.au/service/gsp/2001/)). Users without Internet access can contact the Secretariat to obtain up-to-date versions of these tables (see details on the inside front cover of the Report).

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## 7.1 Overview of health management

Some fundamental changes have taken place in the Australian health care system in recent years. Policy makers are seeking alternative service delivery settings and a more coordinated approach to managing health problems. The growing interest in preventative care, for example, has given prominence to community based health services. The ability of governments to improve particular health outcomes is maximised when health care providers integrate their promotion, prevention, early detection and intervention services. Measuring the management of a health problem involves measuring the performance of service providers and the management of prevention/early detection and intervention programs.

Breast cancer and mental illness are significant causes of morbidity and mortality in Australia. Cancer control and mental health are identified by governments as National Health Priority Areas, along with diabetes mellitus, cardiovascular health, injury prevention and the control of asthma. These areas represent a significant proportion of the burden of illness in Australia, and their management offers considerable scope for reducing this burden (AIHW 1998a).

Appropriate management of breast cancer and mental health will have a large effect on the health and wellbeing of many Australians. Both are the subjects of public health programs designed to improve community awareness (box 7.1). Public health programs require the participation of public acute care hospital services, community health services and general practice services. (The public acute care hospital and general practice components of the health care system are discussed in chapters 5 and 6 respectively.)

The 'Health preface' of this Report outlines the complexities of reporting on the performance of the health system in meeting its objectives. This Report breaks the health system into smaller components and reports on their performance (see figure C.4 of the 'Health preface'). Frameworks for public hospitals and GPs report the performance of particular service delivery mechanisms. The appropriateness of the mix of services (prevention versus intervention) and the appropriateness of the mix of delivery mechanisms (hospital based versus community based) are indicated in this chapter.

A longer term goal of the Review is to extend the health management framework to other health issues, such as the remaining National Health Priority Areas (that is, cardiovascular health, diabetes mellitus, asthma and injury prevention and control). These priorities focus government attention on areas where a concerted effort could achieve significant gains in the health of the nation. The Commonwealth, States and Territories report a limited number of priority indicators, encompassing the continuum of care (from prevention through to treatment, rehabilitation and

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palliation) for each area on a regular basis (AIHW 2000a). The first report on injury prevention and control was released in 1998, and reports for cardiovascular health, diabetes mellitus and mental health were released in 1999. A report on asthma is to be produced in 2001. National reports for the Cervical Screening Program and BreastScreen Australia were published in 1998, 1999 and 2000.

### **Box 7.1 Public and community health**

Public health is defined as the organised social response to protect and promote health and to prevent illness, injury and disability. The starting point for identifying public health issues, problems and priorities, and for designing and implementing interventions, is the population as a whole or population subgroups. All jurisdictions perform public health services or undertake programs to enhance the health of the population. Activities provided and classified as 'public health' are grouped under four headings:

- promotion of health (for example, public campaigns designed to improve nutrition);
- protection against hazards (for example, surveillance of food premises and control of water and air quality through legislation or regulation);
- prevention and early detection of illness (for example, child immunisation and breast and cervical cancer screening services); and
- provision of health services (for example, school dental services and drug and alcohol treatment services).

Promotion and protection activities are often referred to as 'population public health' activities because they are delivered to populations rather than to individuals. Prevention and provision activities are termed 'public health personal clinical activities'.

This Report focuses on public health activities related to promotion, prevention and provision activities. (Most protection activities are not the responsibility of health care providers and therefore are not included in the analysis.) Public health efforts currently target areas including communicable diseases (such as HIV/AIDs and tuberculosis), childhood immunisation, and the National Health Priority Areas.

Many public health activities are delivered by a range of health care providers — general practitioners (GPs), public hospitals and community health services. General practitioners and public acute care hospitals provide a range of services in addition to these public health services, whereas community health services concentrate on health promotion, early detection of health problems, and the assessment and care of health problems. Community health care services are diverse by nature, incorporating a range of service providers (dietitians, community nurses, psychologists and so on). This multi-disciplinary approach makes it difficult to attribute health outcomes to a particular service or provider.

*Sources:* AIHW (1998a); Fry (1994) and NPHP (1997).

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## 7.2 Breast cancer

### Profile

#### Definition

Breast cancer is a disease whereby uncontrolled, or malignant, cell division leads to the formation of a tumour or tumours in a woman's breast (box 7.2).<sup>1</sup> Tumours may expand locally by invasion of surrounding tissue or may spread via the lymphatic or vascular systems to the rest of the body. If left untreated, most malignant tumours eventually result in the death of the affected person (AIHW 2000b). The focus of this Report is on malignant cancers, although some data are reported on the size and grade of *ductal carcinoma in situ* (non-invasive tumours residing in the ducts of the breast).

**Box 7.2 Some common health terms used in breast cancer management**

**Health management:** the ongoing process beginning with initial client contact and including all actions relating to the client. Included are assessment/evaluation, education of the person, family or carer(s), diagnosis and treatment. Problems associated with adherence to treatment and liaison with or referral to other agencies are also included.

**Incidence rate:** the proportion of the population suffering from a disorder or illness for the first time during a given period (often expressed as per 100 000 persons).

**Invasive cancer:** a tumour whose cells invade healthy or normal tissue.

**Prevalence:** the number of cases of a disease present in a population at a given time (point prevalence) or during a given period (period prevalence).

**Screening:** the performance of tests on apparently well people to detect disease at an earlier stage than would otherwise be the case.

Breast cancer is not amenable to practical prevention, so the focus of breast cancer control is on screening to enable early detection and intervention as this increases the probability of survival. Screening is undertaken through the national breast cancer screening program, BreastScreen Australia. The most effective means of detecting breast cancer at an early stage is by mammography screening every two years. Evidence has shown that for women aged from 50 to 69, this substantially reduces the lifetime risk of dying from the disease.

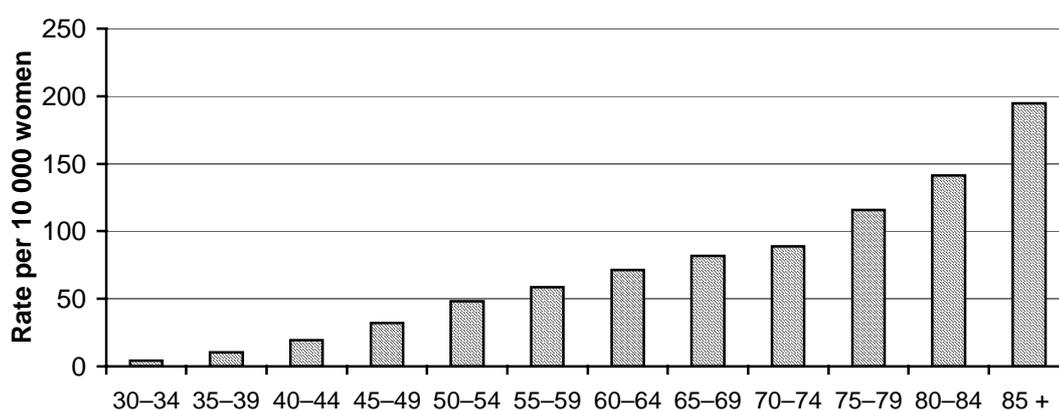
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<sup>1</sup> The Report does not examine breast cancer in males which is very rare.

Cancers detected early may be treated more conservatively, and such patients generally have a higher likelihood of recovery. Because age is the most significant risk factor, the joint Commonwealth–State BreastScreen Australia program targets women aged from 50 to 69 years, although women aged 40 to 49 years and those over 70 years may also use the service. The program aims to achieve a participation rate of 70 per cent among women aged 50 to 69 years.

The strong relationship between age and the mortality rate from breast cancer for the period 1995 to 1998 is shown in figure 7.1. Whereas women aged 40 to 44 years have a mortality rate of 19.1 per 100 000 women, those in the target age group, 50 to 69 years, have an age standardised mortality rate rate of 63.9 while women aged 75 to 79 have a mortality rate of almost 115.7 per 100 000 women.

Figure 7.1 **Age-specific and age-standardised mortality rates from breast cancer, by age group, 1995–1998<sup>a</sup>**



<sup>a</sup> Rates were age standardised to the Australian 1991 population.

Source: table 7A.14.

### *Incidence and prevalence*

Breast cancer was the most common cancer affecting Australian women, with over 10 000 new cases diagnosed in 1997 (AIHW 2000b). It was responsible for approximately 2600 deaths, making it the most frequent cause of death from cancer for females (ABS 1999). The risk of a woman developing breast cancer before the age of 75 years for the period 1992–96 was one in 12 in Australia (AIHW *et al.* 1999).

Almost 120 000 new cases of breast cancer were diagnosed in Australian women between 1982 and 1997 (table 7A.1). Over this period, the average annual growth rate in the number of new cases was 4.7 per cent. The number of new cases per year increased steadily from 7943 in 1992 to 9951 in 1995, fell to 9556 in 1996 and grew

again to 10 257 in 1997 (table 7.1 and table 7A.1). The increase in the number of cases detected reflects both an increase in the underlying rate of breast cancer as well as the detection of cancers that would have previously gone undetected for some years (AIHW 2000b).

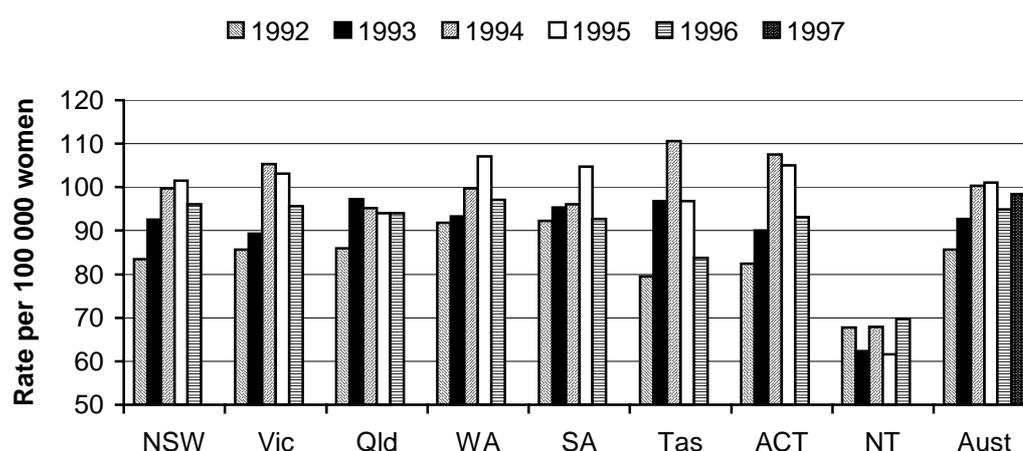
**Table 7.1 New cases of breast cancer**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1992	2 709	2 054	1 326	751	766	203	100	34	7 943
1993	3 051	2 173	1 551	779	795	245	115	29	8 738
1994	3 331	2 607	1 571	843	820	287	140	43	9 642
1995	3 462	2 602	1 603	937	912	255	147	33	9 951
1996	3 352	2 444	1 661	875	820	224	134	46	9 556
1997	3 516	2 609	1 886	935	889	233	140	49	10 257

Source: table 7A.1.

Age standardised incidence rates of breast cancer are presented in figure 7.2 and table 7A.2. (Age standardisation eliminates differences in population age distributions between jurisdictions to allow valid comparisons of similar age cohorts across jurisdictions.) The Australian incidence rate increased from 69.9 per 100 000 in 1982, to a high of 101.1 in 1995, before declining to 98.5 in 1997. The rate in the NT was substantially lower than in other jurisdictions with 69.8 cases per 100 000 women in 1996. (Age standardised incidence rates by jurisdiction for 1997 were unavailable in time for publication of this Report.)

**Figure 7.2 Age-standardised incidence rates of breast cancer, women of all ages<sup>a</sup>**

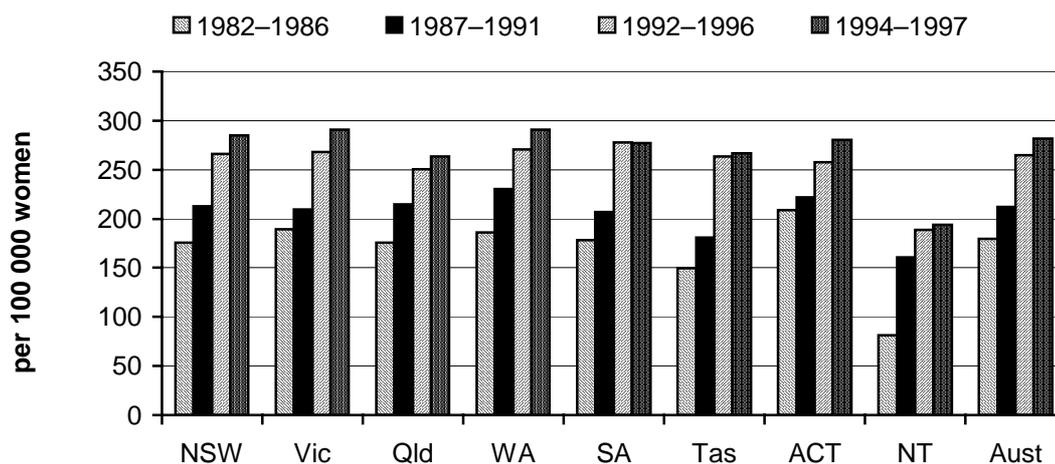


<sup>a</sup> Rates are expressed per 100 000 women and are age standardised to the Australian 1991 Population Standard.

Source: table 7A.2.

Age standardised incidence rates of breast cancer for women aged from 50 to 69 years for four periods, from 1982–86 to 1994–97, are shown in figure 7.3. Using annual data, the rate increase for Australia averaged 3.1 per cent per year between 1982 and 1996 (AIHW *et al.* 1999).

Figure 7.3 **Age standardised incidence rates of breast cancer, women aged 50–69 years<sup>a</sup>**



<sup>a</sup> Rates are expressed per 100 000 woman years and are age standardised to the Australian 1991 Population Standard.

Source: table 7A.3.

For women aged from 40 to 49 years the average annual growth rate in the incidence of breast cancer between 1982 and 1996 was 1.6 per cent, for women aged 70 plus years 1.7 per cent, while for women aged 15 to 39 it was 0.2 per cent (AIHW *et al.* 1999).

### Size of the sector

There is a significant amount of data available in relation to breast cancer screening, however, data in relation to the management and treatment of breast cancer is less readily available. BreastScreen Australia provides breast cancer screening and assessment services up to the point of diagnosis and referral for treatment. Public hospitals provide acute care management and treatment with follow up care undertaken in the main by private or public sector specialist surgeons and other relevant disciplines. It is an objective of the Review to expand reporting into other services and service settings, such as management and treatment support services. The number of women over 40 years of age screened by BreastScreen Australia between 1996 and 1999 provides an indication of the size of Australia's BreastScreen program (table 7.2). In 1998, almost 740 000 women were screened (excluding the NT). This represented an increase from over 667 000 women screened in the previous year.

**Table 7.2 Number of women screened by BreastScreen Australia, first and subsequent rounds, women aged 40 years and over**

	NSW	Vic <sup>a</sup>	Qld	WA	SA	Tas	ACT	NT <sup>b</sup>
1996	224 935	151 921	94 003	54 717	48 375	16 755	9 726	na
1997	252 502	150 681	123 001	58 827	54 077	17 355	11 193	na
1998	266 016	168 797	146 267	62 998	60 110	20 508	11 016	na
1999	na	na	153 931	60 000	64 194	19 382	12 256	na

<sup>a</sup> Data not available for age groupings 70–84 years and 85 plus years. <sup>b</sup> NT was unable to provide data.

Source: table 7A.4.

Information collected from public hospitals for separations for selected malignant breast cancer related diagnosis related groups (DRGs) provides another indication of the scale of breast cancer related medical procedures carried out in Australia in 1998-99 (table 7.3).

**Table 7.3 Separations for selected breast cancer DRGs, public hospitals, 1998-99<sup>a</sup>**

Description	NSW	Vic	Qld	WA	SA	Tas <sup>b</sup>	ACT <sup>b</sup>	NT <sup>b</sup>	Aust
Major procedures for malignant breast conditions	1 909	1 347	882	365	275	na	na	na	4 987
Minor procedures for malignant breast conditions	1 099	564	766	383	321	na	na	na	3 310
Malignant disorders age>69 <sup>c</sup>	126	99	36	20	53	na	na	na	345
Malignant disorders age<70 <sup>c</sup> , or age >69 <sup>d</sup>	312	315	333	89	143	na	na	na	1 311
Malignant disorders age<70 <sup>d</sup>	104	229	81	160	98	na	na	na	729
Total	3 550	2 554	2 098	1 017	890	na	na	na	10 682

<sup>a</sup> AR-DRG (Australian Revised Diagnosis Related Group) version 4.1. <sup>b</sup> Data were not publicly available because of the small number of public hospitals. <sup>c</sup> With complications and comorbidities. <sup>d</sup> Without complications and comorbidities.

Source: table 7A.13.

Table 7.3 shows only a small selection of hospital procedures related to breast cancer. Others include radiotherapy, chemotherapy and a range of other operating room procedures. It is the intention of the Review that these data be improved in the future.

## Framework of performance indicators

The measures developed to report on the performance of breast cancer management are based on the objective for managing the disease shared by all Australian governments (box 7.3). These measures are indicators of the performance of the

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program in the early detection of breast cancer through an organised public health initiative, and of the treatment of breast cancer in public acute hospitals. The framework includes indicators of performance related to age-specific mortality rates for breast cancer and expenditure on early detection and treatment per episode of illness, as well as some indicators of the performance of early detection and intervention strategies.

**Box 7.3 Objective for breast cancer management**

The objective for breast cancer management is to provide an effective balance of early detection and treatment with a view to reducing morbidity and mortality in a manner that is equitable and efficient.

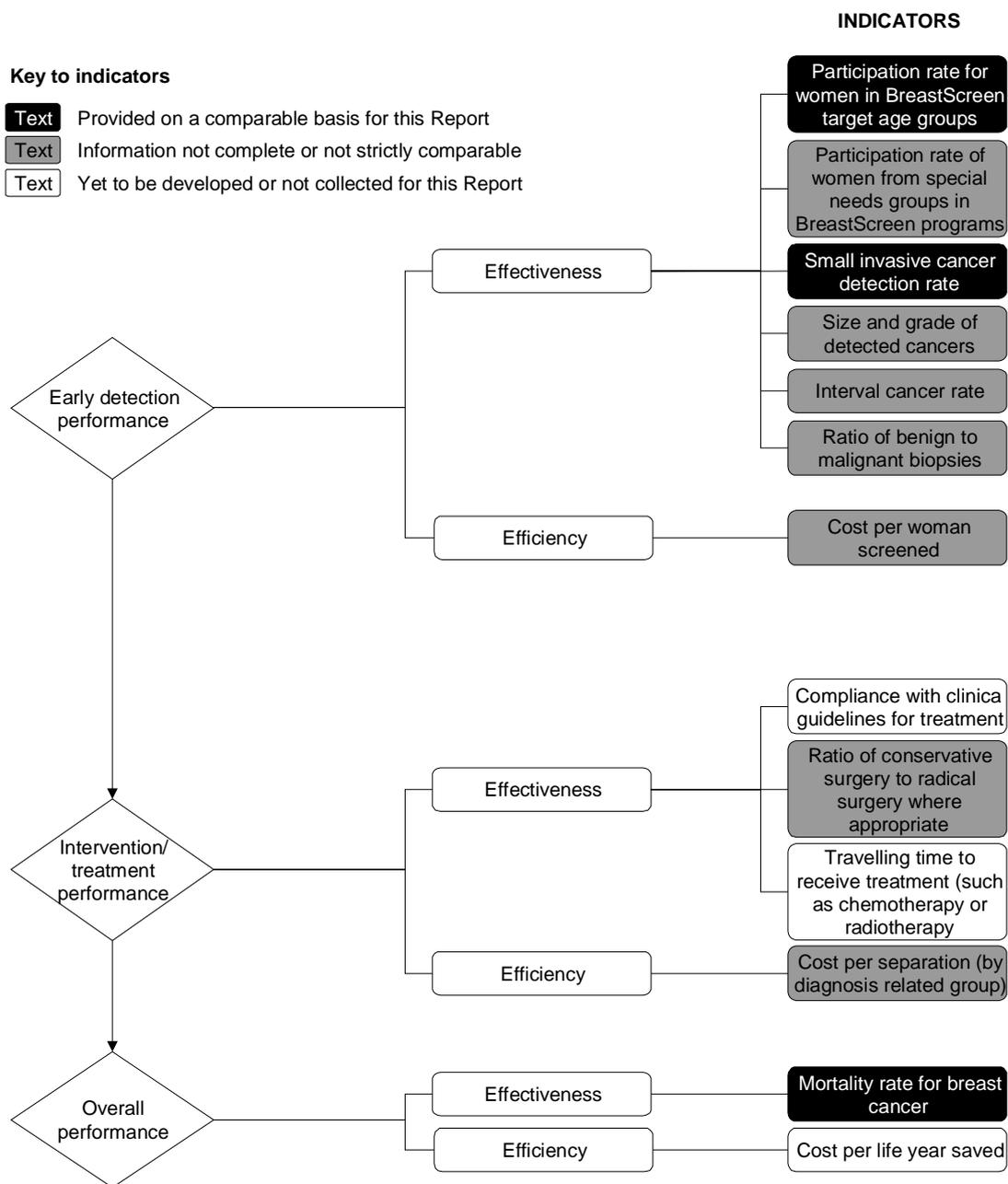
The framework for breast cancer management focuses on achieving a balance between early detection of the disease and treatment. Thus the performance indicators presented relate to early detection, intervention and overall performance (figure 7.4). A similar approach is adopted for emergency management services (see chapter 11).

If breast cancer is detected early, while still localised in the breast, chances of five year survival are around 90 per cent; the survival rate drops to 18 per cent if the tumour has spread to other parts of the body (NBCC 1999). The size and grade of detected cancers reflects the effectiveness of the breast cancer screening program, while the participation rate of women in screening is a key indicator of population level effectiveness. One efficiency indicator for the breast cancer screening program is the cost per woman screened.

Effectiveness indicators relating to intervention and treatment include the appropriateness of treatment (general practitioner and surgeon compliance with clinical practice guidelines for the management of early and advanced breast cancer, and the ratio of conservative surgery to radical surgery), and access (travelling time for radiotherapy and/or chemotherapy).

Some data on the effectiveness of breast cancer screening, such as the participation rate of women in the target age group in the BreastScreen program and the small cancer detection rate, are presented in this Report for the third year. Data on the overall effectiveness of breast cancer management, as indicated by mortality rates from breast cancer, are also presented for the third time. Other effectiveness indicators are being reported for the second time. These include the size and grade of detected cancers, and the participation rates of Indigenous women and those from non-English speaking backgrounds. Data on these indicators have been sourced directly from jurisdictions, and in the absence of validation, are not necessarily comparable.

Figure 7.4 Performance indicators for breast cancer management



Efficiency data have been sourced from jurisdictions and are not strictly comparable as the reporting period and the methodology for data collection, in particular in relation to cost data, is not uniform across all jurisdictions.

Conceptual and practical issues associated with data definition and identification hamper data collection for other indicators. These issues will be addressed in future reports. Indicators can be expected to change over time as better ones are

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developed. The framework will also evolve as the focus and objectives of breast cancer management change.

## **Key performance indicator results**

### *Early detection*

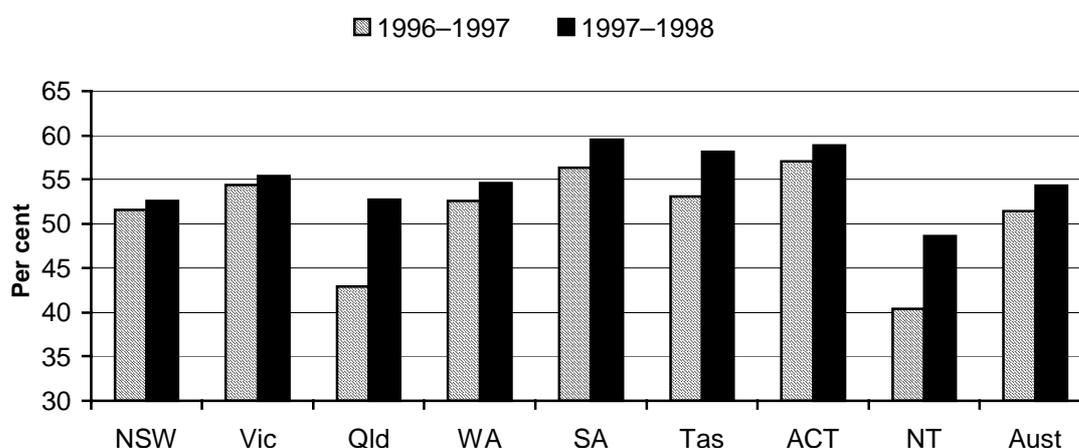
#### *Participation rate of women in the target age group*

The aim of BreastScreen Australia is to screen 70 per cent of women aged 50 to 69 years at regular two year intervals, where screening services have been established for five years or more. The participation of women in the target age group in breast cancer screening is an indicator of the effectiveness of breast cancer screening programs. In 1997–1998, 54.3 per cent of all women in this age group participated in the program, along with 26.7 per cent of women aged 45 to 49 years and 33.9 per cent of women aged 70 to 74 years (table 7A.5).

Age standardised participation rates varied within the target age group (50 to 69 years) in the two year screening periods of 1996–1997 and 1997–1998 (figure 7.5). Women aged 55 to 59 years were most actively involved in breast cancer screening (with 56.1 per cent in 1997–98 participating in the BreastScreen Australia program), whereas women in the 65 to 69 age group had a slightly lower participation rate (51.5 per cent). Participation of women in the target age group was highest in SA (59.5 per cent of women aged 50 to 69 years), followed by the ACT (58.9 per cent). By contrast, the NT recorded the lowest participation rate for the target group (48.6 per cent). Relatively large increases in the participation rate occurred in Queensland (9.8 percentage points), the NT (8.2) and Tasmania (5.1) between 1996–1997 and 1997–1998. Queensland's low participation rate in 1996–1997 was influenced by only five out of eleven fixed BreastScreen services operating for five or more years in 1997. The above increases were largely responsible for the national participation rate for women in the target age group increasing from 51.4 to 54.3 per cent over the period.

Queensland and SA were the only jurisdictions to provide participation rate data for 1998–1999. In that two year period, the participation rate for women aged 50–69 years old was 56.1 and 62.1 per cent respectively (table 7A.5).

**Figure 7.5 Participation rates of women aged 50 to 69 years in BreastScreen Australia<sup>a, b</sup>**



<sup>a</sup> Data are for bi-calendar years (data for two years are included). <sup>b</sup> 1997-98 rates are expressed as the percentage of the eligible female population and are age standardised to the Australian 1991 population.

Source: table 7A.5.

Under the national accreditation requirements of the program at least 60 per cent of the women screened should be in the target age group. According to BreastScreen Australia this target was achieved in all jurisdictions in 1997-98 with approximately two thirds of women screened in 1997-98 belonging in the target age group (women aged 50 to 69 years), 20 per cent were aged 40 to 49 and 10 per cent were aged seventy years or more (AIHW 2000b).

#### *Participation rates of women from special needs groups in BreastScreen programs*

The participation rate of women from special needs groups (Indigenous women, women from non-English speaking backgrounds, and women living in rural and remote areas) in breast cancer screening is another indicator of the effectiveness (in terms of access and equity) of the breast cancer screening program. Data on this indicator are presented in the Attachment tables 7A.6, 7A.6A and 7A.6B.

Data are not fully comparable as jurisdictions have reported different time periods, age groupings, and some differences in collection of Indigenous, non-English speaking background and rural/remote status. Care needs to be taken when drawing inferences across jurisdictions.

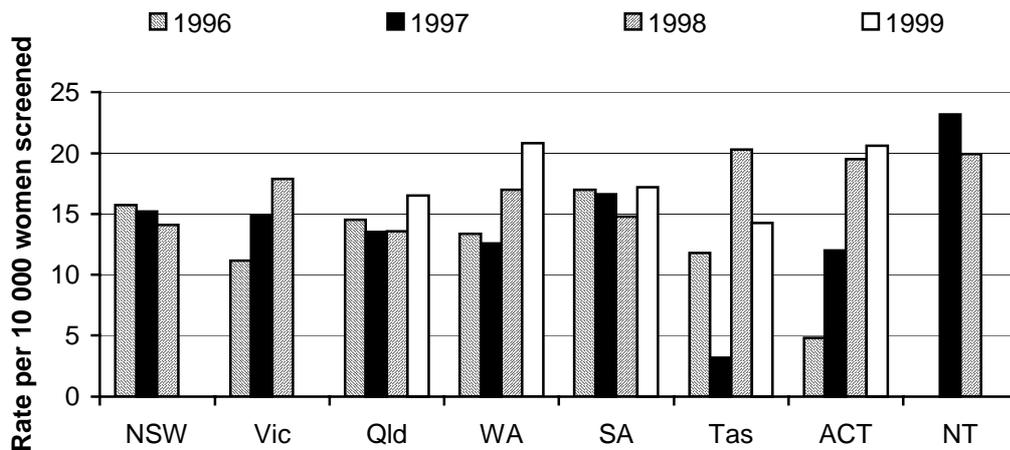
#### *Small invasive cancer detection rate*

The small invasive cancer detection rate is an important indicator of the effectiveness of breast cancer screening programs. The BreastScreen Australia

National Accreditation Requirements Standard is that more than 8.0 invasive cancers per 10 000 women screened have a diameter of 10 millimetres or less. Small cancers (those with a diameter less than or equal to 10 millimetres) are generally associated with increased survival rates and reduced morbidity and mortality, with some cost savings to the health care system and women. Women with small cancers are less likely to require a mastectomy than women with larger tumours (AIHW *et al.* 1998).

For women screened by BreastScreen Australia aged 50 to 69 years, 15.5 small cancers per 10 000 women were detected in 1998 (figure 7.6 and table 7A.7). The small cancer detection rate for women aged 50–69 years screened (all screening rounds) ranged from 13.6 per 10 000 women screened in Queensland to 20.3 per 10 000 women screened in Tasmania. Nationally, the small cancer detection rate for women aged 50–69 rose from 14.4 in 1997, with increases recorded in Victoria, Queensland, WA, Tasmania, and the ACT.

Figure 7.6 **Small diameter cancer detection rate, for target population group of 50–69 years, all rounds of screening<sup>a, b</sup>**



<sup>a</sup> Age standardised to the Australian 1991 population standard. <sup>b</sup> NT data were not available for 1996.

Source: table 7A.7.

The rate of small invasive cancers detected per 10 000 women screened rapidly increases with age. In 1998, for women aged 40 to 44 years screened in first and subsequent screening rounds, the rate was 2.5 nationally, while for those aged 50 to 54 years it was 10.8, for 60 to 64 years it was 18.6 and for those aged 85 years and over it was 43.1 (AIHW 2000b).

Jurisdictions provided data for 1996 to 1999 (table 7A.7), although the 1998 data presented in the table were sourced from AIHW (2000b). Of the States and Territories that were able to provide 1999 BreastScreen data, the small cancer

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detection rate for first and subsequent screenings for the 50–69 age group ranged from 20.8 and 20.6 cancers per 10 000 women screened in WA and the ACT respectively to 14.3 in Tasmania (table 7A.7). Data from jurisdictions with relatively small populations are subject to higher variability.

### *Size and grade of detected cancers*

The size and grade of detected invasive cancers are also indicators of the effectiveness of the breast cancer screening program. The tumour grade describes the degree of similarity of cancer cells to normal cells. The degree of differentiation of the cancer determines the disease prognosis. For example, a well differentiated cancer is associated with a good prognosis and those that are moderately differentiated are associated with an intermediate prognosis (figure 7.7 and table 7A.8).

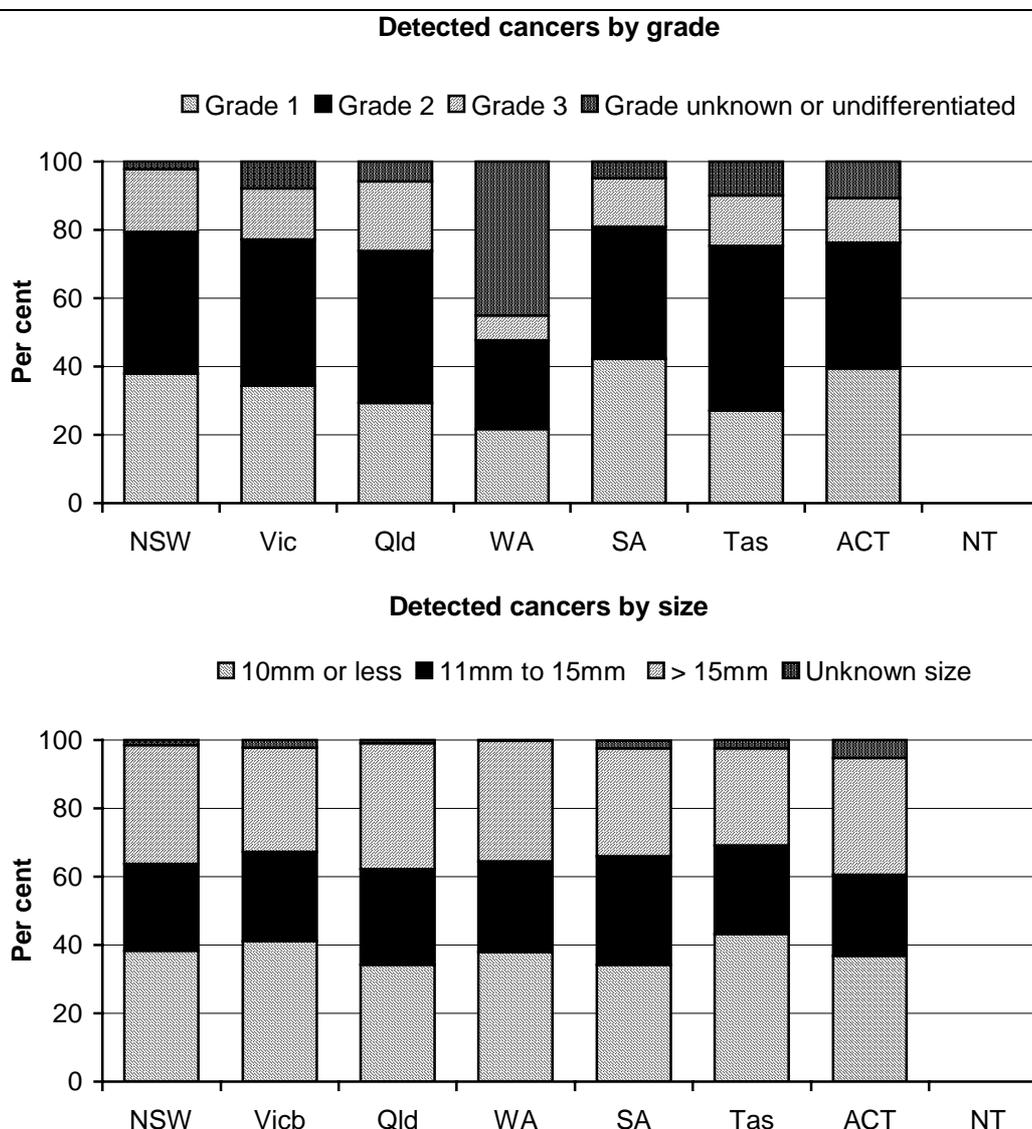
The percentage of low grade invasive cancers (grade 1) detected, as a percentage of all cancers detected in reporting jurisdictions varied between a high of 42.4 per cent in SA and a low of 21.8 per cent in WA in 1998. However, the latter jurisdiction reported 44.9 per cent of cancers as being of unknown grade or undifferentiated. The diagnosis rate for the relatively more aggressive grade 2 cancers averaged 48.2 per cent in Tasmania and 36.8 per cent in the ACT, while cancers classified as the most aggressive grade 3 type ranged from 20.3 per cent in Queensland to 13.2 per cent in the ACT.

Classified by size, the proportion of cancers that were 10mm or less in size was 39 per cent across all jurisdictions that reported. The proportion was lowest in Queensland and SA (34 per cent) and highest in Tasmania (43 per cent). The proportion of cancers that were 11mm to 15mm was highest in SA (32) and lowest in the ACT (24). Finally, the proportion of cancers that were 15mm or greater in size was lowest in Tasmania (28 per cent) and highest in Queensland (37).

### *Interval cancer rate*

An interval cancer is an invasive breast cancer diagnosed in the interval following a negative screening result and before the next scheduled screening examination. The interval cancer rate provides an indication of both the sensitivity and the efficiency of breast cancer screening. A high rate may indicate that not all breast cancers were detected during screening.

Figure 7.7 **Detected invasive cancers by grade and size 1998**  
(per cent)<sup>a, b, c, d</sup>



<sup>a</sup> Non-breast malignancies were not counted. <sup>b</sup> Victorian data exclude women aged less than 40 years of age. <sup>c</sup> 1999 South Australian data used in 'detected cancers by grade'. <sup>d</sup> Data were not available from the NT.

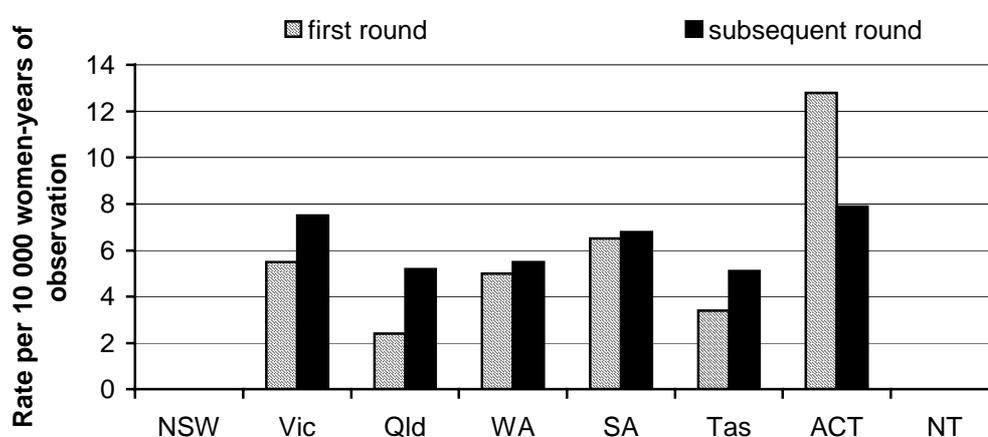
Source: table 7A.8.

The interval cancer rate for asymptomatic women aged 50–69 years screened during 1996 (first screening round) varied from 12.8 in the ACT, to 2.4 in Queensland, to a low of 0.0 in the NT (figure 7.8 and table 7A.9). The 95 per cent confidence interval for the ACT was 0.0 to 32.1 and for Queensland 0.5 to 4.4. The 95 per cent confidence interval for all jurisdictions indicates that none of the rates were significantly different from Victoria's rate of 5.5 (AIHW 2000b). The interval cancer rate for asymptomatic women aged 50–69 years screened during 1996 (subsequent screening round) varied from 7.9 in the ACT, to 5.1 in Tasmania, to a

low of 0.0 in the NT (figure 7.8 and table 7A.9). The 95 per cent confidence interval for the ACT was 2.5–16.2 cases, for Tasmania it was from 1.2–10.1 cases. Once again, the 95 per cent confidence interval for all jurisdictions indicates that none of the rates were significantly different from Victoria's rate of 7.5 (AIHW 2000b).

Data are also available for 1997 for some jurisdictions (table 7A.9).

**Figure 7.8 Interval cancer rate for asymptomatic women (first and subsequent screening rounds) aged 50–69 years, 0 to 12 month interval period following attendance, 1996<sup>a, b, c, d</sup>**



<sup>a</sup> Standardised to the Australian population of women attending BreastScreen services in 1998. <sup>b</sup> None of the jurisdiction rates were significantly different from Victoria at the 5 per cent level of significance. <sup>c</sup> Rate for NT is zero. <sup>d</sup> Interval cancer rates for 1996 from BreastScreen NSW are not available stratified by symptom status.

Source: table 7A.9.

### *Ratio of benign to malignant biopsies*

As the emphasis of breast cancer screening is on detecting small malignant cancers, a low ratio of benign to malignant biopsies indicates effectiveness in detecting malignant cancers while minimising the need for invasive procedures. The BreastScreen Australia National Accreditation Requirements Standards stipulate a benign to malignant open surgical procedure ratio of less than 2:1 for first round screening and of 1:1 for subsequent screening rounds.

In 1999 for all rounds of screening, the ratio of benign to malignant biopsies for:

- Queensland women aged 50–69 years was 0.29, and 0.33 for women of all ages;
- Western Australian women aged 50–69 years was 0.20, and for 0.20 women of all ages;

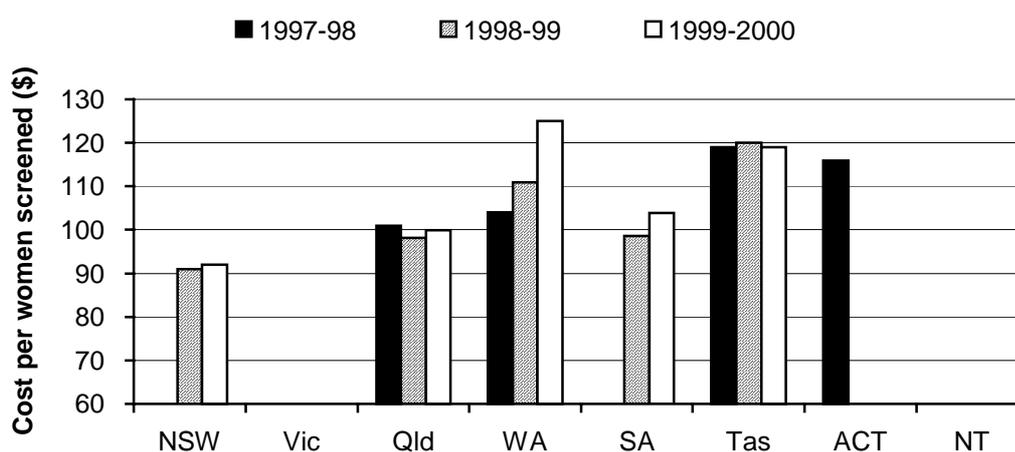
- South Australian women aged 50–69 years was 0.28, and 0.30 for women of all ages;
- Tasmanian women aged 50–69 years was 0.30 and 0.40 for women of all ages; and
- women of all ages from the ACT was 1.00 (table 7A.10).

### *Cost per woman screened*

The cost per woman screened is an efficiency indicator for the breast cancer screening program. It measures the total cost per woman of providing services including screen-taking, reading all follow-up, assessment procedures, data management, central registration and service management.

Potential differences in the items included in the measures of cost (in the treatment of both depreciation and capital asset charges), and in the scope of activities being costed, mean that care needs to be taken when making comparisons across jurisdictions. Not all jurisdictions have been able to report the cost per women screened. In 1999-2000, the average cost for all jurisdictions that provided data was approximately \$100 per woman screened. The cost was lowest in NSW (\$92) and highest in WA (\$125) (figure 7.9 and table 7A.11).

**Figure 7.9 Cost per woman screened for BreastScreen Australia<sup>a, b, c, d, e</sup>**



<sup>a</sup> Data are for calendar years except WA and SA which are for financial years. <sup>b</sup> WA 'other recurrent' data include capital replacement costs. <sup>c</sup> The data for SA are calculated on an accrual basis and not on a cash basis. <sup>d</sup> Queensland data exclude capital. <sup>e</sup> Data were unavailable for Victoria, the ACT and the NT for at least two years.

Source: table 7A.11.

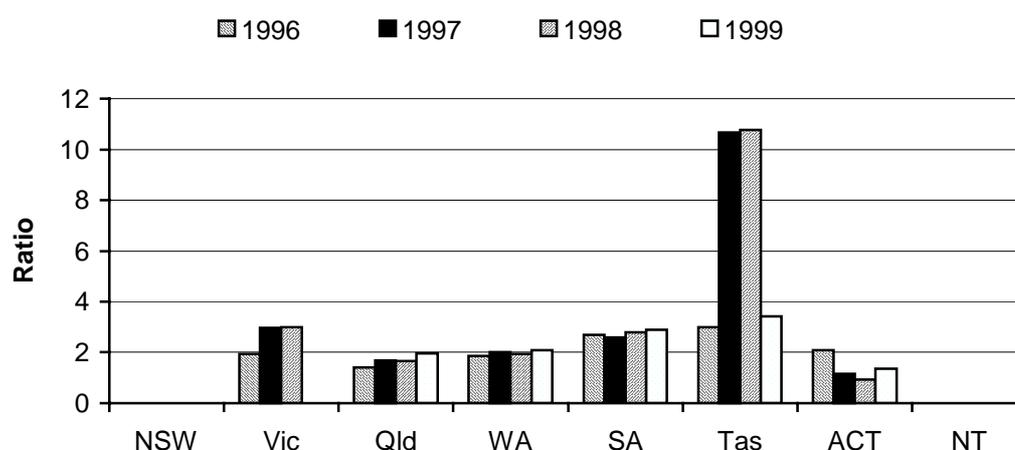
Demographic and geographical differences between jurisdictions could significantly affect screening costs. Comparability has improved since previous years, although further work will be required to improve the data.

### *Intervention/treatment*

#### *Ratio of conservative to radical surgery*

The ratio of conservative to radical surgery is in part a consequence of the early detection of breast cancer, as breast conserving surgery is more likely to be able to be carried out when cancers are detected at an early stage. Other factors, however, such as the judgment of surgeons as to the best treatment for the patient can also affect the type of surgery undertaken. A high ratio indicates a greater reliance on breast conserving and non-surgical procedures. In 1999, the rate was lowest in the ACT (1.35:1) and highest in Tasmania (3.41:1) (figure 7.10).

Figure 7.10 Ratio of conservative to radical surgery, all cancers<sup>a, b</sup>



<sup>a</sup> Victorian data for all years exclude women aged less than 40 years old. 1996 Victorian data exclude 38 women with unknown treatment, similarly, seven women in 1997 and two in 1998. <sup>b</sup> In WA the following numbers of women had both a mastectomy and wider local excision or open biopsy: in 1996, 38 women; in 1997, 28 women; in 1998, 21 women; and in 1999, 33 women.

Source: table 7A.12.

#### *Cost per diagnosis related group (DRG)*

Data are presented for the first time on the cost per DRG. This describes the cost of undertaking surgical and non-surgical hospital procedures on malignant breast tumours (table 7.4). Not all intervention strategies are reported and data are available only for some jurisdictions.

Table 7.4 provides a summary of costs for five selected breast cancer DRGs. It also reports the cost of chemotherapy, which is an average of the cost of treating a variety of cancers. The average cost of major procedures for malignant breast conditions (DRG J062) across Australia was \$3826 in 1998-99. The cost of this procedure was highest in WA and SA (\$4555 and \$4372) and lowest in Queensland (\$3352). Minor procedures for malignant breast conditions cost on average \$2080 in Australia. The cost was highest in SA and WA (\$2775 and \$2646) and lowest in NSW and Victoria (\$1823). Table 7A.13 also summarises the average length of stay in public acute hospitals associated for each breast cancer DRG.

**Table 7.4 Average cost per DRG, selected breast cancer DRGs, public hospitals, 1998-99 (\$) <sup>a</sup>**

<i>DRG description</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Major procedures for malignant breast conditions	3 672	3 963	3 352	4 555	4 372	na	na	na	3 826
Minor procedures for malignant breast conditions	1 823	1 823	1 985	2 646	2 775	na	na	na	2 080
Malignant disorders age>69 <sup>b</sup>	7 027	4 447	3 495	7 084	5 340	na	na	na	5 682
Malignant disorders age<70 <sup>b</sup> , or age >69 <sup>c</sup>	3 701	1 795	2 608	2 283	2 248	na	na	na	2 510
Malignant disorders age<70 <sup>c</sup>	978	771	1 036	553	1 242	na	na	na	858
Chemotherapy	619	598	687	395	603	na	na	na	606

<sup>a</sup> Data for Tasmania, the ACT and the NT were not separately available because of the small numbers of hospitals and are included in the national total for Australia. <sup>b</sup> With complications and comorbidities. <sup>c</sup> Without complications or comorbidities.

Source: table 7A.13.

## Overall performance

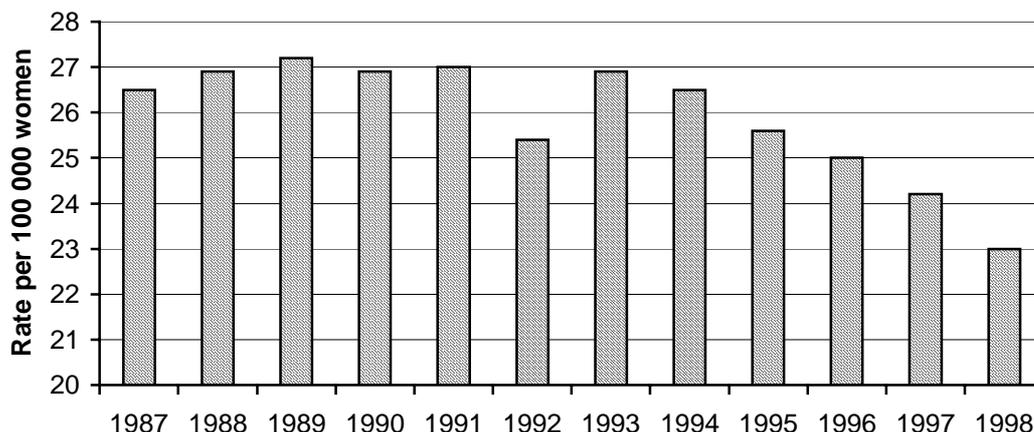
### Mortality

The number of women dying from breast cancer and age-specific mortality rates partly indicate the effectiveness of both early detection and treatment services for breast cancer. The number of deaths as a result of breast cancer rose steadily from 1987 in 1982 to a peak of 2655 in 1994 but has since decreased slightly to 2542 in 1998. Breast cancer accounted for the largest proportion of female cancer deaths in that year (ABS 1999).

Age standardised mortality rates are the most appropriate measure for looking at changes in mortality rates. While there has only been a relatively small reduction in the number of cancer deaths, this, in association with population growth, has had a

significant effect on the age standardised mortality rate. The rate has declined from a peak of 27.2 (per 100 000 women) in 1989 to 23.0 in 1998 (figure 7.11). The decline appears to have been strong and consistent from 1994 onward.

**Figure 7.11 Age standardised mortality rate from breast cancer, all ages<sup>a</sup>**

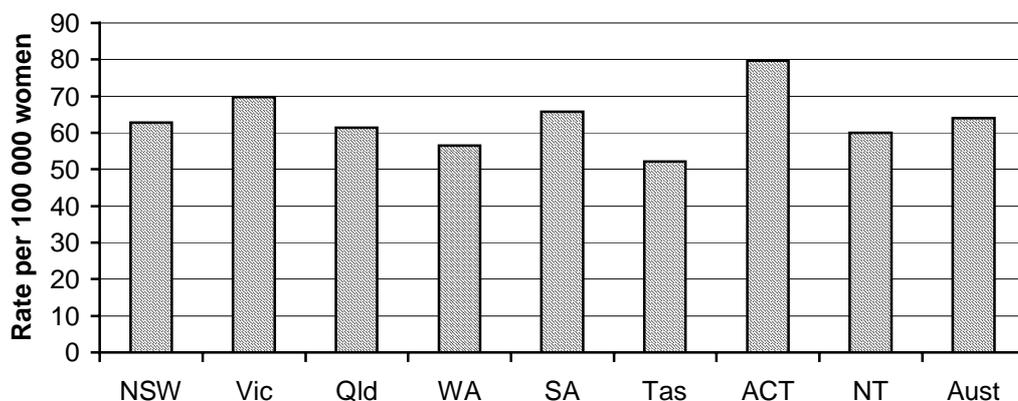


<sup>a</sup> Rates are expressed per 100 000 women and are age standardised to the Australian population as at 30 June 1991.

Source: AIHW (2000b).

The age standardised mortality rate for Australian women aged 50 to 69 years for the period 1995–1998 was 63.9 per 100 000 women (figure 7.12). The rate was highest in the ACT (79.7 deaths per 100 000 women) and lowest in Tasmania (52.2 deaths per 100 000 women) (table 7A.14).

**Figure 7.12 Age standardised mortality rate from breast cancer, women aged 50–69 years, 1995–1998<sup>a</sup>**



<sup>a</sup> Rates are expressed per 100 000 women and are age standardised to the Australian population as at 30 June 1991.

Source: table 7A.14.

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## 7.3 Mental health

Mental disorders contribute substantially to the burden of disease in Australia. Depression, suicide and self inflicted injury accounted for 5 per cent of the total years of healthy life lost as a result of disability and premature mortality in 1996 (see table C.2, 'Health preface'). The 1997 National Survey of Mental Health and Wellbeing suggested that almost one in five Australian adults suffered from one or more mental disorders during the 12 months before the survey was conducted (ABS 1998). This relatively high prevalence places a burden on Australia's health care system. Mental health problems accounted for 6.5 per cent of total recurrent expenditure on health in 1997-98 and just over 4 per cent of separations in all hospitals in 1998-99. Depression was the third most common problem managed by GPs (see chapter 6). These factors make mental health a relatively important area for government health policy. Some common terms used in mental health management are outlined at box 7.4.

### Box 7.4 Some common terms used in mental health management

**Affective disorder:** a mood disturbance that includes mania, hypomania and depression.

**Ambulatory care:** community based services provided by hospitals to non-admitted patients comprising outpatient clinics (hospital and clinic based), mobile assessment and treatment teams, day programs and other services dedicated to the assessment, treatment, rehabilitation and care of people affected by mental illness or psychiatric disability who live in the community (DHAC 2000).

**Anxiety disorder:** represented by feelings of tension, distress or nervousness. Includes agoraphobia, social phobia, panic disorder, generalised anxiety disorder, obsessive-compulsive disorder and post traumatic stress disorder.

**Community residential services:** services that provide beds in the community, staffed by mental health professionals on a 24-hour basis. These services are designed for people with significant disability and dependency needs and are aimed at replacing many of the functions traditionally performed by long stay psychiatric hospitals. They include residential services established as specialised psychogeriatric nursing homes for older people with mental illness, or dementia with severe behavioural disturbance (DHAC 2000).

**Mental disorder:** a diagnosable illness that significantly interferes with an individual's cognitive, emotional or social abilities.

**Mental health:** the capacity of individuals within groups and the environment to interact with one another in ways that promote subjective wellbeing, optimal development and use of mental abilities (cognitive, affective and relational) and the achievement of individual and collective goals consistent with justice (DHAC 1999).

(Continued next page)

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Box 7.4 (Continued)

**Mental health prevention:** interventions that occur before the initial onset of a disorder (DHAC 1999a).

**Mental health problem:** a disruption in the interactions between the individual, the group and the environment, producing a diminished state of mental health.

**Mental health promotion:** focuses on improving environments (social, physical, economic) that affect mental health and on enhancing the coping capacity of communities as well as individuals (DHAC 1999a).

**Non-government organisations:** not-for-profit services funded by governments to provide support services for people with a psychiatric disability arising from a mental illness. These services include a wide range of accommodation, rehabilitation, recreational, social support and advocacy programs (DHAC 2000).

**Prevalence:** the number of cases of a disease present in a population at a given time (point prevalence) or during a given period (period prevalence).

## Profile

### *Definition*

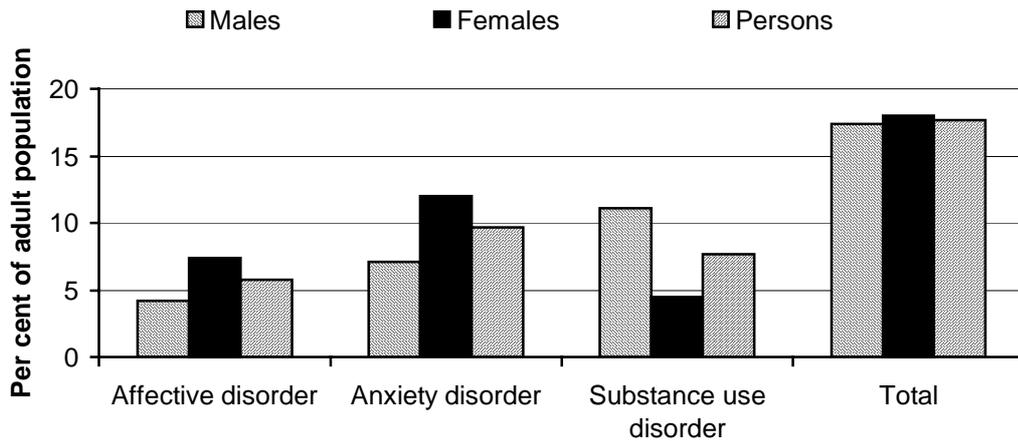
Mental health relates to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioural incapacity (DHAC *et al.* 1999). Problems and disorders that interfere with this ability and diminish quality of life and productivity cover cognitive, emotional and behavioural disorders. Some of the major mental disorders perceived to be public health problems are schizophrenia, depression, anxiety disorders, dementia and substance use disorders (DHAC *et al.* 1999). Each of these disorders is unique in terms of its incidence across the lifespan, causal factors and treatments.

Mental health disorders are a major cause of chronic disability. In 1996, mental disorders accounted for 1 per cent of years of life lost as a result of mortality, but were the leading cause of years of healthy life lost as a result of disability (nearly 30 per cent of the non-fatal burden of disease) (Mathers, Vos and Stevenson 1999). Most of this burden has been attributed to affective disorders (35 per cent of the calculated burden), anxiety disorders (24 per cent) and substance use disorders (20 per cent).

The 1997 National Survey of Mental Health and Wellbeing (ABS 1998) did not attempt to cover all mental health disorders. Of the disorders that were covered, anxiety disorders (such as agoraphobia, post-traumatic stress disorder and social

phobia) were the most common (54.5 per cent of those reporting symptoms of a mental disorder) followed by substance use disorders (43.7 per cent), and affective disorders (depression, mania and bipolar disorder) (32.7 per cent) (figure 7.13). Females most commonly experienced anxiety disorders. By contrast, males most commonly experienced substance abuse.

Figure 7.13 **Prevalence of mental disorders in Australian adults, 1997<sup>a</sup>**



<sup>a</sup> Defined as the percentage of adults with a mental disorder. Components do not sum to 100 because respondents may have reported symptoms for more than one type of mental disorder.

Source: table 7A.15.

The survey found that — of those with the mental disorders covered — 38.0 per cent contacted a health service for their problem. General practitioners were the main mental health service providers, seeing 29.4 per cent of patients with a mental disorder (table 7A.16). Less than one per cent of people with the types of mental health disorder covered by the ABS survey were admitted to hospital (ABS 1998).

### *Roles and responsibilities*

Mental health care providers include a range of government and non-government service providers offering promotion, prevention, treatment and management and rehabilitation services. Providers include GPs, community mental health facilities, specialist psychiatrists, psychotherapists, counsellors, public acute hospitals with specialist psychiatric units and stand-alone psychiatric hospitals.

A number of health care professionals also provided health services to mental health patients in a non-mental health setting (GPs, public acute hospitals' emergency departments, general outpatients and general (rather than specialist psychiatric) wards and nursing homes). While some data on these service providers are reported

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here, their performance is examined more closely in chapter 5 ('Public hospitals'), chapter 6 ('General practice') and chapter 12 ('Aged care').

State and Territory governments are the primary sources of both funding and service delivery for mental health services. The Commonwealth directly funds some health services for people with mental disorders through the Medicare Benefits Schedule, Pharmaceutical Benefits Scheme, and the Department of Veterans' Affairs programs. In addition, the Commonwealth funds other services for people with mental disorders such as emergency relief, employment, accommodation, income support, rehabilitation and other disability services. These services are not discussed in this Report.

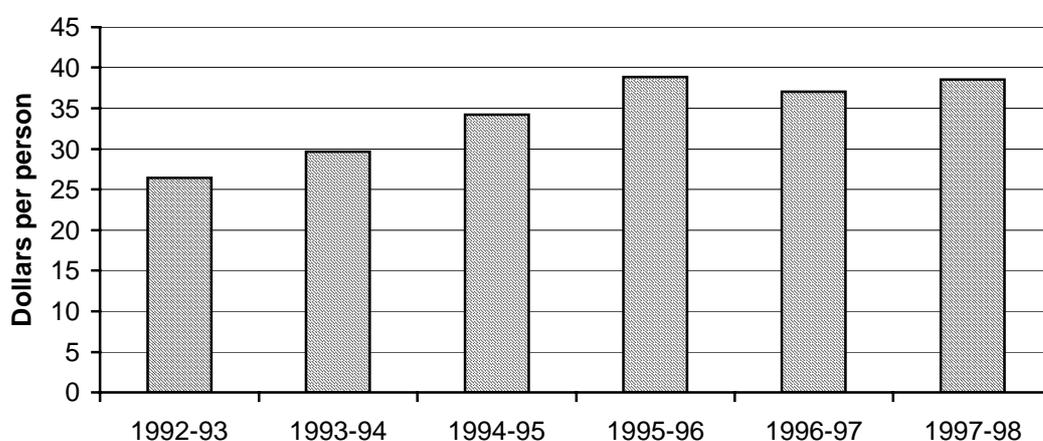
### *Funding*

Recurrent spending of \$2.24 billion was allocated to mental health services in 1997-98 (the most recent data available on spending on mental health). This represented around 6.5 per cent of national total gross recurrent expenditure on health services in 1997-98 (DHAC 2000).

State and Territory governments made the largest contribution — \$1365 million or 61.1 per cent of recurrent expenditure on mental health services in 1997-98. The Commonwealth Government spent \$718 million (around 32.1 per cent of recurrent expenditure on mental health services). Private hospitals accounted for the remainder (\$153 million or 6.8 per cent).

Real Commonwealth spending per capita in 1997-98 was \$38.60 (figure 7.14 and table 7A.18). This represents an increase from \$26.40 in 1992-93.

**Figure 7.14 Commonwealth recurrent spending, 1997-98 dollars**

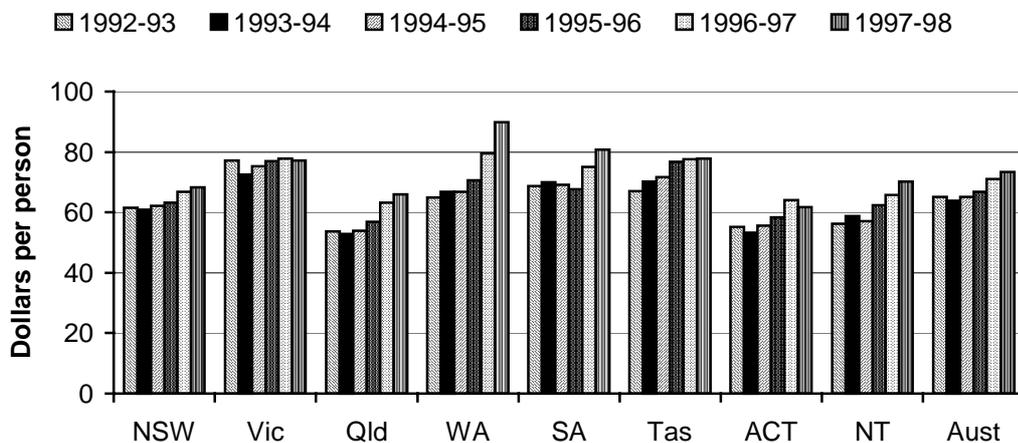


Source: table 7A.18.

The largest component of Commonwealth expenditure on mental health services in 1997-98 was expenditure under the Pharmaceutical Benefits Schedule for psychiatric medication (31.6 per cent). Medicare Benefits Schedule payments for consultant psychiatrists accounted for a further 26.5 per cent of Commonwealth expenditure on mental health services, followed by expenditure for mental health care by GPs (20.1 per cent). The residual went to the Department of Veterans' Affairs (10.0 per cent), the National Mental Health Strategy (NMHS) (including reform and incentive grants to States and Territories) (8.9 per cent), research, Commonwealth Rehabilitation Service Psychiatric Teams and Divisions of General Practice, and project grants for mental health (table 7A.17).

State and Territory government spending per person in real terms has increased over time, most markedly in WA (figure 7.15 and table 7A.20). Victorian spending per person has been consistently above average, although it was overtaken by WA in 1996-97 as the highest spending jurisdiction in per person terms. In 1997-98, WA spent the most (nearly \$90 per person), followed by SA and Tasmania (\$81 and \$78 respectively). Queensland and the ACT spent the least in 1997-98 (\$66 and \$62 respectively).

Figure 7.15 **State and Territory government recurrent expenditure, 1998 dollars<sup>a</sup>**



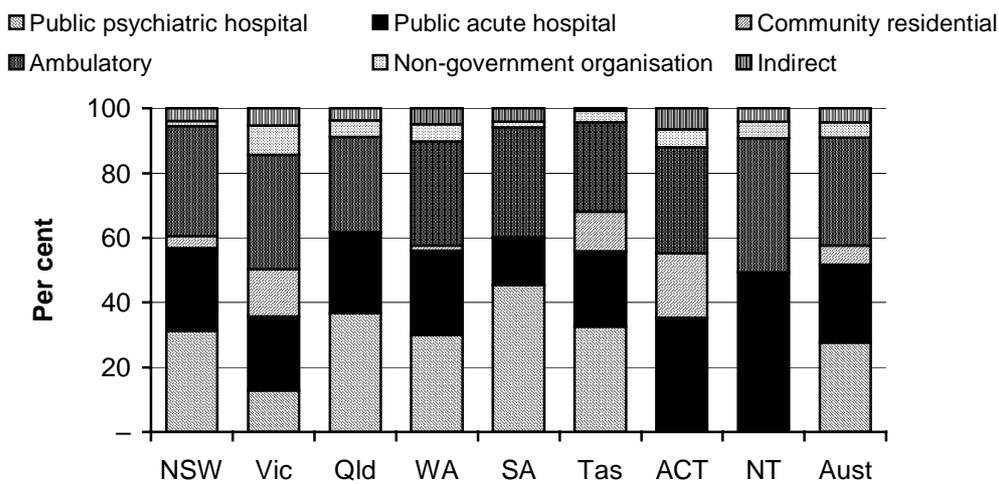
<sup>a</sup> Excludes all significant non-State/Territory funding sources (Department of Veterans' Affairs, Mental Health Strategy).

Source: table 7A.20.

Figure 7.16 shows how Commonwealth, State and Territory government spending was distributed across the range of mental health services in 1997-98. Across Australia, 51.7 per cent of recurrent expenditure was allocated to hospital based services and around 33.3 per cent to ambulatory services. The distribution, however,

differed across jurisdictions. In Victoria and the ACT, the proportion of recurrent expenditure allocated to hospitals was relatively low (35.7 per cent and 35.3 per cent respectively), whereas in Queensland and SA, the proportion of expenditure allocated to hospital based services was relatively high (61.8 per cent and 59.9 per cent respectively).

**Figure 7.16 Recurrent expenditure on specialised mental health services, 1997-98 (per cent)<sup>a</sup>**



<sup>a</sup> Indirect expenditure includes administration and other support service costs, professional training and staff development activity not elsewhere included, grants to academic institutions for academic chairs, mental health research undertaken as a discrete program, mental health promotion, salary and other funded overheads such as superannuation, workers compensation, insurance and other mental health expenditures (DHAC 2000).

Source: table 7A.19.

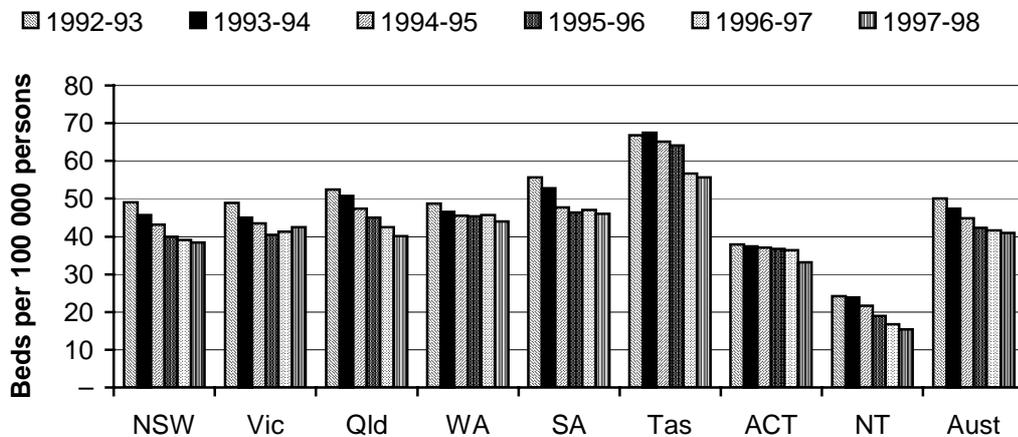
### Size and scope of sector

Across Australia in 1997-98 there were 24 psychiatric hospitals and 104 public acute hospitals with specialised psychiatric units (table 7A.21). Data on community mental health establishments collected under the National Minimum Data Set since July 1998 have not yet been published (see 'Policy developments').

### Available beds

Across all three types of institutions (psychiatric hospitals, public acute hospitals and community residential facilities) in 1997-98, Tasmania had the highest number of beds per 100 000 people (55.6), followed by SA (46.0). The NT had the lowest number of beds per 100 000 people (15.4) in 1997-98 (figure 7.17 and table 7A.22).

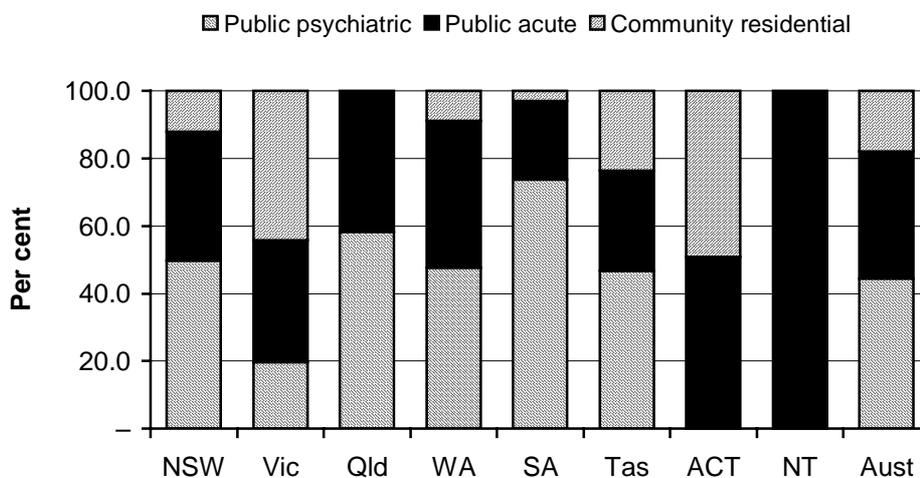
Figure 7.17 Mental health beds per 100 000 people<sup>a</sup>



<sup>a</sup> Available beds are beds that are immediately available for use by admitted patients as required.  
 Source: table 7A.22.

Figure 7.18 shows the distribution of beds across public psychiatric hospitals, public acute hospitals and community residential services in 1997-98. In most jurisdictions, beds were mostly located in public psychiatric hospitals (44.5 per cent). In Victoria, most beds were located in community residential care establishments (44.1 per cent). The ACT and the NT do not have stand-alone psychiatric hospitals and the NT and Queensland do not offer any community residential services.

Figure 7.18 Available mental health beds, 1997-98 (per cent)<sup>a</sup>



<sup>a</sup> Available beds are beds that are immediately available for use by admitted patients as required.  
 Source: table 7A.22.

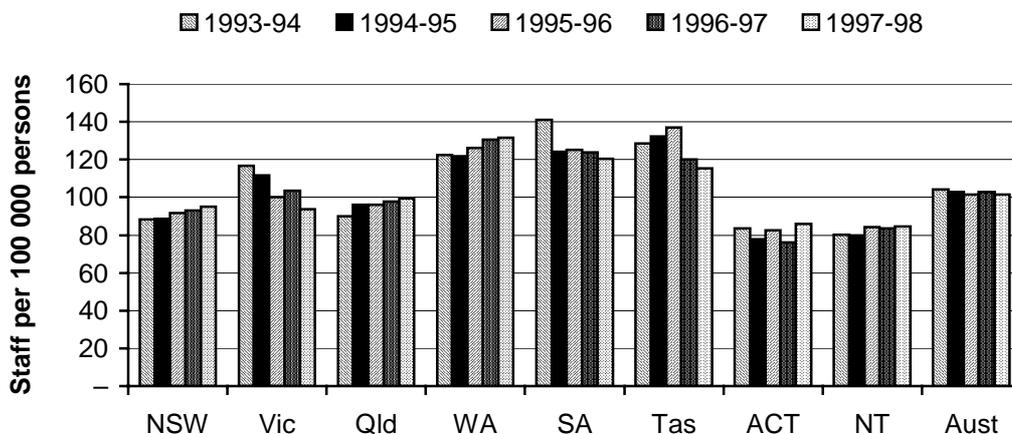
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## Staff

In 1997-98, WA had the most full time equivalent staff per 100 000 people in specialist mental health services (132), closely followed by SA (121) and Tasmania (115). The ACT and the NT had the least staff per 100 000 people in that year (86 and 84 respectively) (figure 7.19 and table 7A.23).

**Figure 7.19 Total full time equivalent staff in specialist mental health services**

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Source: table 7A.23.

Nursing staff comprise the largest full time equivalent component of health care professionals employed in mental health services. Across Australia in 1997-98, nurses comprised 67.3 per cent of full time equivalent staff in specialised mental health services. Allied health care staff (occupational therapists, social workers, psychologists and other allied health staff) made up 21.7 per cent of full time equivalent staff in specialised mental health services, and the remainder comprised medical staff (psychiatrists and other medical officers) (table 7A.24).

## Services provided

There were 124 310 separations for mental health in public acute and psychiatric hospitals in 1998-99 (AIHW 2000c) (table 7A.25). Public acute hospitals also provided just over two million mental health occasions of service to individual non-admitted patients and public psychiatric hospitals provided 198 297 occasions of service in 1998-99 (table 7A.25). Depressive disorders accounted for the highest number of mental health separations across all hospitals in 1998-99 (table 7.5).

**Table 7.5 Separations for the seven mental disorders with highest number of separations, all hospitals, 1998-99**

	<i>Total separations</i>	<i>Same day separations</i>	<i>Separations per 10 000 people</i>	<i>Average length of stay (days)</i>
Depressive disorders	58 682	29 998	31.1	7.9
Neurotic, stress-related and somatoform disorders	39 935	18 576	21.2	4.6
Schizophrenia	25 460	5 372	13.5	35.0
Mental, behavioural disorders from use of alcohol	23 490	7 855	12.5	8.4
Mental, behavioural disorders due to other psychoactive substances use	14 902	2 958	7.9	5.5
Other schizophrenic, schizotypal, delusional disorders	14 536	4 046	7.7	13.8
Bipolar affective disorders	14 463	4 225	7.7	15.5
<b>Total mental disorders</b>	<b>239 237</b>	<b>89 473</b>	<b>126.9</b>	<b>12.5</b>
<b>Total all hospitals</b>	<b>5 735 049</b>	<b>2 747 617</b>	<b>2 945.0</b>	<b>3.9</b>

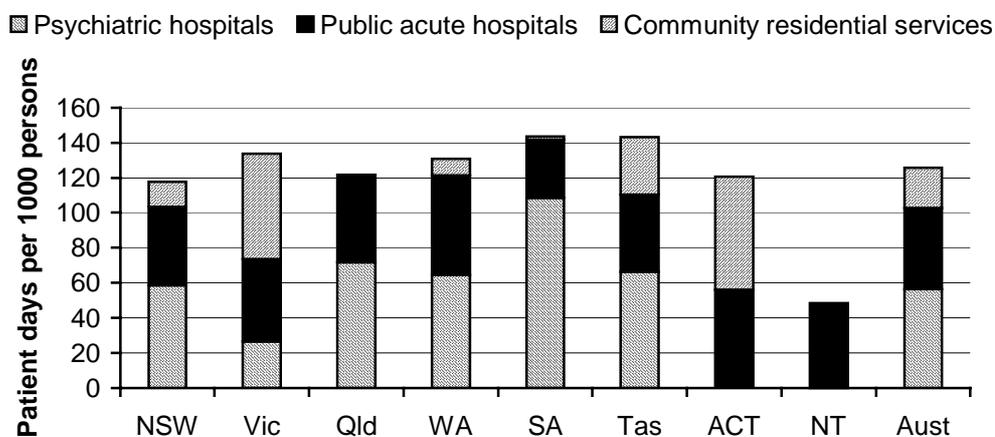
Source: table 7A.26.

The only data available for Indigenous mental health separations are for short stay patients (with a stay of less than 36 days) (table 7A.28). Comparisons are difficult because of the underidentification of Indigenous people. However, in 1997-98 separation rates (per 1000 people) for short stay Indigenous patients were relatively similar to the rates for the total population (11.6 and 12.0 respectively).

Data outlining community mental health care patient contacts are limited, although collection of these data commenced in July 2000 as part of the National Minimum Data Set (see 'Policy developments'). The most comprehensive way of describing services provided by specialised mental health establishments, including community residential care establishments, is to use 'patient days'.<sup>2</sup> In 1997-98, SA and Tasmania had the highest number of patient days in psychiatric hospitals, public acute hospitals and community residential care per 1000 people (143.6 and 143.3 respectively). The NT had the least patient days per 1000 people (48.3) (figure 7.20 and table 7A.27).

<sup>2</sup> Patient days refer to days or part days for patients who were admitted for an episode of care and whose episode of care was completed during the reporting period.

Figure 7.20 Mental health patient days 1997-98



Source: table 7A.27.

## Policy developments

Commonwealth, State and Territory governments agreed to the NMHS in April 1992. The extension of the strategy in July 1998 for a further five years (1998–2003) has been accompanied by a Second National Health Mental Plan. The second plan places greater emphasis on promotion and prevention, partnerships in service reform, quality and effectiveness. Reporting is through the Australian Health Ministers Advisory Council. Recent policy initiatives include the National Depression Initiative (launched in March 2000), the ‘Living Is For Everyone’ Framework (launched in September 2000), and a NMHS Primary Mental Health Care Initiative with a focus on Divisions of General Practice.<sup>3</sup>

While detailed information on admitted patients in specialised mental health public hospital services is available, there are a paucity of data on community mental health care — in particular, ambulatory services and non-government organisations. Under the National Health Information Agreement signed by Commonwealth and State/Territory Health Ministers, a National Minimum Data Set has been developed to collect comparable data on mental health service delivery and outcomes. Data on admitted patients in specialised mental health hospitals have been collected since 1 July 1997 and data for 1997-98 were published in 2000. Data have been collected for the National Minimum Data Set on community mental health establishments since 1 July 1998, but have not yet been published.

<sup>3</sup> Divisions of General Practice are described in chapter 6.

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A casemix classification for specialised mental health services appropriate for inpatient and community settings (Mental Health Classification and Service Costs (MH-CASC) model) was developed during 1997-98, but variations in the practices of different providers have prevented its adoption so far. Victoria is proposing to trial the model to ascertain its appropriateness and applicability to Victorian services. South Australia is currently collecting casemix data for inpatient episodes using Australian Revised Diagnosis Related Group version 4.1 (AR-DRG version 4.1) and is considering possible integration of AR-DRGs and MH-CASC.

In 1999, Victoria commissioned work to develop a set of key performance indicators to monitor performance of its mental health services. The proposed indicators provide information under the broad categories of efficiency and effectiveness. Additional work is planned to investigate further the findings of the initial study, and to investigate applicability to child and adolescent and aged person services. Queensland proposes to develop an information system that incorporates the implementation of Outcome Measurement Systems.

### **Framework of performance indicators**

The distinction between prevention and intervention is more difficult in the case of mental illness. Preventing the onset of mental illness is challenging, primarily because individual disorders have many origins. Most efforts have been directed at treating mental illness when it occurs and, in particular, at determining the most appropriate setting for providing treatment. The mental illness indicators in this Report focus on aspects of service delivery by different providers. However, the Second National Mental Health Plan places considerable emphasis on promoting and preventing mental illness. The Mental Health Promotion and Prevention National Action Plan has been drawn up specifically to meet the prevention and promotion priorities and outcomes outlined in the second plan. Indicators representing these components of mental illness management will be developed for future reports.

The framework of performance indicators for mental health services builds on government objectives for mental health service delivery (box 7.5) as encompassed in the NMHS. The framework reports on the effectiveness (in terms of quality, appropriateness, access and outcomes) and efficiency (in terms of unit cost) of mental health services (figure 7.21). It covers a number of service delivery types (institutional and community based services) and indicators of systemwide performance.

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### Box 7.5 Objectives for mental health service delivery

Key objectives include to:

- promote community awareness of mental health problems;
- prevent, where possible, the development of mental health problems and mental disorders;
- undertake early intervention of mental health problems and mental disorders;
- reduce the impact of mental health disorders on individuals, families and the community;
- assure the rights of persons with mental disorders;
- encourage partnerships among service providers and between service providers and the community; and
- improve the effectiveness and quality of service delivery and outcomes.

Governments also aim to provide services in an equitable and efficient manner.

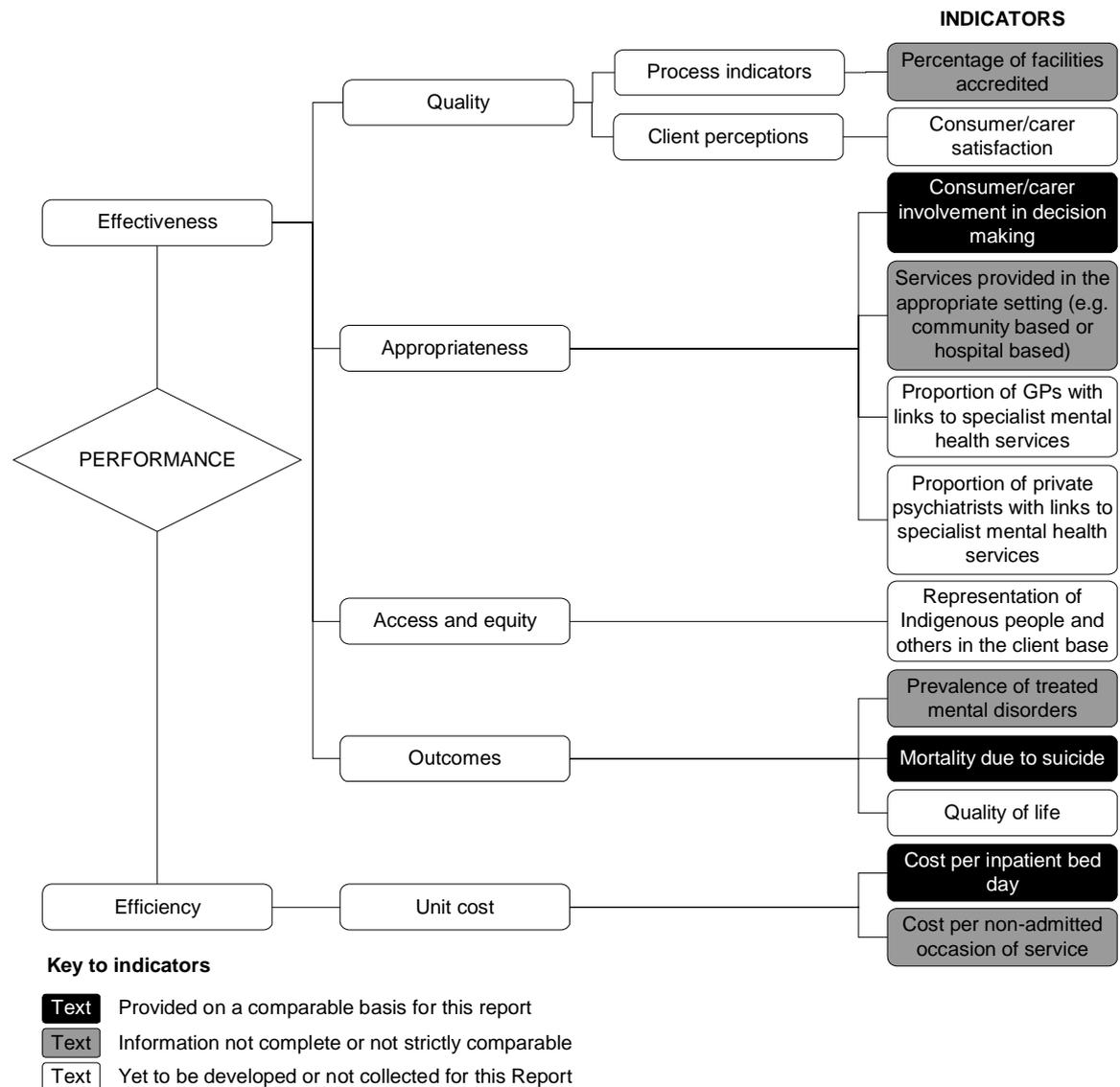
The prevalence of mental disorders in the general population and the mortality rate from suicide (both indicators of outcomes of mental health services) reflect two goals of the NMHS — to promote the mental health of the Australian community, and where possible, to prevent the development of mental health problems. The quality of life indicator, which has still to be developed, provides some information on the ability of mental health services to reduce the effect of mental illness on individuals, families and the community. It is important to note that these outcome indicators may be influenced by a range of factors in addition to mental health care services; for example, social and disability support, education and employment are all likely to have an effect on the prevalence of mental illness and the number of deaths from suicide.

The proportion of facilities delivering mental health services to people with a mental health problem that are accredited is used as a process indicator of quality. Consumer/carer involvement in decision making is an appropriateness indicator that reflects the NMHS's aim to assure the rights of people with mental disorders, and to focus on improving the outcomes for consumers.

A number of other effectiveness indicators are included in the framework. For example, the extent to which mental health services are offered as part of mainstream health care services, consumer/carer satisfaction and access and equity (the representation in the client base of special needs groups, such as Indigenous people and those from culturally and linguistically diverse backgrounds, and people in rural and remote areas). The efficiency of mental health services is indicated by

the cost per bed day for inpatient services and the cost per non-admitted occasion of service for outpatient and community based services.

Figure 7.21 Performance indicators for mental health services



Reporting requirements under the NMHS mean that some performance data for mental health services are already available. These include data on some aspects of the effectiveness of mental health services (consumer/carer involvement in decision making, the appropriateness of care setting, the prevalence of mental disease in the general population, and mortality rates from suicide) and the efficiency of institutional services (cost per inpatient bed day). Ongoing work to provide a more comprehensive set of performance indicators and to improve existing indicators and the data, is discussed in section 7.4.

## Key performance indicator results

### Quality

#### *Percentage of facilities accredited*

The percentage of facilities that have been accredited is used as a process indicator of quality. Hospitals and community residential services are accredited by the Australian Council for Healthcare Standards. In NSW, community residential services are accredited through the Community Health Accreditation Scheme. An accreditation model is yet to be developed for non-government organisations.

Imperfect data are available for this indicator (table 7.6) and there is scope for improvement in coverage of reporting and comparability of results. As mentioned in chapter 5, accreditation is an imperfect indicator because facilities that are not accredited do not necessarily provide poorer quality services. Moreover, smaller regional facilities may be disadvantaged in obtaining formal accreditation because of the high fixed costs of accreditation.

**Table 7.6 Percentage of facilities accredited (per cent)<sup>a</sup>**

<i>Facility</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Psychiatric hospitals								
1999	86	–	na	100	50	na	..	..
2000	86	na	33	na	50	100	..	..
Public acute hospitals								
1999	86	88	na	64	100	na	na	na
2000	92	na	31	na	100	100	na	na
Community residential								
1999	na	88	..	50	100	na	na	..
2000	na	na	..	na	100	na	na	..
Community ambulatory								
1999	na	na	na	48	na	na	na	na
2000	na	na	na	na	na	na	na	na

<sup>a</sup> At June 30. **na** Not available. **..** Not applicable.

Source: table 7A.29.

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## Appropriateness

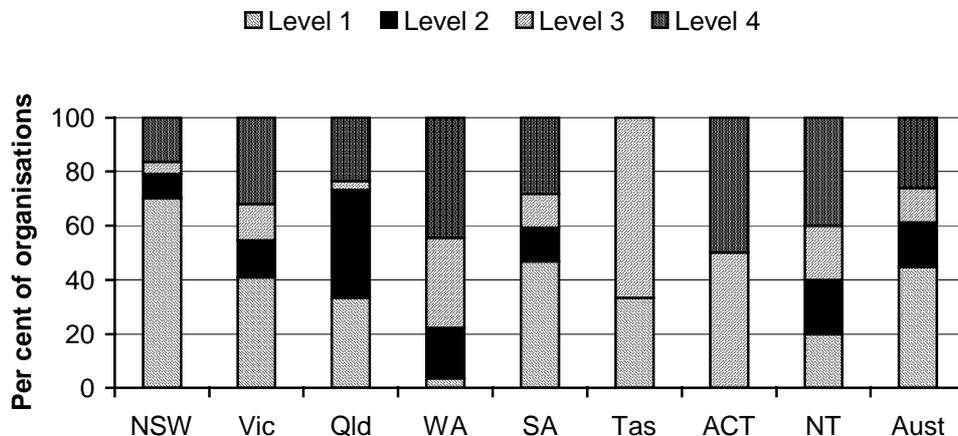
### *Consumer/carer participation in decision making*

An indicator of appropriateness is consumer/carer participation in decision making. Public sector mental health service organisations are asked each year to describe the arrangements provided to allow consumers and carers to contribute to local service planning and delivery. Responses are grouped into four categories:

- level 1 — appointment of a person to represent the interests of consumers and carers on the organisation management committee or a specific consumer/carer advisory group to advise on all aspects of service delivery;
- level 2 — a specific consumer/carer advisory group to advise on some aspects of service delivery;
- level 3 — participation of consumers/carers in broadly based committees; and
- level 4 — other/no arrangements.

Overall in 1997-98, 26 per cent of organisations had no arrangements for consumer/carer involvement in decision making. This compares with around 37 per cent in 1996-97. In 1997-98, NSW had the highest proportion of organisations with a level 1 rating (70 per cent) and the ACT the lowest (0 per cent). The ACT had the highest proportion of organisations with a level 4 rating (50 per cent) and Tasmania the lowest (0 per cent) (figure 7.22 and table 7A.30).

Figure 7.22 **Organisations with consumer participation in decision making, 1997-98**



Source: table 7A.30.

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### *Services provided in the appropriate setting*

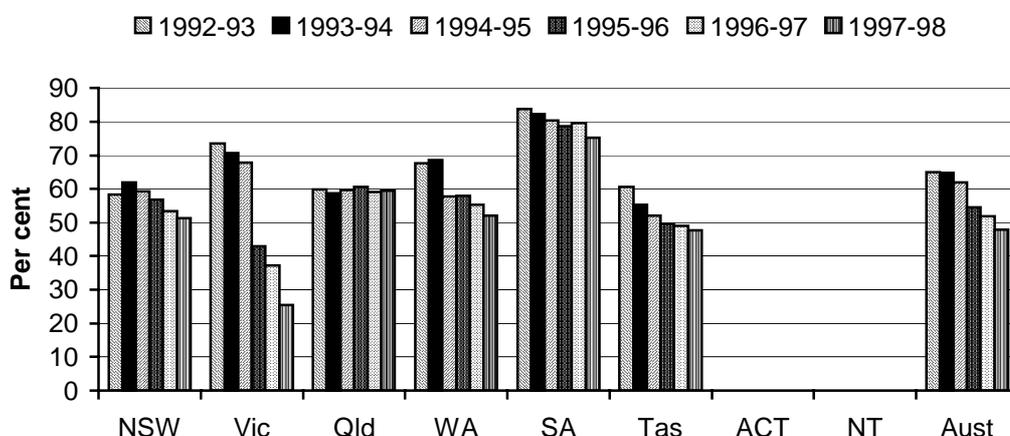
The NMHS advocates the development of local, comprehensive mental health service systems. The services must be capable of responding to the individual needs of people with mental disorders and of providing continuity of care, so consumers can move between services as their needs change. Under the directions set by the Strategy, structural reform of mental health services has resulted in:

- reduced reliance on stand-alone psychiatric hospitals;
- expanded delivery of community based care integrated with inpatient care; and
- mental health services being mainstreamed with other components of health care.

By encouraging treatment of patients in community settings and general hospitals rather than in stand-alone psychiatric hospitals — that is, to substitute the service settings — more appropriate treatment options can be provided.

Figure 7.23 shows the proportion of real recurrent expenditure per person on psychiatric hospitals, public acute hospitals and community residential care allocated to psychiatric hospitals. The proportion allocated to psychiatric hospitals in Victoria has fallen most rapidly. SA maintains the highest proportion of real recurrent expenditure per person on psychiatric hospitals, while Queensland has no community residential services and has not significantly changed the proportion of recurrent spending allocated to psychiatric hospitals. The ACT and the NT have no psychiatric hospitals.

**Figure 7.23 Real recurrent expenditure per person on psychiatric hospitals as a proportion of spending on psychiatric hospitals, acute hospitals and community residential services (per cent)<sup>a</sup>**

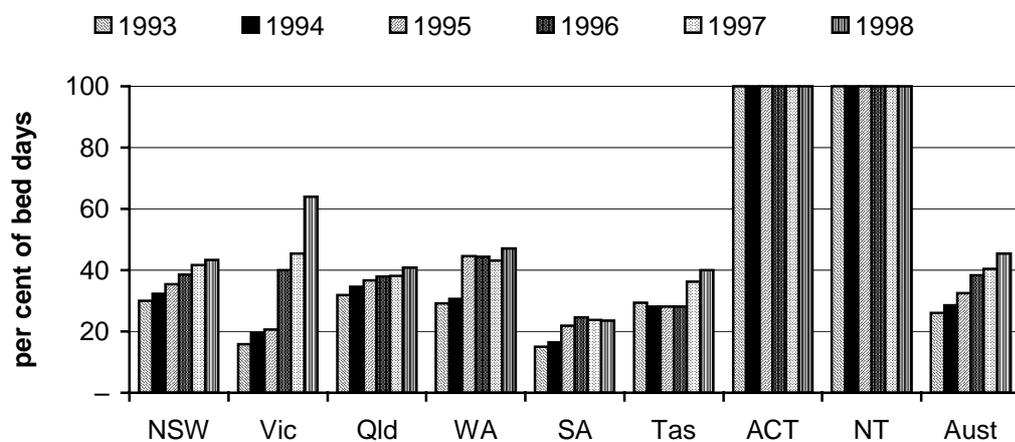


<sup>a</sup> The ACT and NT have no psychiatric hospitals.

Source: table 7A.31.

Similarly, figure 7.24 shows that Australia-wide, the proportion of mental health bed days in public acute hospitals has increased, with the fastest rate of increase in Victoria. By June 1998, 63.8 per cent of mental health bed days in Victoria were in public acute hospitals. This compares with a low of 23.4 per cent in SA. The ACT and the NT do not have psychiatric hospitals, so 100 per cent of bed days in those States were spent in public acute hospitals (table 7A.27).

**Figure 7.24 Bed days in public acute hospitals as a proportion of total mental health bed days in public psychiatric and public acute hospitals<sup>a</sup>**



<sup>a</sup> As at June.

Source: table 7A.27.

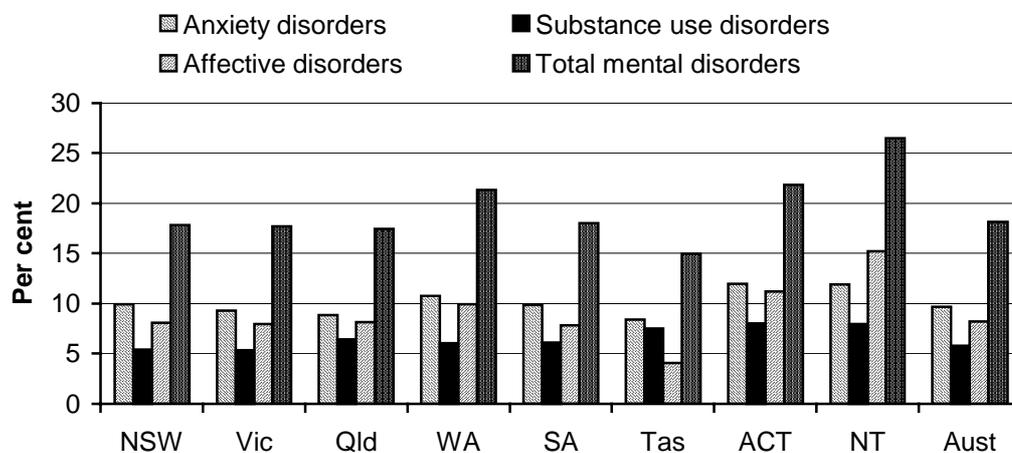
## Outcomes

### *Prevalence of mental disorders*

Outcome indicators for mental health management include the prevalence of mental illness in the community and deaths from suicide amongst adults. Figure 7.25 presents the prevalence of anxiety, affective or substance use disorder by jurisdiction for 1997. The NT had the highest prevalence of all mental disorders (26.5 per cent of the adult population) and Tasmania the lowest (15.0 per cent).

A telephone survey of persons aged over 18 years in SA conducted at the same time as the 1997 National Mental Health and Wellbeing Survey provided similar results for SA, suggesting that the prevalence of a mental health problem during the last few weeks before the interview was 19.5 per cent of adults. Prevalence was found to be higher in younger age groups and in urban areas (Taylor *et al.* 1999).

**Figure 7.25 Prevalence of mental disorder for people aged 18 years and over, 1997**



Source: table 7A.32.

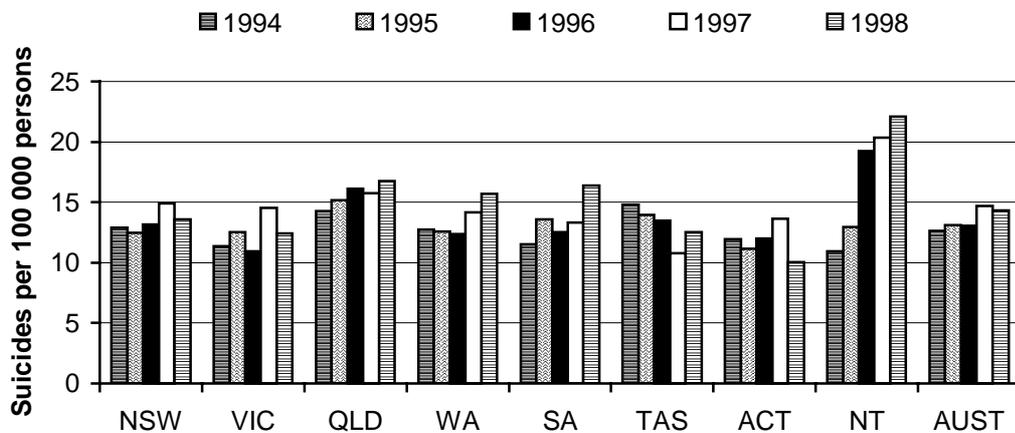
The prevalence of mental disorders in 1997 declined with age (table 7A.33). Almost 26.6 per cent of adults aged 18–24 years experienced symptoms of a mental disorder in the 12 months before the 1997 survey, compared with 6.1 per cent of people aged 65 years and over. The prevalence of mental illness did not vary greatly with geographic location (table 7A.34).

### *Mortality due to suicide*

The prevalence of mental illness is thought to have a significant effect on the number of deaths from suicide. Nearly 2700 deaths from suicide were recorded in Australia in 1998 — equivalent to 14.3 deaths for every 100 000 people. The rate for males was more than three times that for females in 1998 — a trend that was consistent over the 10 years to 1998 (table 7A.35). The rate in the NT has increased markedly from 11.0 suicides per 100 000 people in 1994 to 22.1 suicides per 100 000 in 1998 (figure 7.26 and table 7A.36). The ACT had the lowest suicide rate in 1998.

Suicide was the second leading cause of death for people aged 15–24 years (ABS 1999). In 1998, 23.8 per cent of deaths in this age group resulted from suicide. This was a higher proportion than for other age groups (20.1 per cent of deaths of people aged 25–44 years were suicides, followed by 5.9 per cent of deaths as a result of suicide in the 45–54 years age group).

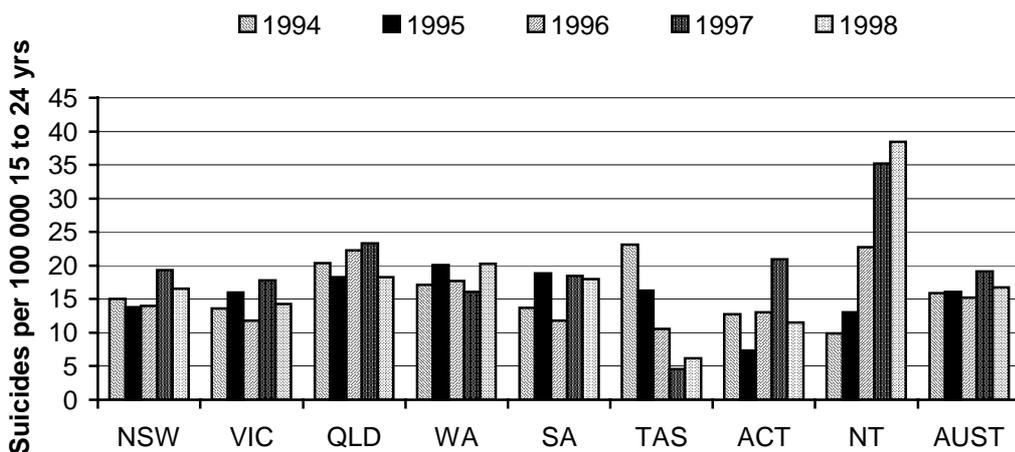
Figure 7.26 Suicide rate (per 100 000 persons)



Source: table 7A.36.

There were 446 suicide deaths among people aged 15–24 years in Australia in 1998. This was equivalent to a rate of 16.7 deaths per 100 000 persons aged 15–24 years. The NT recorded the highest suicide rates in 1997 and 1998 (35.2 and 38.4 deaths per 100 000 people aged 15–24 years respectively), while Tasmania recorded the lowest (4.6 and 6.2 deaths per 100 000 people aged 15–24 years respectively) (figure 7.27 and table 7A.37).

Figure 7.27 Suicide deaths of persons aged 15–24 years (per 100 000 persons aged 15–24 years)



Source: table 7A.37.

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The suicide rate per 100 000 people in 1998 was considerably higher in rural areas than in capital cities or other urban areas in all States except Tasmania (table 7A.38). In 1998, Australia-wide, there were 25.4 suicides per 100 000 people in rural areas compared with 13.3 suicides in capital cities and 11.1 in other urban centres. In NSW, the rate in rural areas was 33.2 suicides per 100 000 people compared with 12.5 in Sydney and other urban areas. The suicide rate in rural areas of WA was similarly high (32.2 suicides per 100 000 people compared with 14.5 in Perth and 9.9 in other urban areas).

In 1998, the suicide rate for Indigenous people was considerably higher than the rate for the total population in those States for which data are considered of publishable standard.<sup>4</sup> In Queensland, the Indigenous suicide rate in 1998 was 45.8 suicides per 100 000 Indigenous people compared with around 16.8 suicides per 100 000 for the total population. In SA, the 1998 Indigenous suicide rate was 45.0 per 100 000 Indigenous people compared with around 16.4 per 100 000 for the total SA population (table 7A.39). Care needs to be taken when interpreting these data for the period 1988–1997.

### *Efficiency*

#### *Cost per inpatient bed day*

Comparability of costs is maximised when the full range of costs to government are counted for all jurisdictions. Where the full costs cannot be counted, comparability is achieved by estimating costs on a consistent basis.

A proxy indicator of efficiency is the level of government inputs per unit of output (unit cost). The most suitable indicator for mental health services would be to adjust the number of separations by the type and complexity of cases to develop a cost per casemix adjusted separation similar to that presented for public acute care hospitals (see chapter 5). However, the current method for adjusting inpatient separations (AR-DRGs) does not account for the full range of mental health services provided. Until an appropriate casemix classification has been developed and introduced, average inpatient day costs will be used as an indicator of efficiency. However, these data should be used cautiously in any comparative assessment.

The cost per inpatient bed day is affected by factors such as differences in the client mix and average length of stay. The client mix in inpatient settings may differ —

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<sup>4</sup> The ABS considered 1998 data for Queensland, WA, SA and the NT to be of publishable standard. See the 'Health preface' for a discussion of the quality of deaths data collected by the ABS.

for example, some jurisdictions treat a higher proportion of less complex patients in inpatient settings rather than in the community. Longer lengths of stay may also be associated with lower average inpatient day costs, because the cost of admission and discharge and more intensive treatment early in a stay is spread over more days of care.

Average length of stay varied across jurisdictions and hospital types (table 7.7). The average length of stay for short stay patients in public hospitals in 1997-98, was highest in WA and Queensland in psychiatric hospitals and highest in SA and Victoria for patients in public acute hospitals. For long stays, the average was highest in Tasmania and NSW in psychiatric hospitals and highest in Victoria for public acute hospitals. The data presented in the table have not been standardised for differences in the complexity of cases. Also, the large variation for long-stay patients in psychiatric hospitals could represent differences across jurisdictions in the interpretation of data definitions. Care needs to be taken when making comparisons across jurisdictions.

**Table 7.7 Average length of stay, public hospitals (days) 1997-98<sup>a</sup>**

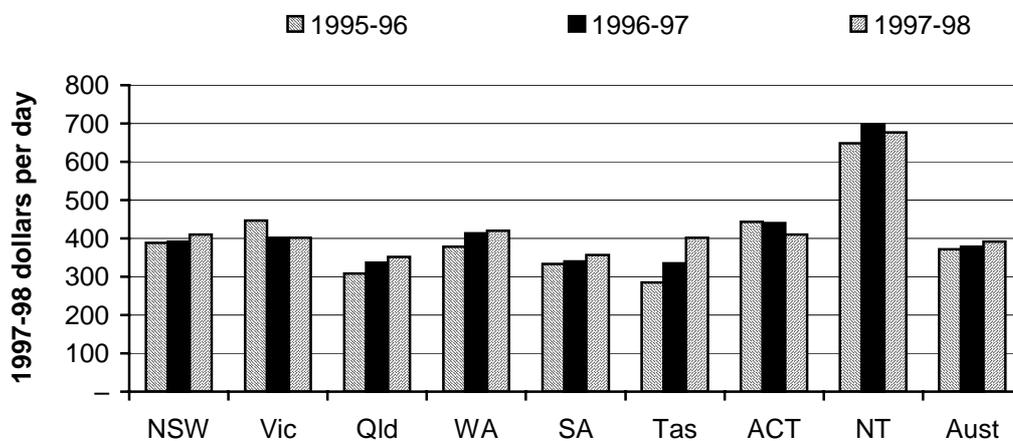
	<i>NSW</i>	<i>Vic</i>	<i>Qld<sup>b</sup></i>	<i>WA<sup>c</sup></i>	<i>SA<sup>d</sup></i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
<i>Short stay patients<sup>e</sup></i>									
Psychiatric hospitals	9.9	10.2	12.6	13.4	10.4	9.6	..	..	10.8
Acute hospitals	10.0	10.4	8.1	na	10.4	7.7	8.6	8.1	9.5
<i>Long stay patients<sup>f</sup></i>									
Psychiatric hospitals	343.3	126.0	na	144.2	133.5	383.6	..	..	352.7
Acute hospitals	66.2	76.8	57.1	na	53.4	50.9	49.0	57.2	67.6

<sup>a</sup> Calculated for separations in specialised unit or ward in an acute hospital or any ward in a psychiatric hospital only. <sup>b</sup> The published figure for average length of stay is 879.5 days, however, the Queensland Government advises this is incorrect. <sup>c</sup> Acute general hospitals in WA did not report total psychiatric care days, therefore data reported may be misleading and should not be directly compared to data from other States. WA figures include activity from psycho-geriatric facilities. <sup>d</sup> Data supplied by the SA Government indicate that the length of stay in psychiatric hospitals is 9.8 days and the length of stay in acute hospitals is 8.0 days. <sup>e</sup> Short stay refers to separations with less than 36 patient days. <sup>f</sup> Separations with 36 patient days or more. .. Not applicable na Not available.

Source: table 7A.41.

Average inpatient costs per day (1997-98 prices) are presented in figure 7.28. Changes over time reflect in part institutional change in accordance with the NMHS. In 1997-98, average patient day costs Australia wide were \$392.0. The NT reported average costs of \$677.0 and Queensland reported costs of \$352.0.

Figure 7.28 Average inpatient costs per day<sup>a</sup>



<sup>a</sup> Victorian data exclude infrastructure costs.

Source: table 7A.42.

Inpatient bed day costs for 1998-99 are presented in table 7.8 (table 7A.42). These data have not been verified, limiting comparability across jurisdictions and with the data presented in figure 7.28.

Table 7.8 Average inpatient bed day costs, 1998-99

	NSW	Vic <sup>a</sup>	Qld	WA	SA	Tas	ACT	NT
\$ per day	441.0	398.4	345.0	391.2	352.5	402.2	na	na
No. days	617 443	325 085	403 996	227 309	210 833	53 388	na	na

<sup>a</sup> Cost data excludes infrastructure costs. **na** Not available.

Source: table 7A.42.

For community residential services, unverified average costs per patient day are presented in table 7.9. It is likely that these will also be affected by institutional changes occurring as a result of the NMHS. In addition, differences across jurisdictions in the types of patients admitted to community residential care will affect average costs in these facilities. Care needs to be taken when comparing across jurisdictions. Queensland and the NT do not have community residential facilities.

Table 7.9 Costs per patient day, community residential services

	NSW	Vic <sup>a</sup>	Qld	WA	SA	Tas	ACT	NT
1997-98 (\$)	195	na	..	141	na	na	na	..
1998-99 (\$)	242	188	..	191	na	259	na	..

<sup>a</sup> Cost data excludes infrastructure costs. .. Not applicable. **na** Not available.

Source: table 7A.42.

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### *Cost per non-admitted occasion of care*

The provision of ambulatory treatment, rehabilitation and support to non-inpatients is an important component of public hospital non-inpatient services. Community health services also play an important role in the provision of services to people in an acute phase of a mental health problem or who are receiving post-acute care. The average cost per occasion of service in both service settings provides a measure of the efficiency with which non-inpatient services are provided. As a result of significant variability in definitions between jurisdictions used within the calculation of cost per non-admitted occasion of care, information from jurisdictions is not comparable. NSW and Victoria reported the following results:

- New South Wales reported average costs per non-admitted occasion of care across all mental health services of \$89.0 in 1997-98, increasing to \$90.0 in 1998-99.
- In Victoria, cost per occasion of care for psychiatric non-inpatient hospital services in 1998-99 was \$151.30 and for community ambulatory facilities was \$75.40.

Queensland, WA, Tasmania, the ACT and the NT were unable to report data for this indicator.

## **7.4 Future directions in performance reporting**

### **Breast cancer**

Key challenges for improving reporting of health management performance of breast cancer include:

- improving the measurement of existing indicators; and
- filling in gaps and developing new indicators.

The number of indicators in this year's Report increased from previous years. Data reported for the first time include: the interval cancer rate, the ratio of benign to malignant biopsies, the ratio of conservative to radical surgery, and the cost per separation (by DRG). The Steering Committee also revised its definitions for several indicators for which it had already collected data with a view to improving comparability — participation rate of women from special needs groups in screening, size and grade of detected cancers, and cost per woman screened.

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The Steering Committee anticipates that the comparability of data collected for the Report will gradually improve over time as a result of continued consultation with jurisdictions and BreastScreen organisations — for example, an evaluation plan to be undertaken by BreastScreen Australia, which will provide a comprehensive analysis of the effectiveness and efficiency of the BreastScreen program. The Steering Committee anticipates that the findings of the evaluation will provide a framework that can be used to collect financial data in future Reports.

Existing performance data for breast cancer management places relatively more emphasis on the performance of BreastScreen programs than on the intervention and ongoing management of breast cancer. This is in large part the result of the availability of breast cancer screening data across jurisdictions. The Steering Committee will seek opportunities to report on compliance to clinical guidelines for treatment, travelling time to receive treatment, and cost per life year saved.

## **Mental Health**

Key challenges for improving the reporting of health management performance of mental health include:

- improving the measurement of existing indicators; and
- filling in gaps and developing new indicators.

The Steering Committee can improve on existing indicators by:

- examining options for obtaining more recent data on the prevalence of mental disorders. Prevalence is a key indicator for the Report and the most recent national data are for 1997;
- improving reporting of effectiveness and efficiency indicators for Indigenous, rural/remote and other special needs groups;
- reporting results from the survey of children's and adolescent mental health undertaken by the University of Adelaide and collaborating centres to be released in 2000. Currently, prevalence data are available only for those aged 18 years or over;
- reporting on developments and progress in the adoption of the MH-CASC casemix classification (see 'Policy developments').

The Steering Committee can expand the reporting of indicators by:

- revising the performance indicator framework to take account of the Second National Mental Health Plan to ensure that reporting remains consistent with government policy objectives for mental health; and

- 
- improving reporting of effectiveness/efficiency indicators for community mental health establishments using data from the new National Minimum Data Set. Under the Second National Mental Health Plan, structural reform has resulted in reduced reliance on psychiatric hospitals and expanded delivery of community based care integrated with inpatient care. Enhanced reporting of community based care would also better reflect performance against policy objectives for mental health.

## **Diabetes mellitus**

The Steering Committee has developed a draft performance indicator framework for diabetes mellitus and expects to commence collecting data for the next Report. Commonwealth, State and Territory governments declared diabetes mellitus a National Health Priority Area in 1996 and have agreed to collaborate in the prevention, detection, care and management of the disease in accordance with the *National Diabetes Strategy 2000–2004*.

Diabetes mellitus is a serious and growing health problem in Australia. If undetected or poorly controlled, it can result in debilitating long-term complications such as blindness, kidney failure, amputation, heart attack, stroke and erectile dysfunction (Colagiuri *et al.* 1998). Diabetes mellitus was the seventh largest burden of disease in Australia (when measured in terms of the number of years of life lost to premature mortality or disability — see ‘Health preface’). The 1995 ABS National Health Survey suggested that 430 700 Australians had self reported diabetes (ABS 1997), but a significant number of people with type 2 diabetes were undiagnosed. The total diabetic population has been estimated at 780 000 people (4.3 per cent of the total population) (ABS 1997). The significance of diabetes mellitus on the wellbeing of Indigenous Australia was particularly pronounced, accounting for between four and ten per cent of all recorded Indigenous deaths in 1998 (see ‘Health preface’).

## **7.5 Jurisdictions comments**

This section provides comments from each jurisdiction on the services covered in this chapter and attachment 7A in the CD-ROM. Appendix A (Descriptive Statistics Appendix) contains short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter. In addition, detailed statistics covering various aspects such as age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings

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and cultural heritage (such as Indigenous status and ethnicity) are also found in Appendix A.

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### **New South Wales' comments**

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The 2001 Report on Government Services shows that there is clear progress in expanding the breadth of indicators relating to health service performance. This is the consequence of the increased emphasis on benchmarking within the health sector. The data are a significant step towards understanding health system performance in Australia. There still remain some concerns in achieving data comparability between States/Territories however, which are being addressed by groups such as the National Health Performance Committee. Three examples are:

1) Definitional issues. When comparing across States/Territories, the term hospital is applied to a broad range of facilities that provide acute or other types of care (for example psychiatric care) or combinations of care types. Some hospitals have specific roles, for example, paediatrics, mothers and babies, and eye care, whereas others are more general. These differences also exist within States/Territories, especially between the rural and metropolitan sectors. The problem is augmented when hospitals report that they are treating 'acute' patients when the care is predominantly nursing home type, for example, in rural community hospitals. Also, in some instances psychiatric patients treated in non-psychiatric units/hospitals are included in acute care measures and in other cases they are excluded.

2) Reporting of expenditure data. Some States/Territories are yet to implement accrual accounting. Also, where depreciation is reported, the values at which items are depreciated differ across States/Territories. There are also differences in the methodology of collecting and reporting expenditure data, especially in areas such as teaching and research.

3) Hospital/facility size. Data presented by State/Territory disguise the configuration of hospitals contributing to the performance indicator. Hospitals vary a great deal in size, and therefore, will have different costs for similar types of care due to higher overheads for example.

These problems are much easier to control for at the local level than across States/Territories. For example, for internal reporting, NSW presents hospital data based on peer groups, which controls for differences in the size and roles of hospitals. This type of standardisation can also be applied across jurisdictions if the right tools are developed.

The value of the Report on Government Services is also in the presentation of data relating to outcomes, quality and safety and in relating to services other than hospital-based care. The performance indicators in these areas are much less refined. However, their publication can only lead to improvements over time.

NSW is keen to improve the comparability of data by being active in national groups and committees examining issues leading to inconsistencies and developing tools/standards to enhance the uniformity of the data. These efforts will contribute to better decisions in the areas of policy, management and delivery of health services.

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## Victorian comments

“ Victoria continues to strongly support comparisons of overall performance and key performance indicators between jurisdictions and with the best practitioners worldwide. In this context the establishment of the National Health Performance Committee is particularly welcome. This Committee has been given the responsibility to develop and maintain a national performance measurement framework for the health system as a whole. It has already moved to establish a working relationship with this Review and this should lead to a more coordinated approach to performance measurement at the national level.

The increased and broader emphasis on health care services in recent editions of this report is also welcome and reflects the level of government expenditure on these services. In particular, the development of a performance measurement framework for general practice, including indicators of quality, safety and evidence of best practice, is important in a funding environment where outcomes are rewarded and emphasis is placed on quality.

As discussed in the previous edition of this Report, the breast cancer control services overseen by BreastScreen Australia provide a good example of a comprehensive mechanism for assessing the effectiveness and efficiency of service delivery at both national and jurisdictional levels. Victoria welcomes the current initiatives of the Review towards extending this approach to some of the other agreed National Health Priority Areas.

It is acknowledged that many of the indicators in the health chapters of this report need further development as they often highlight differences in state administrations, funding mechanisms and service provision rather than performance. However, they do provide a useful starting point for further analysis. The recognition of the need for separate unit cost measures for acute, psychiatric and sub-acute admitted patient services provides an example of this and highlights the need for continual development of even the most conceptually simple indicators. For this reason the Review's iterative approach to reporting, publishing imperfect data with caveats and then working to improve quality and comparability, is strongly supported.

Encouragement should also be given for individual service providers to benchmark at a much greater level of detail, and to achieve improvements at the organisational level, as well as for benchmarking between jurisdictions.”

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## Queensland comments

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Queensland Health is committed to providing quality health care services to the Queensland public and has a strong dedication to performance measurement and benchmarking as a means to promote quality health services. Queensland Health demonstrates this commitment through the chairing of the National Health Performance Committee.

Queensland Health recognises that many indicators need further refinement and development. Queensland Health is continuing to invest in information technology to improve the availability of quality data and information, facilitating activities such as performance measurement and benchmarking. For example, the Decision Support System provides comprehensive information on finance, payroll, pharmacy and pathology. In addition, a clinical benchmarking system, Transition II, has been implemented at Queensland Health's twenty-five largest hospitals providing opportunities to promote clinical process improvement, improved reporting at both the corporate and hospital level and benchmarking opportunities.

The Quality Improvement and Enhancement Program is a major initiative aimed at improving the capacity of Queensland Health to provide accountable, continuously improving, quality services through systematic enhancements at the state-wide and local level. A major effort involving projects across eight broad program areas, valued at \$120 million over 5 years is currently being undertaken by Queensland Health.

Queensland Health is committed to developing innovative strategies to address the National Health Priority Areas. Comprehensive Health Outcomes Plans focussing on improving the management of diabetes mellitus and cardiovascular disease, and establishing strategies for injury prevention and control have been developed. The Health Outcome Plans 2000-2004 for Cardiovascular Health: Coronary Heart Disease, Diabetes Mellitus and Injury Prevention and Control were launched in September 2000. Work is being undertaken to develop Health Outcomes Plans for cancer and asthma. The Outcome Plans will guide the broad acquisition and delivery of services required to improve health status and achieve desired health outcomes.

Queensland Health has demonstrated a pro-active approach to Mental Health information systems development, with the implementation of the Client Event System Application (CESA). This system will provide quality information for community mental health practitioners, administrators and managers and will provide robust statewide data to inform program development. The application provides greater ability to track clients across the continuum of care and reduces duplication of data collection and maintenance across health services facilitated by interfaces between information systems. Additionally, it establishes a clinical information infrastructure to support National Minimum Data Set (NMDS) requirements.

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## Western Australian comments

“ In 2000 the Health Department of Western Australia (HDWA) continued to play a significant role in the development and implementation of performance monitoring activities in the State health sector. For a number of years, there has been a Key Performance Indicators Working Group comprised of representatives from public and private service providers, health insurance firms and the Health Department, which annually updates a manual to assist all stakeholders in refining, reporting and evaluating performance in health care delivery.

In addition to the ongoing developments through the KPI working group, the HDWA has undertaken a series of projects to improve the understanding of the outputs and outcomes in the health system and to identify areas that would benefit from new initiatives. To list some examples of the work in 2000:

- There was a review of Rural Health Service Models, to identify the products of the smaller models of service delivery particularly in the rural sector.
- Results of a three-year reform process into mental health services were released in August 2000 to effect changes and additional services for WA consumers following identified demand.
- A formal Oral Health Program was established, uniquely integrating admitted and outpatient oral health care. In particular, a comprehensive database will allow consistent monitoring of all services provided in this sector.
- A number of providers piloted the WA Rural Palliative Care Database (WARPCD). This patient database enables tracking of clinical progress of palliative care patients and quantification of inputs from various care agencies.
- “HealthNetter”, an online State-wide survey was launched in November 2000 to ask people what they want in the way of health information. Survey results will form the basis of an interactive website accessible to the community.
- Through a joint initiative, the Departments of Health and Family and Children’s Services initiated Building Blocks, a program aimed at providing appropriate support to families when required, helping to make sure every child has the essential building blocks when they start out in life and assisting parents to build stronger and healthier families.

Despite all this work and more, significant challenges still persist that make it difficult to comprehensively evaluate total performance in health. Identifying appropriate and accepted measures of certain activities such as non-admitted patient services, undertaking cross-sectoral and inter-jurisdictional comparisons and keeping abreast of rapid changes in technology are foremost among these hurdles. WA recognises both the progress and the remaining gaps in the work that is happening in all sectors. The State is committed to allocating significant levels of effort and resources to respond to the challenges that remain.

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## South Australian comments

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The Department of Human Services continues to provide a quality health service for the South Australian community. South Australia has for many years had a strong community service sector, in both the health and welfare fields. The Department maintains its efforts to ensure that appropriate health care is provided to all who need it and is actively undertaking further development of integrated and coordinated service provision across all three portfolio areas of health, housing and community services.

Constraints within the human services operational environment include an increasing demand for human services outstripping available resources, ageing capital infrastructure, and new technologies setting higher expectations of medical science. Despite these pressures the SA public hospital system is still one of the most technically efficient (as measured by the cost per casemix-adjusted separation). SA is currently implementing successful population based breast and cervix screening, and immunisation programs as well as exploring innovative methods of case management, continuity of care and chronic illness management for target population groups as well as alternative models for service delivery. These alternative models of service delivery include rehabilitation in the home, hospital in the home, same day of admission surgery, telehealth linkages for renal review and the off-site location of clinics closer to their target populations.

Changing population demographics are a continuing challenge. The latter includes the challenge of influencing the continued lower life expectancy for indigenous people, high rates of poverty and associated high rates of ill health, especially for single parents, younger single people and families with children, and to ensure that services are able to respond appropriately to an ageing population.

Health is central to the key outcomes the Human Services portfolio aims to achieve. These aims are to:

- Enhance the quality of life for South Australians through government and community partnerships promoting health and wellbeing, the development of a sustainable community and quality living standards, and
- Provide the care and support necessary for people to maintain and improve their health and wellbeing at a cost the community is willing to bear.

The Department strongly supports directions to improve reporting of GP services to population groups, especially indigenous people, and to improve reporting of effectiveness and efficiency indicators for indigenous, rural/remote and other population groups.

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## Tasmanian comments

“ The Department of Health and Human Services is developing a 10 Year Plan to support improved health and wellbeing outcomes for people in Tasmania. The Plan will be guided by the vision, goals and benchmarks identified in *Tasmania Together*, a 20 year social, economic and environmental plan. *Tasmania Together* has been developed through an extensive community consultation process and relies on partnerships between State and Local Governments and the private and community sectors to identify whole-of government and whole-of community broad-based goals and to set benchmarks for their achievement.

The 10 year health and wellbeing plan and the Department's approach to measuring and evaluating the quality and performance of its programs and services will be based on the health performance framework developed by the Australian Health Performance Committee. Given the Department's diversity of programs and services (housing through to community services to acute health care) the framework has been modified to adequately capture performance relevant to the three tiers of the framework.

Similar to the national model, the Tasmanian quality and performance framework has regard to *health and wellbeing outcomes, determinants of health and wellbeing and health and human services system performance*. The *outcomes* component of the framework establishes population health and wellbeing status against state, national and international policy commitments and standards. The *determinants* component assesses the social, economic and environmental context to determine potential future impacts on the health and wellbeing of the Tasmanian population and sub-groups within it. The *system* component is about how well the Department's programs and services are performing against dimensions of quality - such as safety, responsiveness, sustainability, etc — in terms of measurable best practice.

Using data from the Healthy Communities Survey (1998), Tasmania has produced a comprehensive analysis of the economic wellbeing and vulnerability of Tasmanian families and households, and how it impacts on Tasmanian's health and quality of life. The analysis not only identifies who is economically vulnerable and where they live, but also which specific factors (aspects of overall capability) contribute to their economic wellbeing and vulnerability.

Key findings reveal that reduced capability in individuals, families and communities is strongly associated with poorer health and wellbeing outcomes. As a consequence, reduced capability results in increasing demand on government services generally, not just within the health sector. Poor health and psychosocial outcomes that result from reduced capability can reduce productivity as well as cost in terms of life years, disability, unfulfilled potential and social pathology. It also means that people enter the health and community services system sooner and stay longer.

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## Northern Territory comments

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The role of the hospital cannot be considered independent of the Primary and Community Health Care sectors. A comprehensive approach to health care through partnerships with primary care, mental health, preventive care and community health is recognised to be a key to overall improvement in health gain.

Five public hospitals in Darwin, Alice Springs, Nhulunbuy (Gove), Katherine and Tennant Creek coupled with community health service outlets form a network throughout the Territory.

Largely due to the remoteness, scattered population and the absence of alternative health care providers, Northern Territory public hospitals fill numerous non acute service gaps in their communities. As service infrastructure develops there will be less need for hospitals to be involved in non acute areas. Health service agreements with each hospital have assisted in defining the role and services to be provided.

Territory Health Services (THS) is facing the challenge of growth in activity in the hospital sector with finite resources to address that growth. In facing this challenge, THS is committed to reform of the health care system incorporating performance based arrangements.

In terms of THS Strategy 21 Corporate Stretch Goals, the effort during the past year focused on collaboration with the community sector. This was demonstrated by the Hospital in the Home initiative at Royal Darwin Hospital and the Post Acute Nursing Service at Alice Springs Hospital.

Overall, a number of factors had an important impact on hospital services. The hospital nursing workforce stabilised with a reduction in staff turnover. Hospital activity grew by 4.7% based on growth rates to March 2000, limiting the ability to impact on growth in elective surgery waiting lists.

Acute activity is measured by Weighted Inlier Equivalent Separations (WIES). Hospital workload is measured in terms of why people came to hospital and how long they stay in hospital. WIES is a measure which addresses both factors. It gives a weighting to each episode of care based on the patient's diagnosis and treatment as well as their length of stay.

Total workload for all Northern Territory hospitals as measured by WIES increased by 4.7%. Individual hospital workloads for 1999/00 were:

- Royal Darwin Hospital increase of 5.7%;
- Alice Springs Hospital increase of 1.1%;
- Katherine Hospital increase of 5.5%;
- Tennant Creek Hospital decrease of 1.9%; and
- Gove District Hospital increase of 19.8%.

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## 7.6 Definitions

Table 7.10 Terms

<i>Term</i>	<i>Definition</i>
Acute care hospital	A hospital that provides at least minimum medical, surgical or obstetric services for inpatient treatment and/or care, and around-the-clock, comprehensive, qualified nursing services as well as other necessary professional services.
Affective disorders	A mood disturbance, includes mania, hypomania, bipolar affective disorder, depression and dysthymia.
Agoraphobia	Fear of being in public places from which it may be difficult to escape. A compelling desire to avoid the phobic situation is often prominent.
Ambulatory services	Services provided by hospitals to non-admitted patients.
Antidepressant	A drug that alleviates depression, usually by energising the person and thus elevating mood.
Anxiolytics	Tranquillisers; drugs that reduce anxiety.
Anxiety disorders	Feelings of tension, distress or nervousness. Includes agoraphobia, social phobia, panic disorder, generalised anxiety disorder, obsessive-compulsive disorder and post traumatic stress disorder.
Bipolar disorder	A mood disorder characterised by a history of manic (or hypomanic) episodes usually alternated with depressive episodes.
Case mix adjustment	Adjustment of data on cases treated to account for the number and type of cases. Cases are sorted into diagnosis related groups (DRGs) which represented a class of patients with similar clinical conditions requiring similar hospital services.
Co-located units	Psychiatric units in general hospitals. Includes ambulatory services and specialised residential services.
Community health services	Health services for individuals and groups delivered in a community setting, rather than in hospitals or in private facilities.
Comorbidity	The simultaneous occurrence of two or more disorders such as depressive disorder with anxiety disorder, or depressive disorder with anorexia.
Depression	A state of gloom, despondency or sadness lasting at least two weeks. The person usually suffers from low mood, loss of interest and enjoyment, and reduced energy. Sleep, appetite and concentration may be affected.
Dysthymia	Constant or constantly recurring chronic depression of mood, lasting at least two years, which is not sufficiently severe, or whose episodes are not sufficiently prolonged, to qualify as recurrent depressive disorder. The person feels tired and depressed, sleeps badly and feels inadequate, but is usually able to cope with the basic demands of everyday life.
General practice	The organisational structure in which one or more GPs provide and supervise health care for a 'population' of patients. This definition includes medical practitioners who work solely with one specific population such as women's health and Indigenous health.

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Table 7.10 (continued)

<i>Term</i>	<i>Definition</i>
Generalised anxiety disorder	Unrealistic or excessive anxiety and worry about two or more life circumstances for six months or more, during which the person had these concerns more days than not.
Hypomania	A lesser degree of mania characterised by a persistent, mild elevation of mood and increased activity lasting for at least four days. Increased sociability, over-familiarity and a decreased need for sleep were often present, but not to the extent that they led to severe disruption.
Invasive cancer	A tumour whose cells invade healthy or normal tissue.
Mental disorder	A diagnosable illness that significantly interferes with an individual's cognitive, emotional or social abilities.
Mental health problems	Diminished cognitive, emotional or social abilities but not to the extent that the criteria for a mental disorder are met.
Mental health promotion	Action to maximise mental health and wellbeing among populations and individuals.
Obsessive-compulsive disorder	Obsessions: recurrent, persistent ideas, thoughts, images or impulses that intrude into the person's consciousness against his/her will. The person experiences these as being senseless or repugnant, but is unable to ignore or suppress them. Compulsions: recurrent, stereotyped behaviours performed according to certain rules. The person often views them as preventing some unlikely event, often involving harm to, or caused by, themselves. The person generally recognises the senselessness of the behaviour, attempts to resist it and does not derive any pleasure from carrying out the activity.
Panic disorder	Panic (anxiety) attacks that occurs suddenly and unpredictably. A panic attack is a discrete episode of intense fear or discomfort.
Post traumatic stress disorder	A delayed and/or protracted response to a psychologically distressing event that is outside the range of usual human experience.
Prevalence	The percentage of the population suffering from a disorder at a given point in time (point prevalence) or during a given period (period prevalence).
Preventive interventions	Programs designed to decrease the incidence, prevalence and negative outcomes of disorders.
Public health	The organised, social response to protect and promote health and to prevent illness, injury and disability. The starting point for identifying public health issues, problems and priorities, and for designing and implementing interventions, is the population as a whole or population subgroups. Public health is characterised by a focus on the health of the population (and particular at-risk groups) and complements clinical provision of health care services.
Psychiatrist	Medical practitioner with specialist training in psychiatry.
Schizophrenia	A combination of signs and symptoms which may include delusions, hallucinations, disorganised speech or behaviour, a flattening in emotions and a restriction in thought, speech and goal-directed behaviour.
Screening	The performance of tests on apparently well people to detect a medical condition at an earlier stage than would otherwise be the case.

(continued next page)

**Table 7.10 (continued)**

<i>Term</i>	<i>Definition</i>
Social phobia	A persistent, irrational fear of being the focus of attention, or fear of behaving in a way that would be embarrassing or humiliating.
Specialised residential services	Services provided in the community that are staffed by mental health professionals on a 24-hour basis.
Stand-alone hospitals	Psychiatric hospitals that are separated from the general health care system.
Substance use disorders	Disorders in which drugs or alcohol are used to such an extent that behaviour becomes maladaptive; social and occupational functioning is impaired, and control or abstinence becomes impossible. Reliance on the drug may be psychological as in substance misuse, or physiological as in substance dependence.

**Table 7.11 Indicators**

<i>Indicator</i>	<i>Definition</i>
Consumer/carer involvement in decision making	Consumer participation arrangements in public sector mental health service organisations according to the scoring hierarchy (levels 1–4) developed for monitoring State and Territory performance under Medicare Agreements Schedule F1 indicators
Cost per patient bed day	The average patient day cost according to the inpatient type
Cost per non-admitted occasion of service	The proportion of expenditure allocated to patients who were not admitted divided by the total number of non-admitted occasions of service
Cost per woman screened	The total cost of provision of breast screening services divided by the number of women screened. The total cost of provision of breast screening services should include the cost of providing the BreastScreen Program in each jurisdiction, in addition to the cost of providing the program to women
Detection rate for small cancers	The rate of small ( $\leq 10$ mm) invasive breast cancers detected per 10 000 women screened
Mortality rate from breast cancer	The age-specific and age-standardised mortality rates, expressed per 100 000 women in the population, who died as a result of breast cancer
Mortality rate from suicide	The percentage of the population who died as a result of suicide
Participation rate	Age-specific rates for women participating in breast screening under BreastScreen Australia as a percentage of all women in the population
Participation rate of Indigenous women and women from non-English speaking backgrounds	Age-specific rates for women identifying themselves as being of Aboriginal and Torres Strait Islander descent, and for women from a non-English speaking background, participating in breast screening under BreastScreen Australia, as a percentage of their respective population group
Percentage of facilities accredited	The percentage of facilities providing mental health services that are accredited
Prevalence of treated mental disorders	Percentage of people in the population suffering from a mental disorder
Size and grade of detected cancers	The percentage of invasive cancers detected classified according to tumour size and grade

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## D Justice preface

Justice services are concerned with ensuring a safe society by enhancing public order and security and upholding the rule of law. This involves crime prevention, detection and investigation, judicial processes and dispute resolution, prisoner and offender management, and rehabilitation services.

The focus of this Report is on the justice services of police, court administration and adult corrective services. Other government services not included in this chapter also contribute to civil and criminal justice outcomes, for example:

- legal aid services provide access to both criminal and civil aspects of the justice system;
- alternative dispute resolution services, such as conciliation and mediation, help to resolve disputes;
- offices of fair trading operate to minimise the incidence of unlawful trade practices;
- crimes compensation services and victim support services assist victims' recovery from crime;
- prosecution services bring actions on behalf of the community in criminal actions; and
- various social services and community organisations in combination help prisoners released from prison reintegrate into society, support families of prisoners during the prisoner's incarceration, and assist people who have contact with the criminal justice system.

This preface focuses on the activities of police, courts administration and corrective services. Both police and courts administration services undertake activities not related to criminal justice. Police, for example, ensure public order during major sporting events and court administration services deal with civil justice matters.

### **Profile of the justice system**

Total recurrent expenditure for that part of the justice system covered in this Report was over \$6.4 billion in 1999-2000 (table D.1). This represents approximately

10 per cent of all expenditure on services covered in the Report. Police services accounted for approximately \$4.2 billion in 1999-2000, corrective services accounted for \$1.3 billion and criminal courts administration accounted for \$388 million. Total expenditure on civil justice was approximately \$479 million, although this estimate excludes a significant proportion of the non-courts administration of the civil justice system.

**Table D.1 Expenditure on justice by all Australian governments (1999-2000 dollars)<sup>a, b</sup>**

	1995-96	1996-97	1997-98	1998-99	1999-2000	Rate of growth
	\$m	\$m	\$m	\$m	\$m	%
Police services	3498	3645	3688	4036	4197	7.6
Court admin. – criminal	351	337	363	389	388	4.0
Court admin. – civil <sup>c</sup>	364	418	420	456	479	11.6
Corrective services <sup>d, e</sup>	1021	1096	1085	1193	1345	11.7
<b>Total justice system</b>	<b>5235</b>	<b>5495</b>	<b>5555</b>	<b>6074</b>	<b>6409</b>	<b>8.4</b>
	%	%	%	%	%	
Police services	67	66	66	66	66	..
Court admin. – criminal	7	6	7	6	6	..
Court admin. – civil	7	8	8	8	7	..
Corrective services	20	20	20	20	21	..
<b>Total justice system</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>..</b>

<sup>a</sup> Totals may not sum as a result of rounding. <sup>b</sup> Defined as recurrent expenditure plus depreciation less revenue from own sources. Excludes capital expenditure and estimates of the user cost of capital. Payroll tax has not been included for WA and the ACT as they are exempt. For all other jurisdictions it has been included. <sup>c</sup> Excludes the cost of probate hearings. <sup>d</sup> The expenditure on corrective services includes the cost of prisoner transport and escort services. For all years, the expenditure on corrective services is the same as that reported in the corresponding Report on Government Services. <sup>e</sup> Excludes WA community corrections expenditure during 1996-97. NT prison and community corrections did not deduct revenue from own sources between 1995-96 and 1996-97. .. Not applicable.

Source: State and Territory governments (unpublished); ABS 2000 (*Estimated Resident Population of Australia – States and Territories*, cat. no. 3201.0); ABS 1999 (*Australian Demographic statistics*, cat. no. 3101.0).

Expenditure between 1995-96 and 1999-2000 grew fastest in real terms for the correctional services (at an annual average of 11.7 per cent), and most slowly for criminal courts administration (at an annual average of 4.0 per cent).

Expenditure per person on civil and criminal justice in 1999-2000 was lowest in Tasmania (\$280) and highest in the NT (\$774). Expenditure per person was lowest for police services in Queensland (\$203) and highest in the NT (\$488). In criminal courts administration the lowest expenditure per person was by Victoria (\$14) and the highest was in the NT (\$56). Victoria also had the lowest expenditure per person on corrective services (\$42) and NT the highest (\$176) (table D.2).

**Table D.2 Government expenditure on justice, per capita  
(1999-2000 dollars)<sup>a, b, c, d</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Police services	217	221	203	236	206	207	211	488	219
Court admin. – criminal	21	14	21	23	25	17	21	56	20
Court admin. – civil <sup>e</sup>	16	11	10	28	18	8	25	54	25
Corrective services	79	42	72	98	74	47	58	176	70
<b>Total justice system</b>	<b>334</b>	<b>288</b>	<b>306</b>	<b>385</b>	<b>324</b>	<b>280</b>	<b>315</b>	<b>774</b>	<b>334</b>
	%	%	%	%	%	%	%	%	%
Police services	65	77	66	61	64	74	72	63	66
Court admin. – criminal	6	5	7	6	8	6	4	7	6
Court admin. – civil <sup>e</sup>	5	4	3	8	6	3	4	7	7
Corrective services	24	15	24	25	23	17	20	23	21
<b>Total justice system</b>	<b>100</b>								

<sup>a</sup> Defined as recurrent expenditure plus depreciation less revenue from own sources. Excludes capital expenditure and estimates of the user cost of capital. Payroll tax has not been included for WA and the ACT as they are exempt. For all other jurisdictions it has been included. <sup>b</sup> Population estimated at 30 June 2000. <sup>c</sup> Totals may not sum as a result of rounding. <sup>d</sup> Includes expenditure on the Family Court of Australia and the High Court, which are not attributed to jurisdiction expenditure. <sup>e</sup> Excludes cost of probate hearings.

Source: State and Territory governments (unpublished); ABS 2000 (*Estimated Resident Population of Australia – States and Territories*, cat. no. 3201.0).

Some smaller elements of justice services are excluded from table D.2 and this Report. Police services, for example, do not cover the National Crime Authority or the federal functions of the Australian Federal Police. The courts administration chapter does not cover the operations of tribunals and registries (except for probate and court registries). The corrective services chapter does not cover juvenile corrective services.

A number of factors contribute to the differences in expenditure across jurisdictions. These include factors beyond the control of jurisdictions (such as geographic dispersion, economies of scale and socioeconomic factors), as well as differences in justice policies. Expenditure may vary across jurisdictions because the scope of services delivered by justice agencies may differ. Police agencies in some jurisdictions, for example, provide event management and emergency response services.

## **Policy developments in the criminal justice system**

The provision of services by the system is continually evolving. In addition to the policies particular to each of the three justice services (see chapters 8–10), whole-of-government policies are increasingly being developed in response to

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major issues such as crime prevention, drugs, youth, Indigenous justice and mental health issues.

Over the past five years, several jurisdictions have been trialing new illicit drug strategies, centred around harm minimisation and the diversion of offenders from the criminal justice system. These initiatives have included the introduction of drug courts and cautions for cannabis users.

The Council of Australian Governments (COAG) endorsed a framework in November 1999 for an illicit drug diversion strategy. In its Communique of 9 April 1999, COAG:

agreed to work together to put in place a new nationally consistent approach to drugs in the community involving diversion of drug offenders by police to compulsory assessment.

This framework will ensure a nationally consistent approach to diversion of drug offenders while recognising that law enforcement, drug assessment, and education and treatment services are jurisdictionally based and have different legislative, practical and cultural circumstances. This initiative will commence in all jurisdictions in 2000, and will be carefully monitored and evaluated.

NSW has been active in trying new initiatives in relation to illicit drug use. NSW established the first Adult Drug Court, which has now been operating for over one year, and has recently established a trial Youth Drug Court in Western Sydney. Other drug initiatives aimed at diverting persons from the justice system to treatment are also being trialed as initiatives arising from the NSW Drug Summit held in 1999.

One of these initiatives involves cooperation between Corrective Services and the Corrections Health Service in the provision of a 24-hour service at a number of NSW correctional centres to assist in the detoxification and stabilisation of prisoners entering the correctional system. The overall aim of this service is to ensure continuity of treatment before, during, and after incarceration.

The Aboriginal Justice Advisory Committee (NSW) was established in 1993 in response to Recommendation two of the Royal Commission into Aboriginal Deaths in Custody. The Aboriginal Justice Advisory Committee was established to consider and advise the NSW Attorney General on law and justice issues which affect Aboriginal and Torres Strait Island people in their contact with the criminal justice system in NSW. The Aboriginal Justice Advisory Council provides a framework for a partnership between Aboriginal communities and criminal justice system agencies. At the central level, it facilitates a whole-of-government approach to the over-representation of Aboriginal people in the criminal justice system through

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direct Aboriginal community input, specialist advice and departmental expertise and support.

Crime Prevention Victoria, a new division of the Victorian Department of Justice, is responsible for the development and coordination of the Victorian Government's crime prevention framework and strategy plan. A key element of this strategy is the development of interagency partnerships that recognise the contributions that Victoria Police and the departments of Education, Infrastructure, Health, Justice, and Premier and Cabinet make to crime prevention. Local governments are encouraged to take a leadership role in crime prevention and community safety through the Safer Cities and Shires Program.

Victoria's justice-wide diversion strategy — involving police, the judiciary and corrections — has sought to develop more appropriate options for less serious offenders. The Victorian Criminal Justice Enhancement Program intends, through its Accused Management Project, to provide an integrated data set on prisoners and offenders for use throughout the Victorian criminal justice system.

Queensland's Crime Prevention Strategy is being oversighted by a Task Force, with a Secretariat based in the Department of the Premier and Cabinet. It seeks to tackle the causes of crime and coordinate the crime prevention activities of a range of government agencies.

Amendments to the Queensland *Penalties and Sentences Act 1992*, the *Juvenile Justice Act 1992*, and the *Children's Court Act 1992*, will enable elders and community justice groups to formally assist judges and magistrates in sentencing Aboriginal and Torres Strait Islander people found guilty of an offence.

Following the release of the *Aboriginal and Torres Strait Islander Women's Task Force on Violence Report* in late 1999, key priorities of the Queensland Domestic Violence Council are Indigenous family violence, non-spousal violence, elder abuse, and domestic abuse of people with a disability.

The Department of Justice in South Australia is developing a Justice Illicit Drug Strategic Framework which will focus the efforts of the portfolio on coordinating responses across the criminal justice system, identifying the extent of illicit drug use and ensuring that responses are appropriate and effective.

Drug Action Teams are a new initiative led by the police in SA and are aimed at increasing community level coordination and cooperation in identifying and resolving local drug issues. As well, SA is also conducting a two-year trial of a Drug Court. The Court targets those offenders who commit drug related crime and are facing terms of imprisonment.

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The SA Justice and Human Services portfolios have also focused their attention on ways to achieve the best possible interface between justice and treatment and support services, to optimise management and service provision for accused persons with a mental impairment at all stages of contact with the criminal justice system.

The action plan ‘To Address the Cycle of Aboriginal Offending’ is a project of the Western Australian Ministry of Justice, aimed at reducing crime through a coordinated whole-of-government approach. The project (at the pilot stage) is a long term strategy that addresses local priorities and risk factors for Indigenous juveniles.

The Tasmanian Government has been active in encouraging strategic partnerships between its public sector agencies, community organisations and local government. A number of key initiatives have arisen as a result of this approach including:

- new youth justice legislation aimed at providing an alternative to the criminal justice system for young offenders. Police now have a broader range of cautionary and diversion options and collaborate closely with health and justice agencies in establishing family and community conferences;
- a Tasmanian Crime Prevention Program, which has seen the consolidation of the work of the Crime Prevention and Community Safety Council comprising government and community and local government representatives. Projects have focused on youth truancy from school, older persons and personal safety, fear of crime, business safety and the establishment of partnership agreements between the Council and local governments; and
- the formation of two strategic management groups — the Inter-Agency Steering Committee and the Inter-Departmental Committee on Drugs. These offer benefits to the community and particularly to health, education and justice agencies through a reduction in cross-agency duplication in service delivery as well as implementing whole-of-government strategies.

The ACT Youth Strategy coordinates government and community responses to youth issues while addressing problems associated with youth. It also attempts to identify opportunities for young people to contribute to decision making and self determination. The strategy involves a number of government agencies beyond the justice portfolio.

Several jurisdictions have created justice agencies that have responsibility for at least two of the three justice services covered in this Report. The WA Ministry of Justice is responsible for courts administration and corrective services. The SA Justice Portfolio, the Victorian Department of Justice, and the ACT Department of Justice and Community Safety help administer police, courts administration and corrective services. Each of these developments has the potential to encourage improved justice policy coordination.

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## Framework of the criminal justice system

The criminal justice system is broad and complex, and has many interrelated objectives. An overarching objective is to encourage community access to a fair system of justice that protects the rights of individuals and that is responsive to community needs (box D.1).

### Box D.1 Objectives for the criminal justice system

The goal is to provide protection for the rights and freedoms of all people through:

- the operation of police services that enhance community safety by preventing, detecting and investigating crime;
- the administration of criminal justice that determines guilt and applies appropriate, consistent and fair sanctions to offenders; and
- the provision of a safe, secure and humane adult correctional system that incorporates the elements of safe containment and rehabilitation of offenders, and restorative justice to the community.

In a manner that is accessible, equitable, timely and efficient.

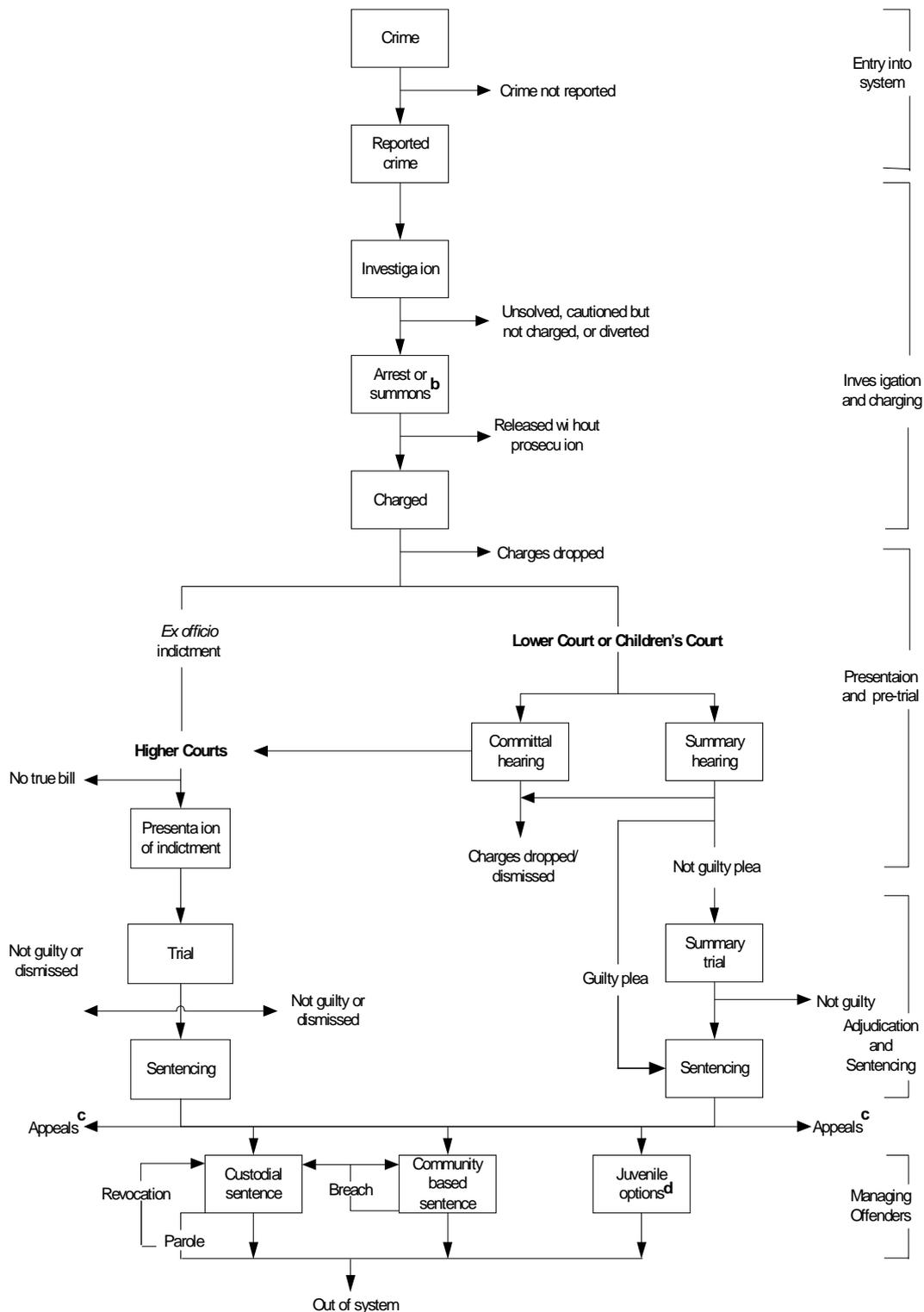
## A model of the criminal justice system

The performance of the criminal justice system is measured against the stated policy objectives of effectiveness (the ability of agencies to meet the outcomes of access, equity and timeliness) and efficiency (the measurement of how well inputs are used to deliver a range of outputs). As individuals pass through the criminal justice system, they interact with police, courts and corrections. Examples of the interactions in this system are:

- the police service's direct influence on the demand on the judicial system, through policing strategies such as police cautions and other diversionary strategies;
- the judicial system's direct influence on the demand on the correctional system, through changes in sentencing practices; and
- the correctional system's direct influence on the demand on the police service, through offences in prison and escapes from prison.

Figure D.1 illustrates the possible stages involved in processing cases through the criminal justice system and shows some of the linkages between the key agencies of police, courts and corrective services. This depiction is broadly indicative and, for purposes of brevity, does not seek to capture all the nuances of the criminal justice system.

Figure D.1 Flows through the criminal justice system<sup>a</sup>



<sup>a</sup> Does not account for all variations across jurisdictions. <sup>b</sup> Includes voluntary agreement to attend court in some jurisdictions. <sup>c</sup> Appeals are referred to higher courts. Lower court sentencing is upheld for unsuccessful appeals. <sup>d</sup> Report does not cover juvenile options in managing offenders.

Source: Adapted from Criminal Justice Commission (1991).

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## **Key results of the criminal justice system**

The following discussion matches the stated policy objectives of the criminal justice system (box D.1), while accounting for the process by which the criminal justice system operates (figure D.1). The discussion illustrates the set of performance indicators used in this Report. It also identifies other areas that are not covered in this analysis, but which may also be relevant in providing a more complete picture of the operations of (and options available to) police, courts and corrective services.

### **Crime prevention and detection**

#### *Effectiveness*

The Report includes measures of community perceptions of safety as well as rates of reported crime and victimisation. Measures of public perceptions of safety indicate the success of the system in ensuring the public feels safe (both personally and regarding their property). Public perceptions of safety are reported in detail in chapter 8 and include measures of perceptions of safety in the home, in public places and on public transport.

An indicator of the success of crime prevention and law enforcement is the recorded rate of crime. Given that a number of factors can influence recorded rates of crime, including the general willingness to report crimes to police, additional information is also required. A survey of the community's experience with crime (such as the Australian Bureau of Statistics' Crime and Safety Survey) helps to clarify the relationship between reported and unreported crimes. Recorded rates of crime and information from crime victimisation surveys are reported in chapter 8.

#### *Efficiency*

The cost of the service delivery area 'Community safety and support' per capita is used as a proxy for the efficiency of delivering these services. This is contained in chapter 8.

### **Crime investigation**

#### *Effectiveness*

Information on the outcomes of criminal investigations indicates the success of the police in responding to criminal incidents. Chapter 8 reports on outcomes of

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investigations. The data includes: the total number of investigations for a range of crimes; the investigations finalised as a proportion of total investigations; and the investigations in which the offender was proceeded against as a proportion of investigations finalised.

Areas that are not covered in chapter 8, but which may also be relevant, are the proportion of investigations that resulted in the offender being cautioned or diverted, as well as the proportion of investigations that are not resolved.

### *Efficiency*

The efficiency measure of crime investigation is the cost per capita of delivery of the service to the community. This is contained in chapter 8.

## **Presentation and pre-trial**

### *Effectiveness*

Measures relating to the proportion of lower court cases resulting in a guilty plea are indicative of the work undertaken by police and prosecuting services. Chapter 8 provides data for police in this area. As well, the timeliness with which criminal committal matters are finalised are included in chapter 9. Data on the timeliness of hearings provide important information on the ability of the justice system to ensure offenders have access to a speedy hearing, and on the courts' ability to handle caseload.

### *Efficiency*

The cost of the service delivery area 'Services to the judicial process' per capita is used as a proxy for the efficiency of delivering police prosecution services. This is contained in chapter 8. The cost per case in lower criminal courts is used to measure the efficiency of case management by court administrators. This is contained in chapter 9.

## **Adjudication and sentencing**

### *Effectiveness*

Measures relating to the proportion of higher court cases resulting in a guilty finding are contained in chapter 8. As well, case completion times in criminal courts

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and adjournment rates in criminal courts are included in chapter 9. Data on the timeliness of hearings provide important information on the ability of the justice system to ensure that alleged offenders have access to a speedy hearing, and on the courts' ability to effectively manage caseload.

An area that is not covered in this analysis, but which may also be relevant, is client satisfaction with court administration services. The proposed court administration survey is discussed in chapter 9.

## **Offender containment**

### *Effectiveness*

The key effectiveness measures of containment are prisoner assault, death and escape rates. In community corrections the key measure is the proportion of orders successfully completed. Descriptive indicators such as imprisonment and offender rates are disaggregated by gender and Indigenous status. Chapter 10 reports on all of this data.

### *Efficiency*

There are no data that report the cost of containment in this analysis. Costs associated with 'total resource management' and 'government operations resource management' provide some indicators of the cost of corrective services — but these costs also include things like rehabilitation, reparation, and prisoner custody and transport (chapter 10).

## **Offender rehabilitation and reparation**

### *Effectiveness*

Information on the number of prisoners and offenders undertaking approved education and training courses, as well as personal development courses, provides an indication of the role of corrective services in providing rehabilitative opportunities for offenders. The types of rehabilitation programs undertaken are shown in chapter 10.

Reparation may include prisoners undertaking work in the community on environmental and other work projects. Offenders in community corrections

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provide reparation by serving court orders with unpaid community work components. The level and distribution of this reparation are detailed in chapter 10.

An area that is not covered in this analysis, but which may also be relevant as part of rehabilitation, is the number of offence related programs (for example, intensive sex offender treatment programs and anger management programs).

### *Efficiency*

Another area that is not reported in this analysis, but may be relevant, is the cost associated with rehabilitation and reparation programs. Currently, these data are incorporated within the total cost of systemwide operations (chapter 10).

## **Overall performance**

### *Effectiveness*

Recidivism — the extent to which persons convicted by the criminal justice system re-offend — is a partial measure of the performance of the system as a whole in improving public safety by reducing the incidence of crime. The only indicator of recidivism presented in this Report relates to the return to corrective services of persons released from custody or community correction orders. This measure is only a partial indicator, because it:

- does not include arrests that do not proceed to court (for example, restitution or police caution);
- does not include convictions for re-offending that lead to outcomes that are not administered by corrective services (for example fines);
- is not weighted in any way to account for the nature of the re-offence (for example, a return to prison for a traffic offence is counted in the same manner as a return for a more serious offence such as armed robbery); and
- does not include a corrections sanction for a repeat offender who has previously been sentenced to only non-corrections sanctions (such as fines).

The original indicator of recidivism assessed within the corrective services sector, was limited to the percentage of prisoners returning to prison within two years of release. A second indicator of return to corrective services (either prisons or community corrections) was introduced in 1997-98. Both indicators are based on the outcomes for prisoners released from custody during the two years before the year in which the indicator is reported; thus data for 1999-2000 relate to prisoners released during the 1997-98 period.

Recidivism among offenders under community correction orders is also assessed by two indicators — a return to community corrections and a return to corrective services (either prisons or community corrections). Return to corrective services is the preferred indicator in both cases. However, not all jurisdictions are able to report on this measure.

In 1999-2000, SA reported the lowest rate of return to prison by prisoners (9.5 per cent) and Western Australia the highest (44.1 per cent). Of those four jurisdictions also able to provide figures on prisoner return to corrections as a whole (Victoria, Queensland, SA and the NT), SA reported the lowest rate in 1999-2000 (24.9 per cent) and NT the highest (49.2 per cent).

Queensland reported the lowest rate of return to community corrections by offenders following completion of community orders in 1999-2000 (7.7 per cent) and WA the highest (26.4 per cent). NSW and the ACT did not report on this indicator. Of the four jurisdictions also able to provide figures on offender return to corrections as a whole (Victoria, Queensland, SA and the NT), Queensland reported the lowest rate in 1999-2000 (15.1 per cent) and the NT (37.2 per cent) the highest (table D.3).

**Table D.3 Proportion of prisoners and offenders released or completing order in 1997-98, returning with a correctional sanction within two years (per cent reported)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Prisoners returning									
– to corrective services	na	42.9	38.8	na	24.9	na	..	49.2	na
– to prison	39.5	33.7	29.3	44.1	9.5	34.2	..	34.9	33.1
Offenders returning									
– to corrective services	na	24.0	15.1	na	17.7	na	na	37.2	na
– to community corrections	na	20.2	7.7	26.4	17.1	22.7	na	18.5	18.0

na Not available. .. Not applicable.

Source: State and Territory governments (unpublished).

### *Efficiency*

The efficiency of the criminal justice system is reflected in the level of resources used to deliver justice services. Unit cost indicators for individual justice services are presented in the relevant chapters, but some system outcomes result from interactions between the individual services. One indicator of the efficiency of the justice system is annual government expenditure on justice services per person (table D.4). However, comparisons of unit costs should account for conflicting

objectives and tradeoffs between cost, quality and timeliness, and should be viewed in the context of the suite of effectiveness indicators in each chapter.

Table D.4 **Government expenditure on criminal justice system per capita (1999-2000 dollars)<sup>a, b, c</sup>**

	1995-96	1996-97	1997-98	1998-99	1999-2000 <sup>d</sup>	Real annual growth rate
	\$	\$	\$	\$	\$	%
NSW	282	277	292	314	318	5.0
Victoria	263	266	257	271	277	2.0
Queensland	222	238	245	268	296	12.3
WA <sup>e</sup>	287	311	324	347	370	10.8
SA	273	295	277	291	305	4.5
Tasmania	224	246	257	271	272	8.2
ACT	229	233	252	279	302	11.7
NT <sup>f</sup>	658	696	731	793	720	3.7
<b>Australia</b>	267	274	279	300	309	6.0

<sup>a</sup> Defined as recurrent expenditure plus depreciation less revenue from own sources. Excludes capital expenditure and estimates of the user cost of capital. <sup>b</sup> Population estimated at 30 June. <sup>c</sup> Excludes costs of civil and probate hearings. <sup>d</sup> Includes adjustments for WA and the ACT to include a proxy amount for payroll tax (\$14 and \$11 per head of population respectively). Data for WA and the ACT will differ from previous years, as data from 1995-96 to 1998-99 excludes any adjustments for differences in payroll tax. Consequently, rates of growth for these two jurisdictions may be misleading. All other jurisdictions have payroll tax included. <sup>e</sup> Excludes WA community corrections expenditure during 1995-96 and 1996-97. <sup>f</sup> Prison and community corrections revenue from own sources not deducted between 1995-96 and 1996-97.

Source: State and Territory governments (unpublished); ABS 2000 (*Estimated Resident Population of Australia – States and Territories*, cat. no. 3201.0); ABS 1999 (*Australian Demographic statistics*, cat. no. 3101.0).

Per capita expenditure on criminal justice in Australia grew at an average annual rate of 6.0 per cent between 1995-96 and 1999-2000. The highest rate of annual growth was experienced in Queensland (12.3 per cent). The slowest rates of annual growth were experienced in Victoria (2.0 per cent), the NT (3.7 per cent) and SA (4.5 per cent).

## Future directions in performance reporting

Each chapter (police, courts and corrective services) contains its own service-specific future directions. The aim of this section is to provide an insight into directions in performance reporting that covers the whole justice sector.

This discussion on the key results focuses on the importance of flows throughout the justice system, and on the interaction of police, courts and corrective services. To provide a better grasp of these flows, the issue of a consistent and uniform counting unit becomes important; for example, police may report the number of

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charges laid, and courts may report the number of cases handled, but these do not indicate the number of individuals in the system (that is, a number of charges may represent one individual).

The Australian Bureau of Statistics is developing a National Crime and Justice Statistical Framework which will use, among other things, common definitions and counting rules across service areas and jurisdictions. The Australian Bureau of Statistics expects to release the first edition of a national data dictionary for crime and justice statistics in mid-2001.

The advantage of moving to a common person based denominator is that it ensures consistent reporting across jurisdictions and criminal justice agencies, and allows the flow of offenders to be tracked through the criminal justice system. It also allows for the improved comparability of non-criminal justice agency data. The Australian Bureau of Statistics is likely to continue reporting non-person based data (for example, the number of charges laid by police and the number of cases handled by courts). Ideally in the future, these data may supplement the use of a common person based reporting unit.

### **Indigenous issues**

The information available on contact by Indigenous people with parts of the criminal justice system is of varying quality. The most important reason for the poor quality of Indigenous data is the failure of a number of justice agencies to explicitly ask for the person's Indigenous status. Self identification is the Australian Bureau of Statistics' preferred method of identifying Indigenous clients. However, self identification can be difficult to implement, given that identifying Indigenous status may be perceived as discriminatory or prejudicial, particularly if the question is asked at an inappropriate time.

The accuracy of police records of charges or convictions against Indigenous people is uncertain, depending on whether the records were made on the basis of appearance or self identification. The result of recent work to analyse the quality of the Indigenous status data and racial appearance data collected by the NSW Police is contained in chapter 8 (box 8.4).

Throughout nearly all jurisdictions, court administrations appear not to record the racial identity of litigants in a form that can be readily extracted as data, although some progress appears to have been made in NSW with information on Indigenous status of defendants now routinely captured for all court appearances. If other jurisdictions make similar progress, then detailed monitoring and comparison of

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trends in court appearances and outcomes of Indigenous and non-Indigenous defendants in criminal proceedings will be possible.

The data on the deaths of Indigenous people in police custody (see chapter 8), Indigenous representation in prisons and community corrections (see chapter 10), and Indigenous deaths in prison custody (see chapter 10) are of a high quality and are published within the Report.

While acknowledging that there are limitations, there may still be an opportunity to increase reporting in certain areas. An example of the indicators that could be developed for future Reports may include indicators that identify for Indigenous people:

- arrest rates;
- the use of diversionary mechanisms for juveniles;
- the number of offenders appearing in lower and higher courts;
- conviction rate;
- courts' use of imprisonment and non-custodial sentences;
- involvement in education and training programs while under custody; and
- rate of recidivism.

In some cases, greater examination of these indicators will be necessary. For instance, many diversionary schemes are not developed to suit the needs of Indigenous people, and therefore are not accessed very often. Thus, a measure of the number and types of specific Indigenous diversionary schemes may be a better indication of the justice system's ability to meet the needs of Indigenous clients. A comparative measure of Indigenous use of specific and mainstream services, and measures linking the use of such schemes and rates of re-offending might provide a more qualitative indication.

One source of further Indigenous data is the Australian Institute of Criminology, which produces a number of statistical and analytical reports on the involvement of Indigenous people within the criminal justice system, particularly in relation to deaths in police and corrective services custody.

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## 8 Police services

This chapter reports on the performance of police services. These comprise the operations of the police agencies of each State and Territory government and the ACT community policing function performed by the Australian Federal Police under the 'Policing Arrangement between the ACT and Commonwealth governments'. The national policing function of the Australian Federal Police and other national non-police law enforcement bodies, such as the National Crime Authority, are not included in the Report.

A profile of the police sector appears in section 8.1, followed by a brief discussion of recent policy developments in section 8.2. The general approach to performance measurement for police services is outlined in section 8.3. The over arching indicators of police performance are contained in section 8.4, and the specific performance measurement frameworks and data for each service delivery area are discussed in sections 8.5–8.8. Section 8.9 contains information on the future directions in performance reporting. The chapter concludes with jurisdictions' comments (section 8.10), information on sample data (section 8.11) and definitions of data descriptors and indicators (section 8.12).

Supporting tables for chapter 8 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as `\Publications\Reports\2001\Attach8A.xls` and in Adobe PDF format as `\Publications\Reports\2001\Attach8A.pdf`.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 8A.3 is table three in the electronic files). They may be subject to revision. The most up-to-date versions of these files can be found on the Commission's Review web page ([www.pc.gov.au/service/gsp/2001/](http://www.pc.gov.au/service/gsp/2001/)). Users without Internet access can contact the Secretariat to obtain up-to-date versions of these tables (see details on the inside front cover of the Report).

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## 8.1 Profile of police services

### Service overview

The police services are the principal means through which State and Territory governments pursue, in an equitable and efficient manner, the following objectives: to ensure a safe and secure environment for the community; to investigate offences; to provide road safety and traffic management; and to provide services to the judicial process.

In meeting these objectives, police are involved in a diverse range of activities aimed at reducing the incidence and effect of criminal activity. Police also respond to more general needs in the community — for example, assisting emergency services, mediating family and neighbourhood disputes, delivering messages regarding death or serious illness, and advising on general policing and crime issues (Criminal Justice Commission 1996).

The expenditure of each jurisdiction on police services for 1993-94 to 1999-2000 is contained in tables 8A.1-8.

### Roles and responsibilities

Policing services are predominantly the responsibility of State and Territory government police agencies. The Australian Federal Police provides a community policing service in the ACT through a strategic partnership underpinned by a detailed purchaser/provider agreement. The Commonwealth Government is responsible for the Australian Federal Police.

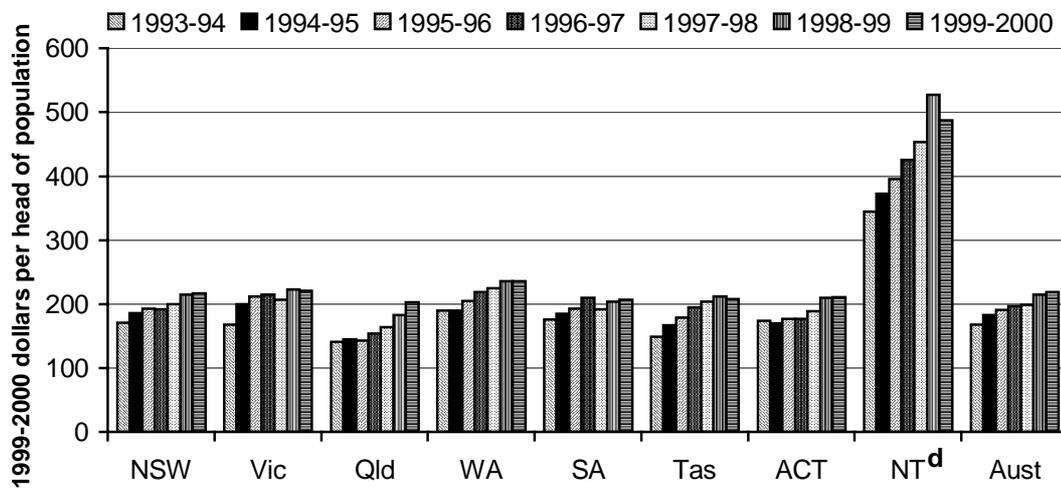
Each jurisdiction's police service is autonomous, but there is significant cooperation among jurisdictions (under the auspices of the Australasian Police Ministers' Council). There are also bilateral arrangements and common national police services, such as the National Institute of Forensic Sciences and the National Exchange of Police Information.

### Funding

Funding for police services comes almost exclusively from State and Territory government budgets, with some specific purpose Commonwealth grants. Real recurrent expenditure (less revenue from own sources) on police services across Australia was approximately \$4 billion (or \$219 per head of population) in 1999-2000; across jurisdictions, it varied from \$203 per head of population in

Queensland to \$488 per head of population in the NT. The general trend of rising police expenditure per head of population across Australia in recent years continued in 1999-2000. The average annual change in real recurrent expenditure (less revenue from own sources) between 1993-94 and 1999-2000 ranged from 2.7 per cent in SA to 6.3 per cent in Queensland (figure 8.1). Variations in policies, socioeconomic factors and geographic/demographic characteristics may influence expenditure on police services in each jurisdiction.

Figure 8.1 **Real recurrent expenditure (less revenue from own sources) on police services<sup>a, b, c</sup>**



<sup>a</sup> Excludes the user cost of capital. <sup>b</sup> Includes payroll tax for all jurisdictions, except WA and the ACT (which are exempt from payroll tax). If WA and the ACT were liable for paying payroll tax, then real recurrent expenditure (less revenue from own sources) in 1999-2000 would have increased by \$10 per head of population in WA and the ACT. <sup>c</sup> Population based on ABS estimates for June 2000. <sup>d</sup> The inclusion of superannuation costs for the first time in 1998-99 accounted for two thirds of the increase in expenditure data from 1997-98 to 1998-99.

Source: table 8A.11.

The chapter breaks police outputs/programs into four key service delivery areas. A fifth area ('other services') has been identified to account for expenditure by jurisdictions on unique functions that are not directly associated with the key service delivery areas. Expenditure data on each service delivery area of police are preliminary, and thus have not been subjected to extensive tests to determine comparability. (Further information on the service delivery areas is included within section 8.3, and the outputs/programs undertaken within each service delivery area, by jurisdiction, are listed in table 8A.10).

Further, some differences in counting rules may exist across jurisdictions as a result of the differing mixes of activities undertaken within each of the common service delivery areas. As well, the activity survey data which provides the relative

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breakdown of expenditure, is reliant on snapshot data for most jurisdictions. Therefore, the survey is based on a snapshot in time and may not be truly reflective of peaks and troughs in expenditure throughout the year. The reliability and representativeness of survey data will continue to improve as more surveys are conducted. In the meantime, caution should be taken when comparing results across jurisdictions.

The NT and Queensland did not provide data in this area. The NT do not undertake activity surveys, and Queensland have doubts as to the accuracy and comparability of the whole data set.

As a proportion of each jurisdictions total budget, NSW spent the most on community safety and support (63 per cent) in 1999-2000, while NSW, Victoria and Tasmania each spent the most on crime investigation (22 per cent). Expenditure on road safety and traffic management (as a proportion of total budget) was highest in WA (15 per cent), while Victoria spent the most on providing services to the judicial process (22 per cent) (figure 8.2). Expenditure is broken down by service delivery area for 1999-2000 in table 8A.12 and for 1998-99 in table 8A.13.

## **Size and scope of sector**

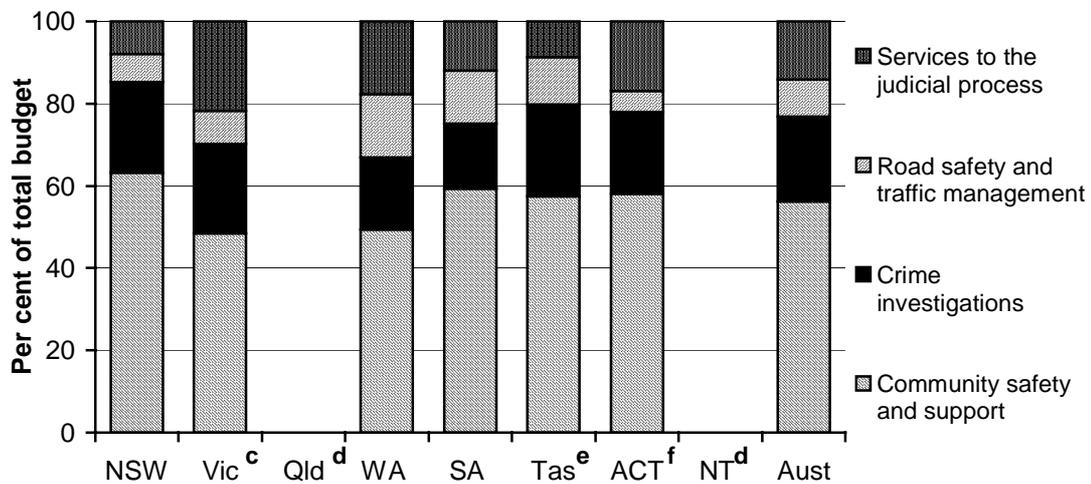
### *Client groups*

Broadly, the whole community is a 'client' of the police. All individuals are provided with protection, help and reassurance, and everyone is required to comply with the law. Some members of the community have more direct dealings with the police and can be considered a specific client group, for example:

- victims of crime;
- those suspected of committing offences;
- those involved in traffic related incidents;
- third parties (such as witnesses to crime, and people reporting accidents); and
- those requiring police services for non-crime related matters.

Of all Australian people aged 18 years and over, approximately 49 per cent had some form of contact with police in 1999-2000. Police initiated the most recent contact in 59 per cent of these cases, mainly to undertake random breath testing (68 per cent of cases), pursue traffic violations (10 per cent) and request information (8 per cent). Most contact initiated by members of the public was to report a crime (40 per cent), request assistance (16 per cent) or report an accident (13 per cent) (tables 8A.28; 8A.30 – 32).

Figure 8.2 Recurrent expenditure (less revenue from own sources) on police services, by service delivery area, 1999-2000<sup>a, b</sup>



<sup>a</sup> Some data are preliminary and thus have not been subjected to extensive tests to determine comparability. Further, some differences in counting rules may exist across jurisdictions as a result of the differing mixes of activities undertaken within each of the common service delivery areas. <sup>b</sup> Overheads (for example, infrastructure costs, such as rent on buildings, and vehicle and equipment costs) have been apportioned to these service delivery areas on a *pro rata* basis. If 20 per cent of expenditure goes towards crime investigation, for example, then 20 per cent of overheads will be apportioned to crime investigation. <sup>c</sup> In 1998-99, data showed 20 per cent of expenditure on road safety and traffic management, and 8 per cent of expenditure on services to the judicial process. In 1999-2000, the data showed 8 per cent of expenditure on road safety and traffic management and 22 per cent of expenditure on services to the judicial process. The variation is a result of a change in output costing method aligning services to financial allocations. Previous data used historical cost formula. <sup>d</sup> Data only available for all key service delivery areas combined. <sup>e</sup> The total service delivery area budget incorporates overheads and expenditure associated with ministerial support and information services. These costs are distributed evenly throughout the four key service delivery areas. As in the 2000 Report, the data exclude expenditure associated with emergency management and the protection of primary industries and fisheries resources. <sup>f</sup> Results are based on a survey of staff directly involved in the delivery of community policing and related support services within the ACT region. The Australian Federal Police employs a teams based approach to criminal investigations and response. Subsequently, officers involved in response activities sometimes (depending on circumstances and priorities) commence an investigation as part of the initial response to an incident. In some circumstances, time spent on preliminary investigations following the initial response to an incident may have been counted against community safety and support.

Source: table 8A.12.

### Recorded crime in Australia

The Australian Bureau of Statistics compiles comparable data on recorded victims of crime for selected offences. These statistics relate to those crimes against the person and crimes against property that are common across jurisdictions, and do not reflect all crimes in these categories (box 8.1).

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## Box 8.1 Victims of crime

### Recorded crime statistics

Since 1993 the Australian Bureau of Statistics has produced a series of publications providing crime statistics on victims of crime, recorded by State and Territory police services in Australia. *Recorded Crime, Australia, 1999* is the latest publication in this series.

#### *Comparing recorded crime statistics across jurisdictions*

The compilation of recorded crime statistics uses national standards and classifications, but caution should be exercised when directly comparing these statistics across States and Territories because:

- data are based on recorded crimes only; and
- reporting procedures, crime recording systems and legislation differ among States and Territories.

#### *Comparing recorded crime statistics with jurisdiction-specific data*

Care should also be taken if attempting to compare the Australian Bureau of Statistics' recorded crime statistics with data reported by some jurisdictions. The former are *victim based* (that is, based on the number of victims per selected offence category), whereas data for each State and Territory are commonly *offence* or *incident based* (that is, based on the total number of all offences or incidents recorded). To illustrate the difference, multiple offences of the same national offence category committed against the same victim are included as only one count in the national crime statistics. In contrast, the information systems in each jurisdiction may count each offence committed against the same victim.

### Crime and safety statistics

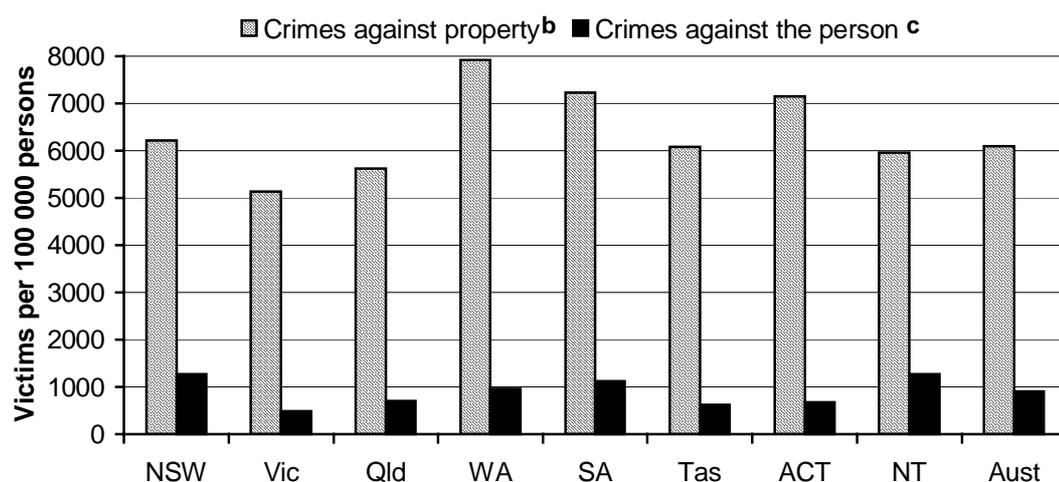
Another valuable measure of crime is the Crime and Safety Survey Australia, conducted every five years by the Australian Bureau of Statistics. The latest national survey was conducted in April 1998, and data from this survey were released in August 1999. This survey provides information on the levels of both reported and unreported victimisation in the Australian community for selected offences. In addition, the Australian Bureau of Statistics undertook to repeat the survey in WA and NSW (as part of their State Supplementary Survey) in 1999.

Crimes against the person include: murder; attempted murder; manslaughter; driving causing death; assault; sexual assault; kidnapping/abduction; robbery; and blackmail/extortion. Crimes against property include: unlawful entry with intent; motor vehicle theft; and other theft.

There were 172 230 recorded victims of crime against the person (or 908 victims per 100 000 persons) recorded by police in Australia in 1999. This figure includes 4760 non-person victims (such as organisations) of armed/unarmed robbery and blackmail/extortion. The number of crimes per 100 000 persons varied across jurisdictions, from 497 in Victoria to 1272 in NSW (figure 8.3).

There were also 1 155 741 victims of crimes against property (or 6095 per 100 000 persons) in Australia in the same year. Across jurisdictions the number per 100 000 persons ranged from 5135 in Victoria to 7921 in WA (figure 8.3). These data understate the true level of crime in Australia because not all offences are reported to, or become known by, police. In addition, the offences include only selected offences and therefore exclude certain offences for which it is more difficult to develop comparable data (for example, fraud offences). Section 8.5 contains further information on crime rates and victims of specific offences.

Figure 8.3 Victims of recorded crimes, 1999<sup>a</sup>



<sup>a</sup> Excludes offences against Commonwealth laws processed under Commonwealth jurisdiction; conspiracy offences; aiding, abetting and accessory offences; and other offence types, such as drug and prostitution offences. <sup>b</sup> Includes unlawful entry with intent; motor vehicle theft; and other theft. Data are based on crimes reported to police. Includes a small proportion of person victims of other theft. <sup>c</sup> Includes murder; attempted murder; manslaughter; assault; sexual assault; kidnapping/abduction; armed robbery; unarmed robbery; and blackmail/extortion. Data are based on reported crimes to police. Includes a small proportion of non-person victims (such as organisations) of armed/unarmed robbery and blackmail/extortion. For person offences, the victim may be the victim of multiple person offences within a single criminal incident.

Source: table 8A.14.

### Staffing

Most people directly involved in delivering police services are sworn police officers. These officers exercise police powers, including the power to arrest,

summons, caution, detain, fingerprint and search. However, a trend has occurred in recent years to increase the participation of non-sworn officers (or contracted external providers) to undertake some activities. 'Civilianisation' of police services has three key objectives:

- to account for the increasing need for specialist skills;
- to reduce the amount of administrative work undertaken by sworn police staff; and
- to reduce the involvement of sworn staff in duties that do not require constabulary office (for example, crime scene analysis and intelligence analysis).

Total police staffing in Australia was 52 064 (or 271 per 100 000 persons) in 1999-2000, which equalled that in 1993-94 but is lower than the 277 staff per 100 000 population in 1996-97.

Nationally, staffing comprised 211 sworn police officers and 60 unsworn employees per 100 000 persons in 1999-2000. Across jurisdictions, total staffing ranged from 230 staff per 100 000 in the ACT to 557 per 100 000 in the NT. Over the period of 1993-94 to 1999-2000, the national level of sworn police staff fell by the same amount by which the level of unsworn police staff increased. However, the changes in composition varied depending on the jurisdiction; for example, the NT increased its level of sworn police staff per 100 000 persons from 405 to 462, but decreased its unsworn staff from 124 to 95 over the same period. In contrast, SA's sworn police staff (per 100 000 persons) decreased from 246 to 232, while its unsworn staff increased from 50 to 64 persons (table 8.1).

**Table 8.1 Police staff, by sworn/unsworn status (staff members per 100 000 population)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas<sup>b</sup></i>	<i>ACT<sup>c</sup></i>	<i>NT<sup>d</sup></i>	<i>Aust</i>
Sworn police staff									
1993-94	210	219	193	246	246	225	223	405	218
1996-97	207	220	191	264	228	217	208	451	217
1999-2000	203	196	205	246	232	223	202	462	211
Unsworn police staff									
1993-94	54	50	53	57	50	62	19	124	53
1996-97	64	46	68	79	43	86	24	120	60
1999-2000	57	44	80	66	64	76	28	95	60

<sup>a</sup> Comprises all full time equivalent staff. <sup>b</sup> Additional unsworn staff were employed in 1996-97 to manage the firearms buy-back scheme. <sup>c</sup> Includes a notional 129 staff for corporate support functions attributed to the ACT community policing provided by the Australian Federal Police. The disaggregation of these 129 positions has been determined by apportioning details in accordance with the relative breakdown of the community policing staff. <sup>d</sup> Sworn police officers include police auxiliaries and Aboriginal community police officers.

Source: table 8A.15.

An operational staff member is any person (sworn or unsworn) who delivers a police or police related service to an external customer directly (where an external customer refers to members of the public, other government departments, courts and the government), including:

- operational staff (general duties officers, detectives, traffic officers, community policing and station counter staff); and
- operational support staff (any person directly supporting the operational provider, including technical staff and intelligence staff).

A non-operational staff member is any person who does not satisfy the operational staff criteria, including functional support staff such as finance staff and personnel services staff. Approximately 88 per cent of staff were operational in Australia in 1999-2000. Across jurisdictions, the proportion ranged from 92 per cent in WA and the ACT to 82 per cent in Victoria. Queensland was unable to provide information on operational status for 1999-2000.

From 1997-98 to 1999-2000, all jurisdictions identified a greater proportion of staff as being operational. However, the rate of increase in operational staff and decrease in non-operational staff over these years and between jurisdictions, has not been uniform (table 8.2). Caution should be used when interpreting these results as the data for earlier years, particularly 1997-98, may not be strictly comparable due to changes in definitions or methods used to compile the data.

**Table 8.2 Police staff, by operational status (per cent)<sup>a, b</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA<sup>c, d</sup></i>	<i>SA<sup>e</sup></i>	<i>Tas<sup>f</sup></i>	<i>ACT<sup>g</sup></i>	<i>NT</i>	<i>Aust</i>
Operational staff									
1997-98	85.4	75.9	na	69.5	68.5	72.8	80.2	73.7	na
1998-99	89.0	82.3	96.5	92.8	90.5	91.1	79.7	88.1	87.2
1999-2000	90.9	82.0	na	92.2	90.2	85.6	92.1	83.8	88.2
Non-operational staff									
1997-98	14.6	24.1	na	30.5	31.5	27.2	19.8	26.3	na
1998-99	11.0	17.7	3.5	7.2	9.5	8.9	20.3	11.9	12.8
1999-2000	9.1	18.0	na	7.8	9.8	14.4	7.9	16.2	11.8

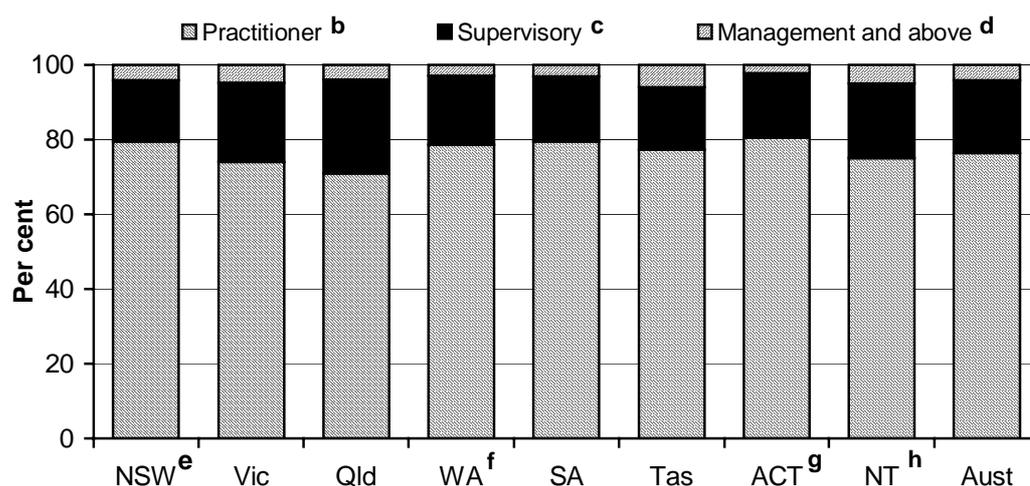
<sup>a</sup> Comprises all full time equivalent staff. <sup>b</sup> The definition of operational status is quite broad and may be interpreted differently across jurisdictions. <sup>c</sup> The determination of operational staff and non-operational staff for 1999-2000 is based on functional areas rather than the individual officers. An area may be deemed to be non-operational but may have some staff who would be considered operational and vice versa. <sup>d</sup> The 1998-99 data has been re-worked based on current methods and hence are different to those previously published. The 1997-98 figures are unable to be re-worked and are based on methods previously used. <sup>e</sup> The data for 1997-98 differs from the subsequent years. Operational support staff were included as non-operational staff in 1997-98 and correctly as operational staff in subsequent years. <sup>f</sup> 1998-99 figure incorrectly included operational marine and emergency service staff. These are services unique to Tasmania and their exclusion from this year's figures has changed the proportion of operational/non-operational staff status. <sup>g</sup> Includes a notional 129 staff for corporate support functions attributed to the ACT community policing provided by the Australian Federal Police. The disaggregation of these 129 positions has been determined by apportioning details in accordance with the relative breakdown of the community policing staff. **na** Not available.

Source: table 8A.16.

Further, staff can be reported by classification. Nationally, in 1999-2000, the majority of police staff (76 per cent) were concentrated in the practitioner area. This includes civilian staff (administration) and sworn staff (constable to senior constable). More staff were at a supervisory level in Queensland (25 per cent) than anywhere else. Tasmania had the highest proportion (6.0 per cent) of staff at management level or above (including executive or senior executive level staff). This is primarily due to a policy decision to increase the number of senior staff managing operational criminal investigation teams. The ACT had the lowest proportion of staff at management level or above (2.3 per cent) (figure 8.4).

This is only the second year in which these data have been published in the Report, and the results did not differ significantly from the classifications data published last year (table 8A.18).

Figure 8.4 Police staff, by classification, 1999-2000<sup>a</sup>



<sup>a</sup> Comprises all full time equivalent staff. <sup>b</sup> Comprises civilian administration staff and sworn staff (from Constable to Senior Constable). <sup>c</sup> Comprises civilian team leaders and sworn staff (from Sergeant to Senior Sergeant). <sup>d</sup> Comprises management level staff (civilian managers and sworn staff from Inspectors to Superintendents), executive level staff (civilian Senior Executive Service and sworn staff from Chief Superintendent to Assistant Commissioner) and senior executive level staff (civilian top Senior Executive Service and sworn staff, including Commissioner, Deputy Commissioner and equivalent executives). <sup>e</sup> Police training is part of a tertiary education program conducted by Charles Sturt University. Students are not members of the NSW Police Service. Attestation follows graduation from the first year diploma course. <sup>f</sup> Excludes recruits in training. <sup>g</sup> Includes a notional 129 staff for corporate support functions attributed to ACT community policing provided by the Australian Federal Police. The disaggregation of these 129 positions has been determined by apportioning details in accordance with the relative breakdown of the community policing staff. <sup>h</sup> Small units and remote stations are staffed at Sergeant level.

Source: table 8A.17.

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## 8.2 Policy developments in policing

### **CrimTrac**

The Commonwealth Government has committed \$50 million to establishing a national crime information system. All jurisdictions have committed to establishing this information system (called CrimTrac) as a matter of priority.

#### *National Automated Fingerprint Identification System*

The current National Computerised Fingerprint Identification System is outmoded and will reach full capacity in early 2001. The new National Automated Fingerprint Identification System database will provide superior fingerprint recording, matching and archiving capabilities. With appropriate integration, it will be able to record and search for fingerprints electronically. Consequently, it will be possible to record and transmit fingerprints to a central searching facility, and to be notified of search results within minutes. The new system will be able to perform fingerprint searches directly from the database against repeat offenders.

The new National Automated Fingerprint Identification System will also have a searchable palm print database containing 4.6 million palm prints. This will make it the largest palm print database in the world.

#### *National Deoxyribonucleic Acid (DNA) system*

DNA profiling is a key, proven investigative tool. Samples can be extracted from a number of sources on a suspect's body (blood, saliva, hair, etc.) or from objects at a crime scene (glass, cigarette butts, etc.). The national DNA system is planned to provide a modern capacity to match DNA profiles from individuals and crime scenes on a national basis using several modes of delivery.

#### *Police Access to National Data Asset system and the national child sex offender system*

The Police Access to National Data Asset system is designed to provide police access to the multiple police databases within the eight Australian law enforcement jurisdictions. The factual information kept on child sex offenders will be part of the information stored on criminal court outcomes. It is intended that available intelligence information about child sex offenders will be collated (at a later stage) and be provided under tight security to authorised police personnel.

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## Directions in Australasian policing

*Directions in Australasian Policing* is a document of strategic intent, developed by the Australasian Police Ministers' Council. It aims to provide direction and promote cooperation among policing agencies in Australia and New Zealand. The expressed directions, goals and objectives provide a shared vision for police agencies to work towards, and a framework to work within, until 2002.

The document acknowledges the differences across jurisdictions, and establishes the need to develop policy, procedures, initiatives and legislation responsive to local conditions.

*Directions in Australasian Policing* provides a broad policy framework around three core directions: leadership, partnership and consultation; professionalism and accountability; and cooperation and coordination in operations and resources. These three core directions provide the high level policy context for jurisdictions and form the basis of individual jurisdictional plans.

### 8.3 General approach to performance measurement for police services

Performance can be defined in terms of how well a service meets its objectives, given its operating environment. Performance indicators need to focus on outcomes and/or outputs aimed at meeting common, agreed objectives. Four such objectives (and associated service delivery areas) have been identified for the purposes of this chapter (box 8.2).

#### Box 8.2 Objectives for police services

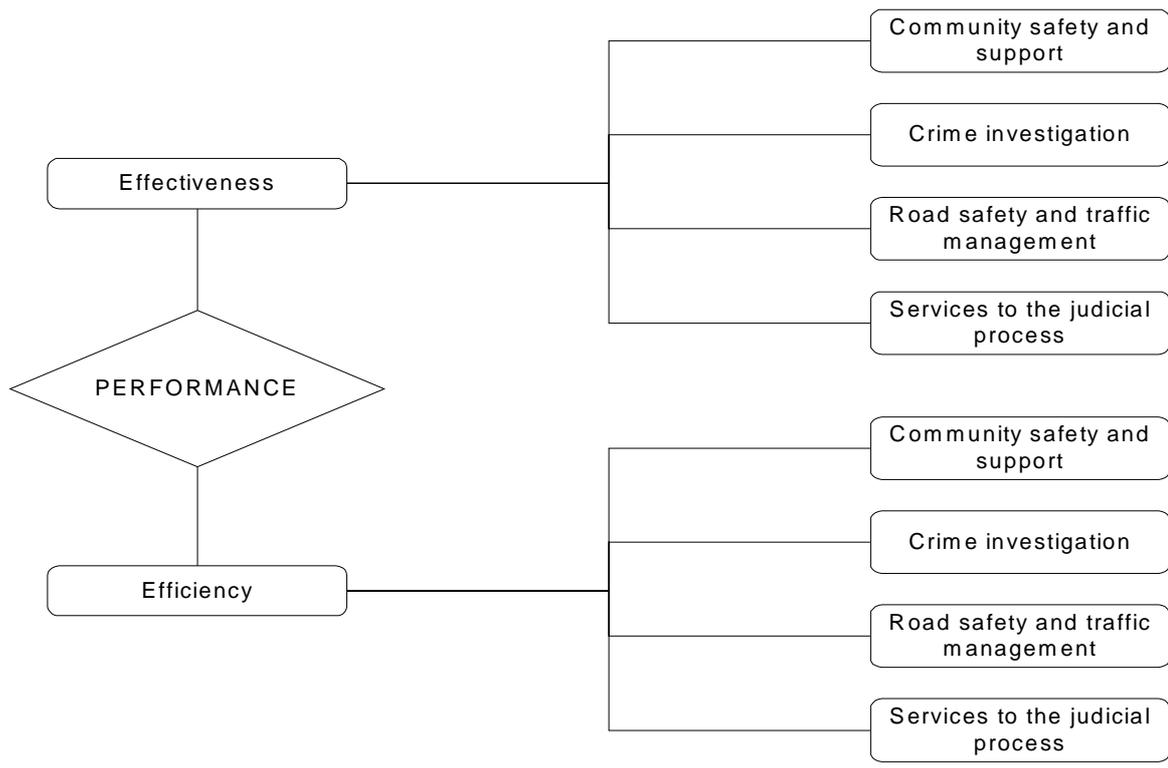
The key objectives for police services (and associated service delivery areas) are:

- to allow people to undertake their lawful pursuits confidently and safely (through activities associated with community safety and support);
- to bring to justice those persons responsible for committing an offence (through activities associated with crime investigation);
- to promote safer behaviour on roads (through activities associated with road safety and traffic management); and
- to support the judicial process to achieve efficient and effective court case management and judicial processing, while providing safe custody for alleged offenders, and ensuring fair and equitable treatment of both victims and alleged offenders (through activities associated with services to the judicial process).

These objectives are to be met through the provision of services in an equitable and efficient manner.

Figure 8.5 shows the framework of performance indicators, and definitions of all indicators are provided in section 8.12. The reported results should be considered in conjunction with the data on demographic and geographic differences reported in appendix A, and with other available information on jurisdiction-specific characteristics.

**Figure 8.5 General performance framework for the police services sector**



The individual outputs/programs that are linked to the service delivery areas listed above are contained in table 8A.10. For some jurisdictions, one output/program may be relevant for more than one service delivery area, and thus the jurisdiction may choose to disaggregate that output/program according to the data relevant to each service delivery area.

### Population survey monitor

As in past years, Australian police agencies in cooperation with the Steering Committee, have developed a regular Community Perceptions of Police Services Survey. This survey provides a range of information, including the way in which the community perceives the police service, their own safety, and problems in the community and neighbourhood.

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The Australian Bureau of Statistics has been commissioned to conduct this survey quarterly using its Population Survey Monitor. The combination of four quarters' results (August 1999, November 1999, February 2000 and May 2000) produces estimates for the 1999-2000 financial year. (Selected results from this survey are presented in this chapter, and the full results are presented electronically in attachment 8A.)

The timing of each quarter's survey in each jurisdiction may influence the survey data reported here. Rare but significant adverse events in a jurisdiction (such as a mass murder or police corruption incident) may influence general satisfaction with police and perceptions of safety and crime levels for that quarter.

The data obtained from the Population Survey Monitor may be different from the data that would have been obtained from the entire group or population. Consequently, when using survey results, it is necessary to be cautious (box 8.3).

The Australian Bureau of Statistics completed a review of its Household Survey Program in the second half of 1999. One outcome of this review was the decision to discontinue the Population Survey Monitor from November 2000. As a result, this will be the final year in which Monitor results are published in the chapter. In the 2002 Report, the survey results from a private provider will be used, including commentary to specify differences in the results and methods used.

**Box 8.3      Sampling error and statistical significance**

The actual precision of survey estimates depends on the survey sample size, the representativeness of the sample and the sample estimate. Large sample sizes result in higher precision, as do large sample estimates; for example, if 90 per cent of surveyed respondents chose an answer, then there would be less uncertainty about the actual population's views than if 50 per cent of respondents had chosen it. Consequently, caution should be used when interpreting small differences in results and estimates that are small. (Section 8.11 discusses the sampling method, including sample size, and provides information for calculating confidence intervals).

Appendix A outlines a method that can be used to test whether the difference between two proportions is statistically significant. This test may be used to assess the significance of differences between the Population Survey Monitor estimates reported here.

## **8.4      Indicators relevant to all service delivery areas**

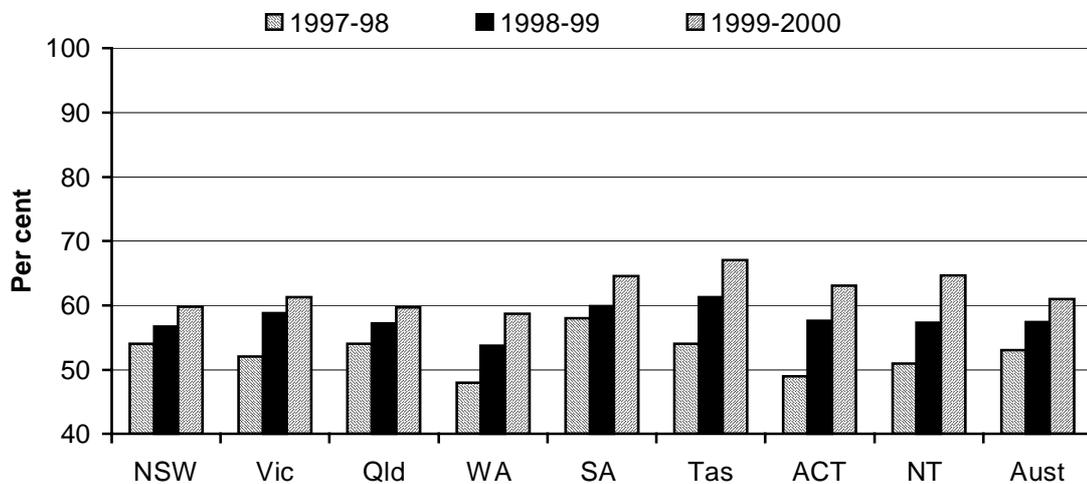
The four key service delivery areas of the performance indicator framework identify the core areas of police work. Within this context, certain indicators of police

performance are not specific to any one particular service delivery area but are relevant for all service delivery areas. These indicators may include the integrity and professionalism with which police deliver their services, and access and equity considerations. This section provides information on these overarching indicators of police performance, while sections 8.5–8.8 examine each particular service delivery area.

### *Perceptions of police integrity*

Important aspects of police services' performance are: (a) the ability of various individuals and groups to access services; and (b) the service those individuals receive. Nationally, 61 per cent of persons aged 18 years and over in 1999-2000 'agreed' or 'strongly agreed' that police treat people 'fairly and equally' — an increase of 4 percentage points since 1998-99, and 8 percentage points since 1997-98. The proportion has increased in every jurisdiction since 1997-98 (figure 8.6).

**Figure 8.6 Persons aged 18 years and over who 'agreed' or 'strongly agreed' that police treat people fairly and equally<sup>a</sup>**

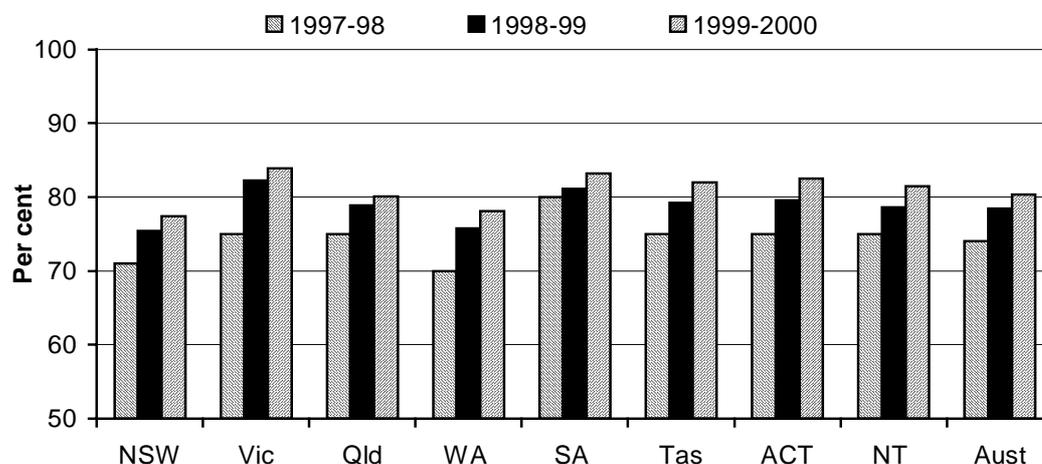


<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an affect on the accuracy of the results.

Source: tables 8A.19–8A.21.

Nationally, 80 per cent of persons 'agreed' or 'strongly agreed' in 1999-2000 that police perform the job 'professionally'. The proportion ranged from 77 per cent in NSW to 84 per cent in Victoria. Again, this proportion increased across all jurisdictions between 1997-98 and 1999-2000, ranging from an increase of 3 percentage points in SA to 9 percentage points in Victoria over this period (figure 8.7).

**Figure 8.7 Persons aged 18 years and over who 'agreed' or 'strongly agreed' that police perform the job professionally<sup>a</sup>**

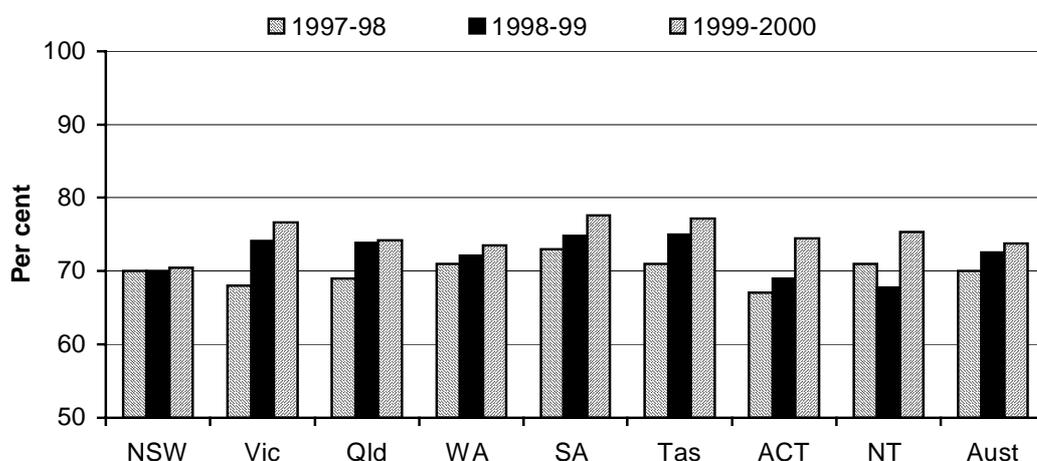


<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an affect on the accuracy of the results.

Source: tables 8A.19–8A.21.

Police integrity is another important influence on police services' performance. This can be judged to some extent by the public perception of police honesty. This perception in Australia remained fairly constant, albeit rising slightly, between 1997-98 and 1999-2000, with 74 per cent of persons aged 18 years and over nationally having 'agreed' or 'strongly agreed' that most police are honest. Across jurisdictions, this proportion in 1999-2000 ranged from 70 per cent in NSW to 78 per cent in SA (figure 8.8).

**Figure 8.8 Persons aged 18 years and over who 'agreed' or 'strongly agreed' that police are honest<sup>a</sup>**



<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an affect on the accuracy of the results.

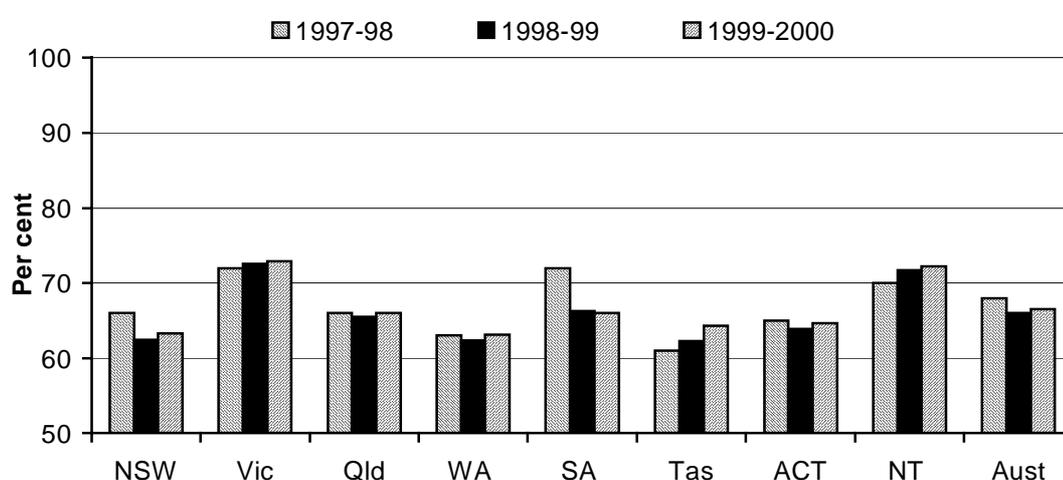
Source: tables 8A.19–8A.21.

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### Satisfaction with police services

The majority (67 per cent) of the estimated population in 1999-2000 was 'satisfied' or 'very satisfied' with services provided by police. Across jurisdictions, this proportion varied from 63 per cent in both NSW and WA to 73 per cent in Victoria. Satisfaction with police services increased in each year between 1997-98 to 1999-2000 for Victoria, Tasmania and the NT. It decreased in each of these years in SA (figure 8.9).

Figure 8.9 **Persons aged 18 years and over who were 'satisfied' or 'very satisfied' with police services<sup>a</sup>**



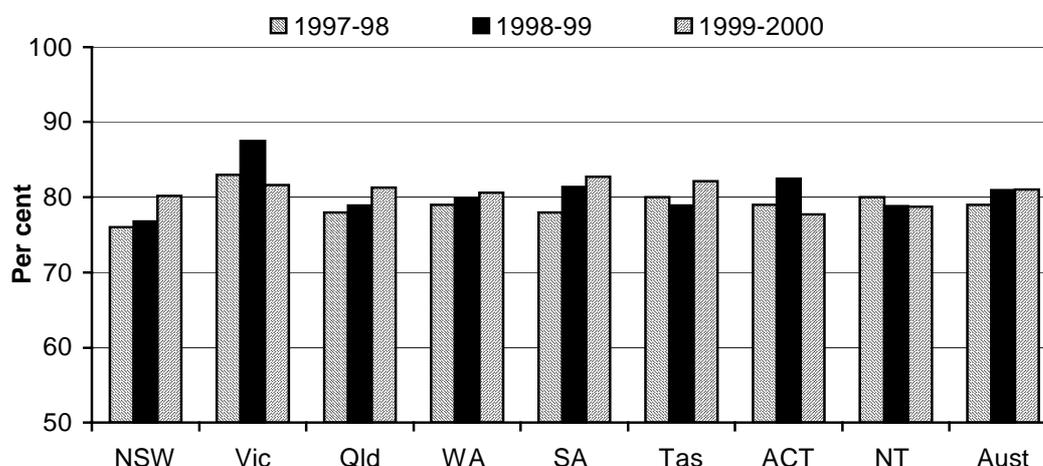
<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an affect on the accuracy of the results.

Source: table 8A.22.

Nationally, of people aged 18 years and over who had contact with police in 1999-2000 (approximately half of all respondents), 81 per cent were 'satisfied' or 'very satisfied' with the service they received during their most recent contact. This proportion increased between 1998-99 and 1999-2000 for all jurisdictions except Victoria and the ACT (where it declined), and the NT (where it remained constant). The largest increase over this period was in NSW and Tasmania (3 percentage points) (figure 8.10).

Nationally, of people aged 18 years and over who had contact with police in 1999-2000, the most common reason (given by 46 per cent of the estimated population) for satisfaction with police services was that police were 'courteous'. The prevalence of this reason ranged from 43 per cent in NSW, Tasmania and the NT to 49 per cent in Queensland. 'Approachable/friendly' treatment from police was the second most common reason for satisfaction, given by 42 per cent of the estimated population nationally. Across jurisdictions, this proportion ranged from

**Figure 8.10 Persons aged 18 years and over who were 'satisfied' or 'very satisfied' with police in their most recent contact<sup>a</sup>**



<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an affect on the accuracy of the results.

Source: table 8A.33.

40 per cent in the ACT to 45 per cent in SA. Police acting in a 'professional/fair' manner was the third most common reason for satisfaction, given by 34 per cent of the estimated population. Across jurisdictions, this proportion ranged from 28 per cent in SA to 42 per cent in the ACT (table 8.3).

**Table 8.3 Persons aged 18 years and over who had contact with police in the last 12 months: reasons for satisfaction with police services in most recent contact, 1999-2000 (per cent)<sup>a, b</sup>**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Courteous	43	46	49	46	45	43	48	43	46
Approachable/friendly	42	41	41	42	45	44	40	41	42
Professional/fair	38	34	37	29	28	31	42	34	34
Took appropriate action	26	26	26	27	26	30	30	32	26
Prompt service	24	28	22	25	29	24	25	26	25
Helpful	28	22	21	24	32	24	25	27	25
Handled well	24	24	25	23	29	25	24	27	24
Efficient	18	19	21	21	21	23	21	22	20
Communicated clearly	14	13	17	12	18	16	16	17	15
Respondent kept informed	7	7	7	8	10	8	6	8	7
Recovered property	3	4	2	2	2	2	2	2	3
Other	-	-	1	1	1	-	-	1	1
Don't know	-	-	-	-	-	-	-	-	-

<sup>a</sup> Sum to more than 100 per cent for each jurisdiction because respondents could choose more than one reason. <sup>b</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an affect on the accuracy of the results. - Nil or rounded to zero.

Source: table 8A.34.

Nationally, the most common reason (given by 34 per cent of the estimated population who were dissatisfied) in 1999-2000 for dissatisfaction with police services was that police 'took no action'. The prevalence of this reason ranged from 28 per cent in Victoria to 46 per cent in the ACT. 'No interest shown' was the second most common reason for dissatisfaction, given by 29 per cent of dissatisfied persons nationally. Across jurisdictions, this proportion ranged from 21 per cent in the NT to 36 per cent in the ACT. 'Kept waiting' by police was the third most common reason for dissatisfaction, given by 26 per cent of dissatisfied persons nationally, 20 per cent in both WA and SA, and ranging to 30 per cent in the ACT (table 8.4).

**Table 8.4 Persons aged 18 years and over who had contact with police in the last 12 months: reasons for dissatisfaction with police services in most recent contact, 1999-2000 (per cent)<sup>a, b</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Took no action	35	28	39	36	31	41	46	43	34
No interest shown	27	30	33	28	23	32	36	21	29
Kept waiting	29	26	28	20	20	24	30	27	26
Unhelpful	31	18	27	28	23	24	32	34	26
Unfriendly/impolite	21	27	21	28	28	25	22	14	24
Unprofessional/unfair	17	27	27	21	19	18	19	22	22
Not kept informed	24	13	22	26	22	28	25	29	21
Other	13	11	14	10	10	9	5	11	12
Made false accusation	9	15	12	10	15	10	6	6	12
Used unnecessary force	3	7	4	2	2	2	-	2	4
Used complex language	3	2	3	3	4	3	1	1	3
Don't know	-	-	-	1	-	-	-	-	-

<sup>a</sup> Sum to more than 100 per cent for each jurisdiction because respondents could choose more than one reason. <sup>b</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an affect on the accuracy of the results. - Nil or rounded to zero.

Source: table 8A.35.

## Complaints

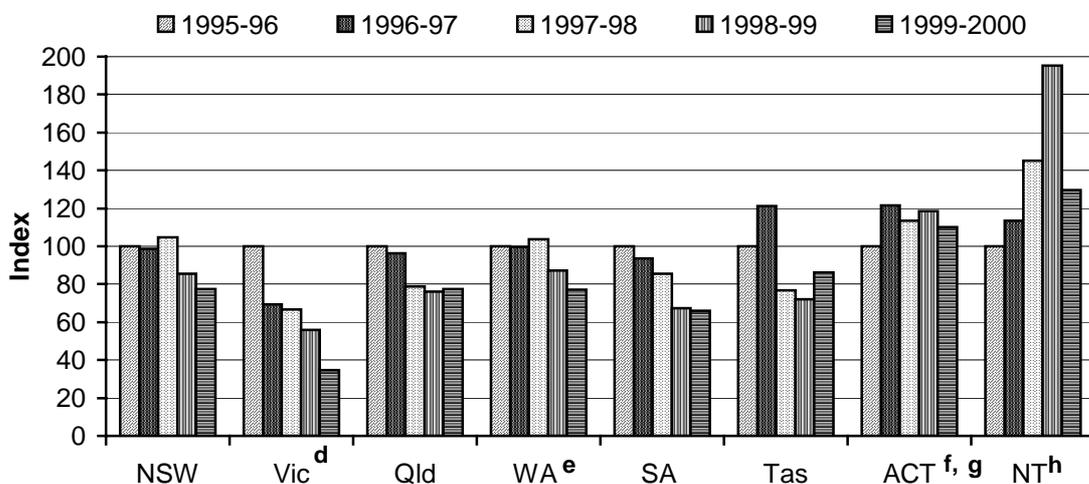
Police services across Australia have developed codes of customer service that encourage openness and accountability. Complaints made against police increasingly reflect a range of issues relating to service delivery. Only a small percentage of complaints relate to serious misconduct. Complaints of a more serious nature are also oversighted by external review bodies such as the Ombudsman, Director of Public Prosecutions or integrity boards.

Complaint data represented in Figure 8.11 provide an accurate picture of trends over time for each jurisdiction. The index does not however reflect accurately a

comparison across jurisdictions because of the vastly different counting rules, particularly in the ACT.

The number of complaints by members of the public against police was on a general downward trend in NSW, Victoria, Queensland, WA and SA over the period 1995-96 to 1999-2000. It fluctuated over the period in Tasmania, and followed an upward trend for the ACT and the NT (although there were decreases over the last year for both jurisdictions). The number of complaints fell between 1998-99 and 1999-2000 in all jurisdictions except Queensland and Tasmania (figure 8.11).

Figure 8.11 Trends in complaints against police<sup>a, b, c</sup>



<sup>a</sup> Index base year 1995-96 = 100. This data has been revised from what was published in previous Reports because of inconsistencies identified with data for 1993-94 and 1994-95. <sup>b</sup> Caution should be used when comparing differences in results across jurisdictions and over time. <sup>c</sup> Data include some verbal complaints in the NT and the ACT. <sup>d</sup> For 1999-2000, figures supplied include all complaints, allegations made and public incident resolutions. The definition used in this Report does not comply with figures reported by Victoria Police in other reports referring to the number of complaints. <sup>e</sup> 1999-2000 data are preliminary. <sup>f</sup> The data represent the number of complaints made against any member of the Australian Federal Police located in the ACT, and therefore include complaints made against national Australian Federal Police members not located in the ACT region police service. <sup>g</sup> Includes 33 allegations in 1998-99 and 55 internal allegations in 1999-2000. <sup>h</sup> A significant proportion of complaints in 1998-99 arose from the Jabiluka Uranium Mine protests in Kakadu National Park.

Source: table 8A.36.

### Access and equity — Indigenous staffing

This section focuses on the performance of mainstream services in relation to Indigenous Australians. The process of identifying Indigenous staff members poses challenges, particularly when relying on self identification. If Indigenous people are required to identify themselves, then the accuracy of the data will partly depend on how they perceive the advantages (or disadvantages) of identification and whether

these perceptions change over time. For the purposes of this chapter, an Indigenous person is one who is identified as an Aborigine or Torres Strait Islander or both an Aborigine and Torres Strait Islander.

NSW, Victoria, Queensland and WA did not provide this information for 1999-2000, although Queensland and WA provided the information in 1998-99. Both WA and Queensland experienced difficulties with their information systems this year. Of the other jurisdictions, the NT had the highest proportion of Indigenous police staff (6 per cent) in 1999-2000, while the ACT had the lowest proportion (1 per cent). In most jurisdictions, the proportion of Indigenous police staff generally reflected the Indigenous proportion of the population. The exception was the NT, where the relative discrepancy between the number of Indigenous police staff as a proportion of total police staff (6 per cent) and the Indigenous population as a proportion of the total population (24.4 per cent) was greatest (table 8.5).

**Table 8.5 Indigenous staffing (per cent)**

	<i>NSW</i> <sup>a</sup>	<i>Vic</i> <sup>a</sup>	<i>Qld</i> <sup>b</sup>	<i>WA</i> <sup>c</sup>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Indigenous staff as proportion of total staff								
1998-99	na	na	2.7	2.3	1.1	1.3	0.5	6.0
1999-2000	na	na	na	na	1.2	1.3	1.0	6.0
Indigenous population as proportion of total population (1996) <sup>d</sup>	1.7	0.5	2.9	3.0	1.4	3.0	1.0	24.4

<sup>a</sup> Employee's race is provided on a voluntary basis. Information is not available for 1998-99 and 1999-2000.

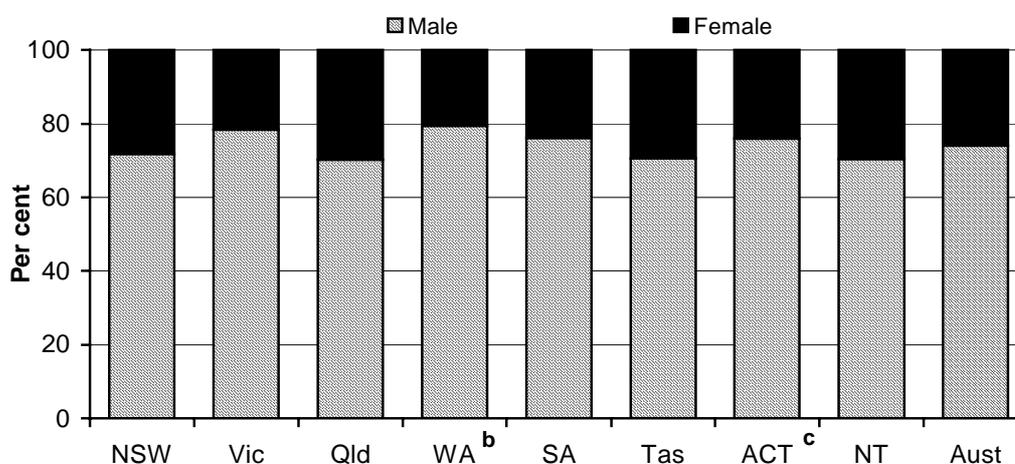
<sup>b</sup> Problem with data on information systems for 1999-2000. <sup>c</sup> Employee's race is provided on a voluntary basis. Information is not available for 1999-2000. <sup>d</sup> Population data based on the Australian Bureau of Statistics' *Census of Population and Housing: Community Profiles, Australia* (cat. no. 2020.0, 1996). **na** Not available.

Source: table 8A.37.

### *Access and equity — staffing by gender*

Another measure of access and equity is the level of staffing by gender. More than 74 per cent of police staff in all States and Territories in 1999-2000 were male. This proportion ranged from 70 per cent in Queensland and the NT to 79 per cent in WA (figure 8.12). Nationally, the proportion of female police staff has increased by 0.8 percentage points over the last year (from 25.0 per cent to 25.8 per cent of staff). While all jurisdictions increased their proportion of female police staff over this period, the biggest increase occurred in Tasmania (from 26.1 to 29.5 females per 100 staff), while the smallest increase occurred in WA (from 20.5 to 20.6 females per 100 staff). Previous year data, on staffing by gender for 1998-99, is contained in table 8A.38.

Figure 8.12 Police staff, by gender, 1999-2000<sup>a</sup>



<sup>a</sup> Comprises all full time equivalent staff. <sup>b</sup> Excludes recruits in training. <sup>c</sup> Includes a notional 129 staff for corporate support functions attributed to the ACT community policing provided by the Australian Federal Police. The disaggregation of these 129 positions has been determined by apportioning details in accordance with the relative breakdown of the community policing staff.

Source: table 8A.38.

## 8.5 Community safety and support

This service delivery area captures the role of police in preserving public order and promoting a safer community through a range of activities, including:

- responding to calls for assistance;
- responding to, managing and coordinating major incidents and emergencies; and
- undertaking crime prevention activities and community support programs.

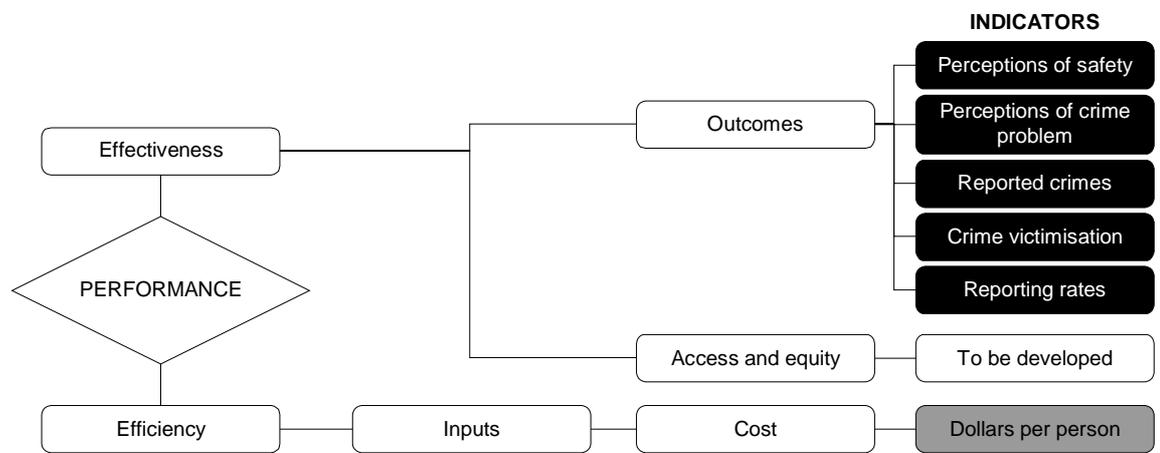
### Framework of performance indicators

The performance of the police in undertaking these activities is measured using a suite of indicators that incorporates information on recorded crime levels and community perceptions data (figure 8.13).

#### *Perceptions of safety*

An important objective of police services is to ‘reassure the public’ by ensuring the community feels safe (within themselves and regarding their property) in public and private. Perceptions of safety are reported here, although these perceptions may not reflect reported crime for many reasons — for example, reported crime may understate actual crime, underreporting may vary across jurisdictions, and many factors (including media reporting) may affect public perceptions of crime levels and safety.

Figure 8.13 Performance indicators for community safety and support



**Key to indicators**

- Text** Provided on a comparable basis for this Report
- Text** Information not complete or not strictly comparable
- Text** Yet to be developed or not collected for this Report

Nationally, 95 per cent of the estimated population felt ‘safe’ or ‘very safe’ at home alone during the day. Across jurisdictions, this proportion ranged from 93 per cent in WA to 97 per cent in the NT (figure 8.14). Nationally, 84 per cent of persons felt ‘safe’ or ‘very safe’ at home alone after dark. This proportion ranged from 80 per cent in WA to 86 per cent in Victoria, the ACT and the NT (figure 8.14).

Nationally, 42 per cent of persons aged 18 years and over felt ‘safe’ or ‘very safe’ when walking or jogging after dark. Across jurisdictions, the proportion ranged from 40 per cent in both Queensland and SA to 45 per cent in Victoria. Nationally, 23 per cent of the estimated population felt ‘safe’ or ‘very safe’ when travelling on public transport after dark. This perception of safety ranged from 17 per cent in WA to 40 per cent in the ACT (figure 8.15). However, these results will be influenced by the mix (i.e. trains, buses, trams) of public transport in each jurisdiction.

Figure 8.14 Persons aged 18 years and over: perception of safety at home<sup>a</sup>



<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may affect on the accuracy of the results.

Source: tables 8A.39–8A.41.

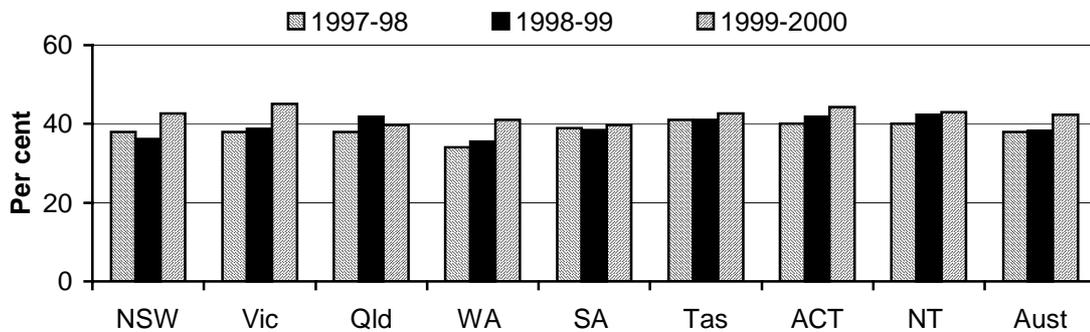
### *Perceptions of crime problem*

Nationally, when people were asked about crime problems in the general community, 90 per cent cited illegal drugs as a 'major problem' or 'somewhat of a problem', 83 per cent cited physical assaults, 79 per cent cited family violence, and 79 per cent cited sexual assault in 1999-2000. Data for each jurisdiction are presented in table 8A.42.

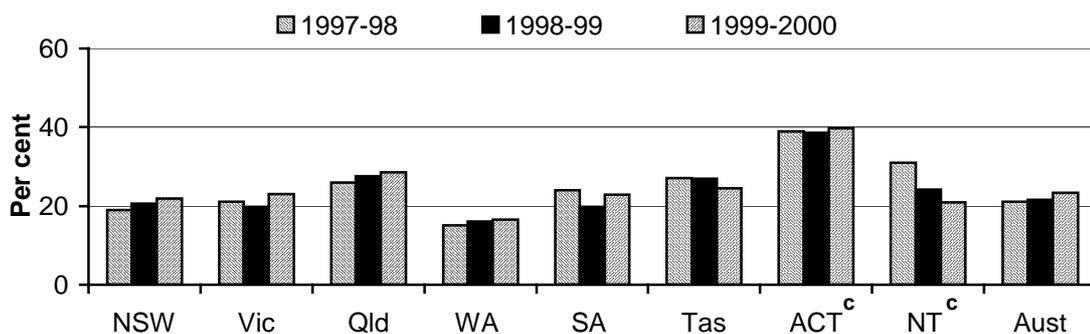
Nationally, 62 per cent of persons aged 18 years and over believed housebreaking to be a 'major problem' or 'somewhat a problem' in their neighbourhood in 1999-2000. Across jurisdictions, the prevalence of this response ranged from 58 per cent in Queensland to 70 per cent in the ACT (figure 8.16).

Figure 8.15 Persons aged 18 years and over: perception of safety in public places<sup>a</sup>

Proportion who felt 'safe' or 'very safe' walking or jogging locally after dark



Proportion who felt 'safe' or 'very safe' travelling on public transport after dark<sup>b</sup>



<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an impact on the accuracy of the results. <sup>b</sup> Note for this survey question, the response 'not applicable' was very large and varied significantly across jurisdictions in line with the availability of public transport (see table 8A.39). <sup>c</sup> Unlike other jurisdictions, the ACT and NT do not operate a suburban train network, relying on buses as the primary means of public transportation.

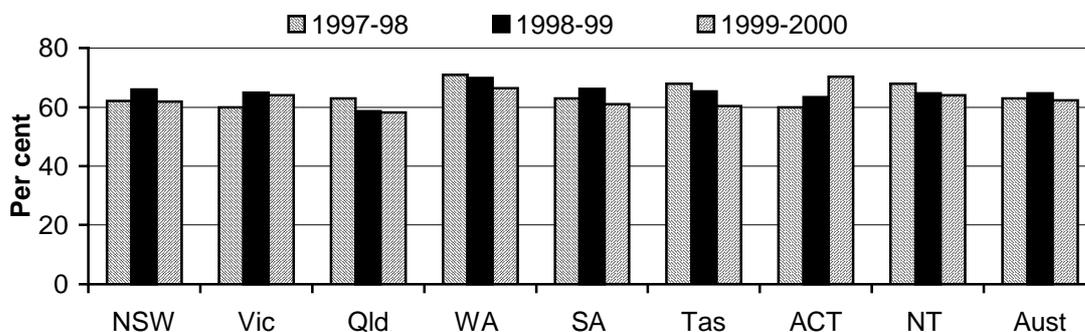
Source: tables 8A.39–8A.41.

According to the Australian Bureau of Statistics, there were 129 865 reported victims of motor vehicle theft in Australia in 1999. The Population Survey Monitor results indicate that 50 per cent of the estimated population believed that motor vehicle theft was a 'major problem' or 'somewhat a problem' in their neighbourhood. The prevalence of this perception varied from 42 per cent in Queensland to 56 per cent in Victoria (figure 8.16).

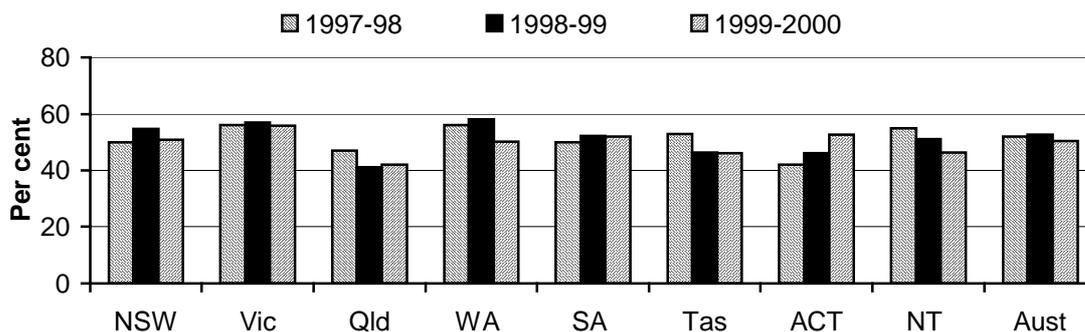
Nationally, 45 per cent of the estimated population believed graffiti and vandalism to be a 'major problem' or 'somewhat a problem' in their neighbourhood. Across jurisdictions, the prevalence of this response ranged from 35 per cent in Tasmania to 52 per cent in SA (figure 8.16).

Figure 8.16 Persons aged 18 years and over: perception of problems in the neighbourhood<sup>a</sup>

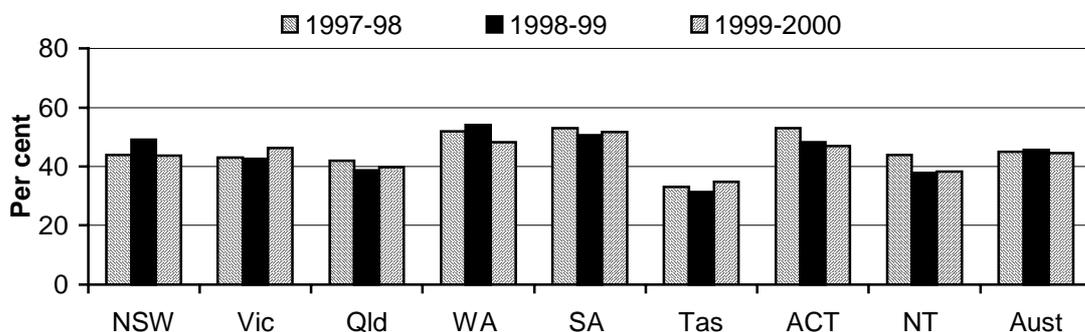
Proportion who felt that housebreaking was a 'major problem' or 'somewhat a problem'



Proportion who felt that motor vehicle theft was a 'major problem' or 'somewhat a problem'



Proportion who felt that graffiti or other vandalism was a 'major problem' or 'somewhat a problem'



<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an affect on the accuracy of the results.

Source: tables 8A.42–8A.44.

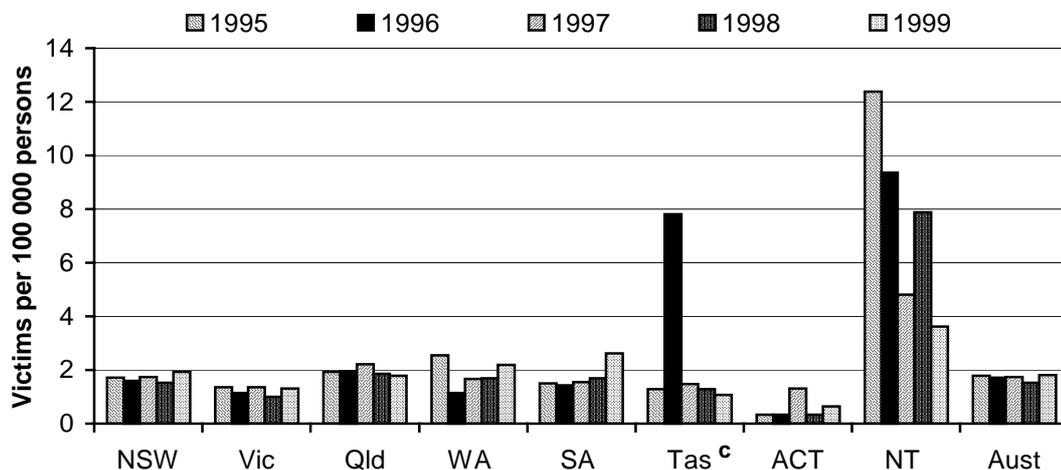
Caution should be used when interpreting data on perceptions of crime. The perceptions of a problem and the actual incidence of these offences may significantly differ across jurisdictions. Reducing people's concerns about crime and reducing the actual level of crime are two separate but related challenges for police.

Comparisons between perceptions of crime problems and the level of crime raise questions about the factors that affect perceptions. More generally, such comparisons highlight the importance of considering the full suite of performance indicators rather than assessing performance on the basis of specific measures in isolation.

### *Recorded crimes against the person*

Nationally, there were 1.8 recorded victims of murder per 100 000 persons in 1999, which is equal to the rate in 1995 but slightly higher than the rate in all other years previously reported here. The victimisation rate in 1999 ranged from 0.6 victims per 100 000 persons in the ACT to 3.6 victims per 100 000 persons in the NT (figure 8.17).

Figure 8.17 **Recorded victims of murder<sup>a, b</sup>**

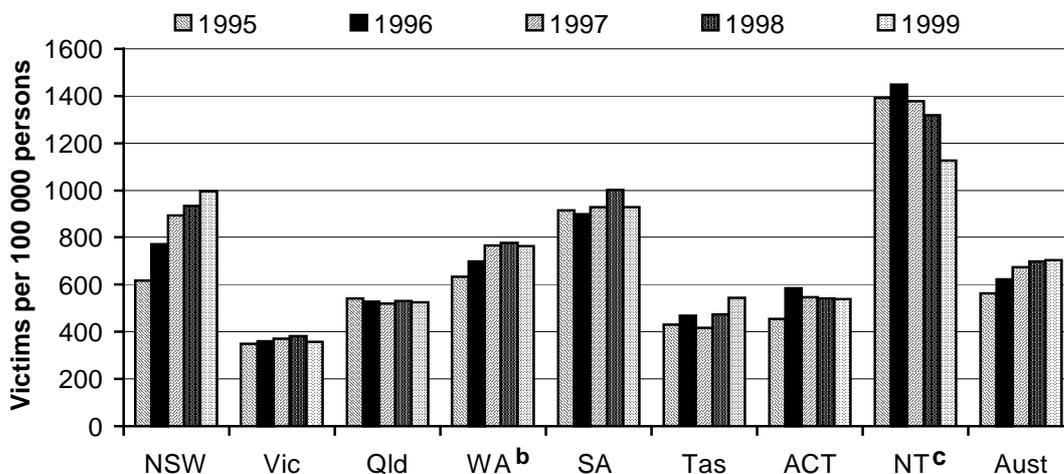


<sup>a</sup> Data are based on crimes recorded by police. <sup>b</sup> For some jurisdictions, 1998 data have been revised from what were published last year. <sup>c</sup> The dramatic increase in reported victims of murder in 1996 was the result of the multiple murder incident at Port Arthur.

Source: table 8A.45.

Nationally, there were 705 victims of assault per 100 000 persons in 1999, ranging from 358 victims per 100 000 persons in Victoria to 1126 victims per 100 000 persons in the NT (figure 8.18). The victimisation rate rose in NSW and Tasmania between 1998 and 1999, and fell in all other jurisdictions.

Figure 8.18 Recorded victims of assault<sup>a</sup>

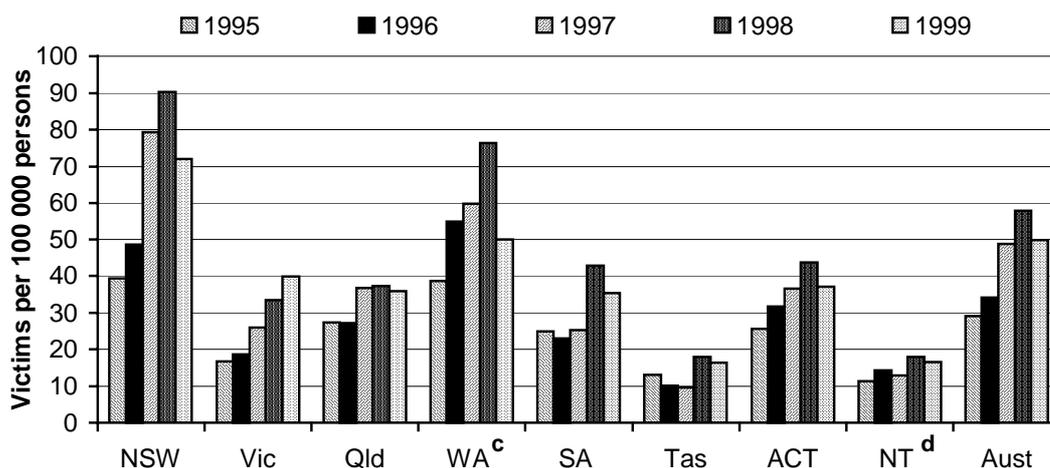


<sup>a</sup> Data are based on crimes recorded by police. <sup>b</sup> The 1999 and 1998 recorded crime statistics for assault are not directly comparable with those for previous years. <sup>c</sup> The 1999 recorded crime statistics for assault are not directly comparable with previous years.

Source: table 8A.45.

Victims of armed robbery per 100 000 persons increased for Victoria between 1998 and 1999, but fell for all other jurisdictions. Nationally, there were 49.8 victims of armed robbery per 100 000 persons in 1999, ranging from 16.4 victims per 100 000 persons in Tasmania to 72.0 victims per 100 000 persons in NSW (figure 8.19).

Figure 8.19 Recorded victims of armed robbery<sup>a, b</sup>



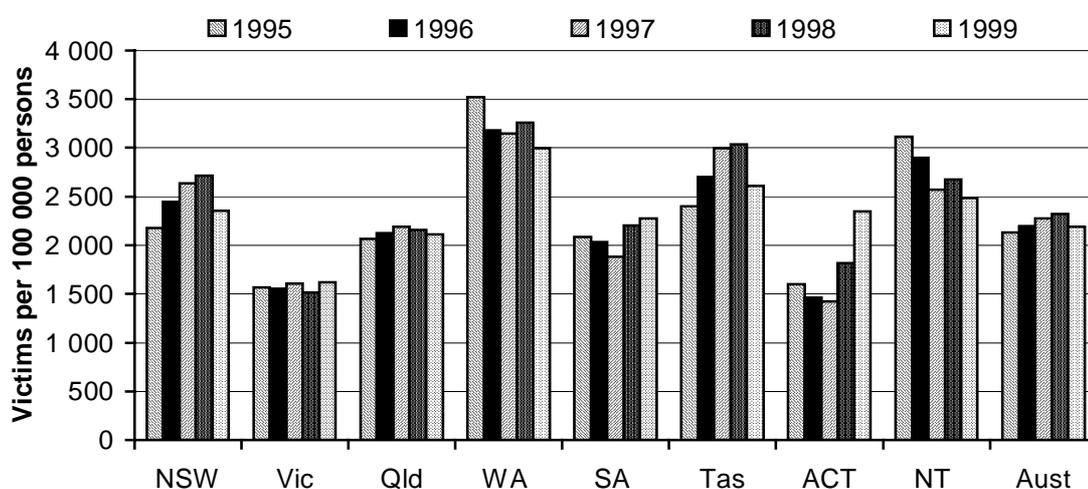
<sup>a</sup> Data are based on crimes recorded by police. <sup>b</sup> Victims include persons and organisations. <sup>c</sup> The 1999 and 1998 recorded crime statistics for armed robbery are not directly comparable with those for previous years. <sup>d</sup> The 1999 recorded crime statistics for armed robbery are not directly comparable with those for previous years.

Source: table 8A.45.

### Recorded crimes against property

Nationally, there were 2192 victims of unlawful entry with intent per 100 000 persons in 1999. The incidence varied from 1619 victims per 100 000 persons in Victoria to 2998 victims per 100 000 persons in WA. Victimization rates were higher in 1999 than in 1995 for all jurisdictions except WA and the NT. Between 1995 and 1999, victims of unlawful entry with intent per 100 000 persons rose by 47 per cent in the ACT, and fell by 20 per cent in the NT (figure 8.20).

Figure 8.20 Recorded victims of unlawful entry with intent<sup>a, b</sup>



<sup>a</sup> Data are based on crimes recorded by police. <sup>b</sup> Victims refers to places/premises.

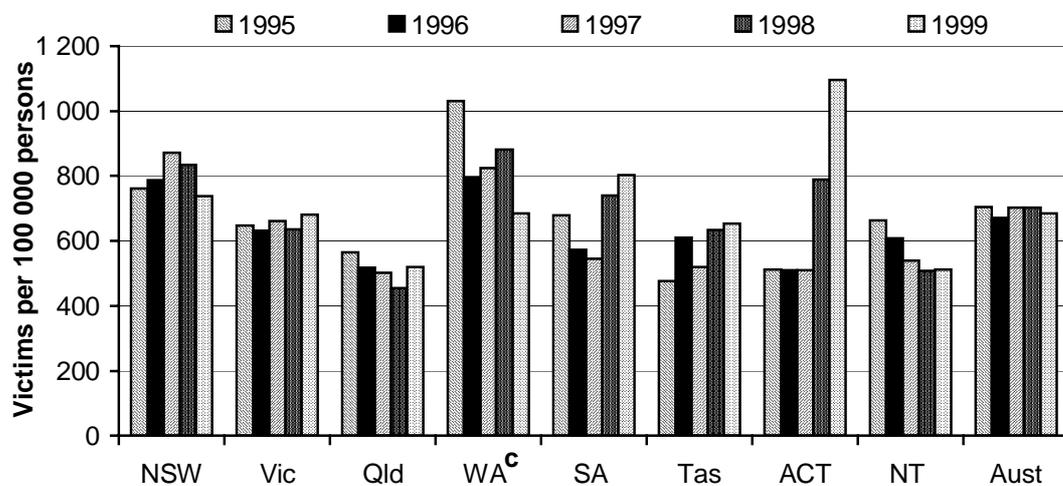
Source: table 8A.46.

Nationally, there were 685 motor vehicles stolen per 100 000 persons in 1999. The victimisation rate ranged from 511 motor vehicles per 100 000 persons in the NT to 1095 motor vehicles per 100 000 persons in the ACT. The largest increase in motor vehicles stolen per 100 000 persons between 1995 and 1999 was a 114 per cent increase in the ACT. The largest fall in motor vehicles stolen per 100 000 persons over the same period was a 34 per cent fall in WA (figure 8.21).

### Efficiency

Expenditure on each service delivery area of police is included in this chapter for the second year. The comparability of data has been improved by accounting for differences in payroll tax liabilities across jurisdictions according to the approach recommended in *Payroll Tax in the Costing of Government Services* (SCRCSSP 1999). The separate identification of payroll tax liabilities facilitates comparisons of expenditure data (less payroll tax) across all jurisdictions.

Figure 8.21 Recorded victims of motor vehicle theft<sup>a, b</sup>



<sup>a</sup> Data are based on crimes recorded by police. <sup>b</sup> Victims are based on the number of motor vehicles.

<sup>c</sup> Counts of motor vehicle theft prior to 1997 are not directly comparable with other States and Territories.

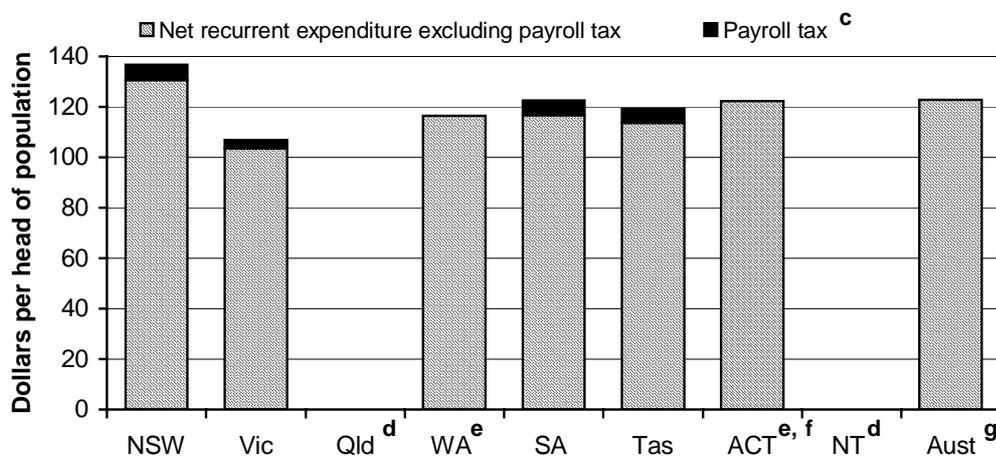
Source: table 8A.46.

The NT and Queensland have not provided data in this area. The NT do not undertake activity surveys, and Queensland have doubts as to the accuracy and comparability of the whole data set.

Expenditure on community safety and support ranged from \$107 per head of population in Victoria to \$137 per head of population in NSW. Nationally, it was \$123 per head of population (figure 8.22).

While comparisons can be made with last year, caution should be used due to changes in the methods employed. SA is excluded from comparisons with last year for this service delivery area, as its large rise in expenditure was mainly the result of changes to activity survey definitions. For the other jurisdictions, the largest increase in expenditure over the past year occurred in NSW and the ACT, where expenditure on community safety and support rose by \$19 per head of population (from \$118 to \$137 and \$103 to \$122 respectively). The smallest increase in expenditure over the past year occurred in WA, where expenditure rose by \$1 per head of population (up from \$115 to \$116). Nationally, expenditure increased by \$18 per head of population (up from \$105 to \$123) (table 8.6).

Figure 8.22 Expenditure on community safety and support, 1999-2000<sup>a, b</sup>



<sup>a</sup> Some data are preliminary and thus have not been subjected to extensive tests to determine comparability. Further, some differences in counting rules may exist across jurisdictions as a result of the differing mixes of activities undertaken within each of the common service delivery areas. <sup>b</sup> Population based on ABS estimates for June 2000. <sup>c</sup> Calculated by multiplying the proportion of expenditure on salaries and payments for each service delivery area by the total payroll tax expenditure. <sup>d</sup> Data are only available for all key service delivery areas combined. <sup>e</sup> Exempt from payroll tax. <sup>f</sup> Results are based on a survey of staff directly involved in the delivery of community policing and related support services within the ACT region. Based on ACT Government payment to the Australian Federal Police for community policing. <sup>g</sup> Includes payroll tax where applicable.

Source: table 8A.50.

Table 8.6 Expenditure on community safety and support, (dollars per head of population)<sup>a, b</sup>

	NSW	Vic	Qld <sup>c</sup>	WA <sup>d</sup>	SA <sup>e</sup>	Tas	ACT <sup>d, f</sup>	NT <sup>c</sup>	Aust <sup>g</sup>
Net recurrent expenditure excluding payroll tax									
1998-99	113	94	na	115	62	103	103	na	105
1999-2000	130	103	na	116	117	114	122	na	123
Payroll tax <sup>h</sup>									
1998-99	5	4	na	..	3	5	..	na	..
1999-2000	6	4	na	..	6	6	..	na	..
<b>Total<sup>i</sup></b>									
<b>1998-99</b>	<b>118</b>	<b>98</b>	<b>na</b>	<b>115</b>	<b>65</b>	<b>108</b>	<b>103</b>	<b>na</b>	<b>105</b>
<b>1999-2000</b>	<b>137</b>	<b>107</b>	<b>na</b>	<b>116</b>	<b>122</b>	<b>119</b>	<b>122</b>	<b>na</b>	<b>123</b>

<sup>a</sup> Some data are preliminary and thus have not been subjected to extensive tests to determine comparability. Further, some differences in counting rules may exist across jurisdictions as a result of the differing mixes of activities undertaken within each of the common service delivery areas. <sup>b</sup> Population based on ABS estimates for June 2000. <sup>c</sup> Data are only available for all key service delivery areas combined. <sup>d</sup> Exempt from payroll tax. <sup>e</sup> Data for 1998-99 did not include a wide range of crime prevention, reduction, and response activities. This has been corrected in the current year. <sup>f</sup> Results are based on a survey of staff directly involved in the delivery of community policing and related support services within the ACT region. Based on ACT Government payment to the Australian Federal Police for community policing. <sup>g</sup> Includes payroll tax where applicable. <sup>h</sup> Calculated by multiplying the proportion of expenditure on salaries and payments for each service delivery area by the total payroll tax expenditure. <sup>i</sup> May not add to sum of its components as a result of rounding. na Not available. .. Not applicable.

Source: table 8A.50.

In 1999-2000, as a proportion of each jurisdiction's total expenditure, expenditure on community safety and support ranged from 48 per cent in Victoria to 63 per cent in NSW. Nationally, it was 56 per cent of total expenditure (figure 8.2).

## 8.6 Crime investigation

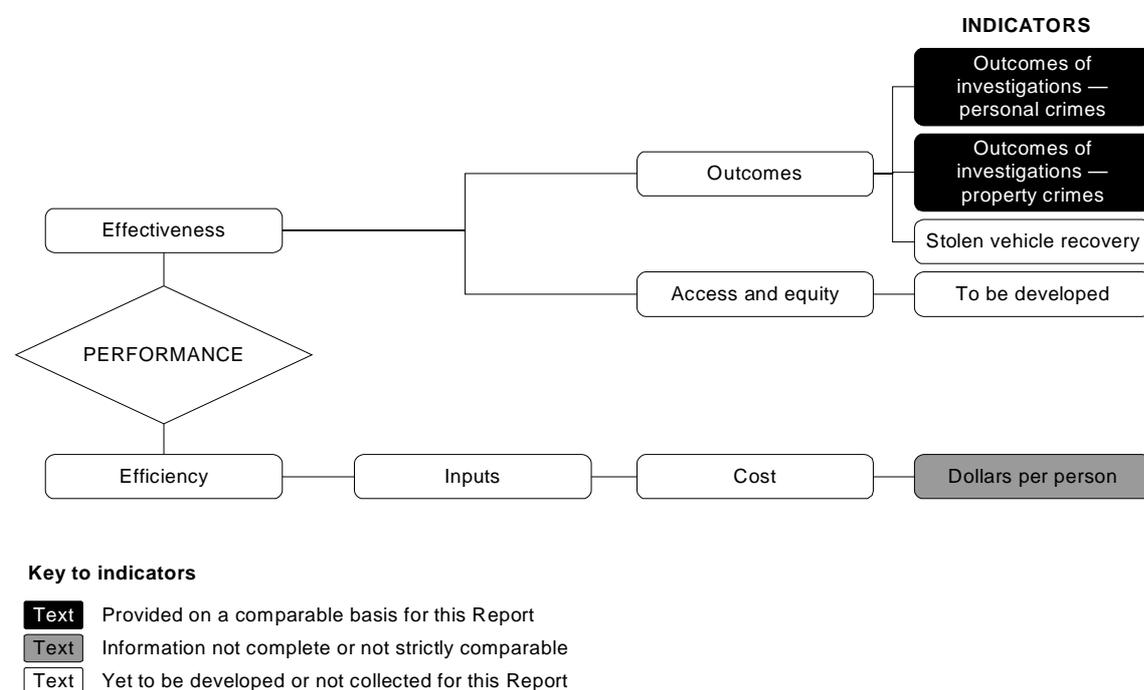
This service delivery area captures the role of police in investigating crime and identifying and apprehending suspects. Activities include:

- gathering intelligence on suspects and locations to assist with investigations; and
- collecting and securing evidence in relation to both the offence and the suspect.

### Framework of performance indicators

The performance of the police in undertaking these activities is measured using a suite of indicators that includes outcomes of investigations (figure 8.23).

Figure 8.23 Performance indicators for crime investigation



## Key performance indicator results

The Australian Bureau of Statistics collects data on the 30-day status of investigations — that is, the stage that a police investigation has reached after 30 days since the recording of the incident by police.

### *Outcomes of investigations — crimes against the person*

Nationally, in 1999, 68 per cent of investigations into reported murders were finalised within 30 days of the offence becoming known to police. Across jurisdictions, the proportion varied from 50 per cent in the ACT (based on two murder investigations) to 100 per cent in Tasmania (based on five murder investigations). Nationally, for all finalised murder investigations, proceedings against an alleged offender had begun within 30 days in 92 per cent of cases; this proportion ranged across jurisdictions from 71 per cent in WA to 100 per cent in SA, Tasmania, the ACT and the NT (table 8.7).

**Table 8.7 Victims of murder: outcomes of investigations, 30-day status, 1 January to 31 December 1999**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Total	no.	123	62	63	41	39	5	2	7	342
Investigations finalised as a proportion of total investigations	%	64	66	78	76	56	100	50	71	68
Investigations in which offender is proceeded against as a proportion of investigations finalised	%	94	95	96	71	100	100	100	100	92

Source: table 8A.51.

Nationally, 58 per cent of investigations into reported assaults were finalised within 30 days of the offence becoming known to police. The proportion ranged from 42 per cent in the ACT to 63 per cent in NSW. Proceedings against an alleged offender had begun within 30 days in 79 per cent of finalised assault investigations nationally; this proportion ranged across jurisdictions from 61 per cent in SA to 89 per cent in Tasmania (table 8.8).

**Table 8.8 Victims of assault: outcomes of investigations, 30-day status, 1 January to 31 December 1999**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT<sup>a, b</sup></i>	<i>Aust</i>
Total	'000	64	17	18	14	14	3	2	2	134
Investigations finalised as a proportion of total investigations	%	63	47	54	55	60	46	42	53	58
Investigations in which offender is proceeded against as a proportion of investigations finalised	%	83	81	84	65	61	89	85	66	79

<sup>a</sup> Not directly comparable with other States and Territories as a result of changes in recording procedures for incidents involving multiple assault victims. <sup>b</sup> Includes offences where the outcome is unknown as well as offences where the outcome is known but the date of finalisation is unknown.

Source: table 8A.51.

Nationally, 25 per cent of investigations into reported armed robbery were finalised within 30 days of the offence becoming known to police. This rate of finalisation of investigations ranged from 16 per cent in the NT to 40 per cent in Tasmania. Proceedings against an alleged offender occurred within 30 days in 87 per cent of finalised armed robbery investigations nationally; this proportion ranged across jurisdictions from 81 per cent in NSW to 100 per cent in Tasmania and the NT (table 8.9).

**Table 8.9 Victims of armed robbery: outcomes of investigations, 30-day status, 1 January to 31 December 1999**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT<sup>a, b</sup></i>	<i>Aust</i>
Total	no.	4 619	1 880	1 257	931	528	77	115	32	9 439
Investigations finalised as a proportion of total investigations	%	17	32	33	29	32	40	35	16	25
Investigations in which offender is proceeded against as a proportion of investigations finalised	%	81	86	93	90	92	100	98	100	87

<sup>a</sup> Not directly comparable with other States and Territories as a result of changes in recording procedures for incidents involving multiple robbery victims. <sup>b</sup> Includes offences where the outcome is unknown as well as offences where the outcome is known but the date of finalisation is unknown.

Source: table 8A.51.

### *Outcomes of investigations — property crimes*

Nationally, in 1999, 8 per cent of investigations into reported unlawful entry with intent were finalised within 30 days of the offence becoming known to police. This rate of finalisation of investigations ranged from 5 per cent in the ACT to

14 per cent in the NT. Proceedings against an alleged offender had commenced within 30 days in 82 per cent of finalised investigations nationally; this proportion ranged across jurisdictions from 72 per cent in NSW and the NT to 97 per cent in the ACT (table 8.10).

**Table 8.10 Victims of unlawful entry with intent: outcomes of investigations, 30-day status, 1 January to 31 December 1999**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT<sup>a</sup></i>	<i>Aust</i>
Total	'000	151	76	74	56	34	12	7	5	416
Investigations finalised as a proportion of total investigations	%	7	9	9	8	6	7	5	14	8
Investigations in which offender is proceeded against as a proportion of investigations finalised	%	72	90	91	76	89	92	97	72	82

<sup>a</sup> Includes offences where the outcome is unknown as well as offences where the outcome is known but the date of finalisation is unknown.

Source: table 8A.52.

Nationally, 10 per cent of investigations into reported motor vehicle theft were finalised within 30 days of the offence becoming known to police. This rate of finalisation of investigations ranged from 3 per cent in Tasmania to 18 per cent in Queensland. Proceedings against an alleged offender occurred within 30 days in 76 per cent of finalised motor vehicle theft investigations nationally; this proportion ranged across jurisdictions from 59 per cent in WA to 93 per cent in the ACT (table 8.11).

**Table 8.11 Victims of motor vehicle theft: outcomes of investigations, 30-day status, 1 January to 31 December 1999**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT<sup>a</sup></i>	<i>Aust</i>
Total	'000	47	32	18	13	12	3	3	1	130
Investigations finalised as a proportion of total investigations	%	6	10	18	13	9	3	6	16	10
Investigations in which offender is proceeded against as a proportion of investigations finalised	%	79	79	74	59	83	87	93	70	76

<sup>a</sup> Includes offences where the outcome is unknown as well as offences where the outcome is known but the date of finalisation is unknown.

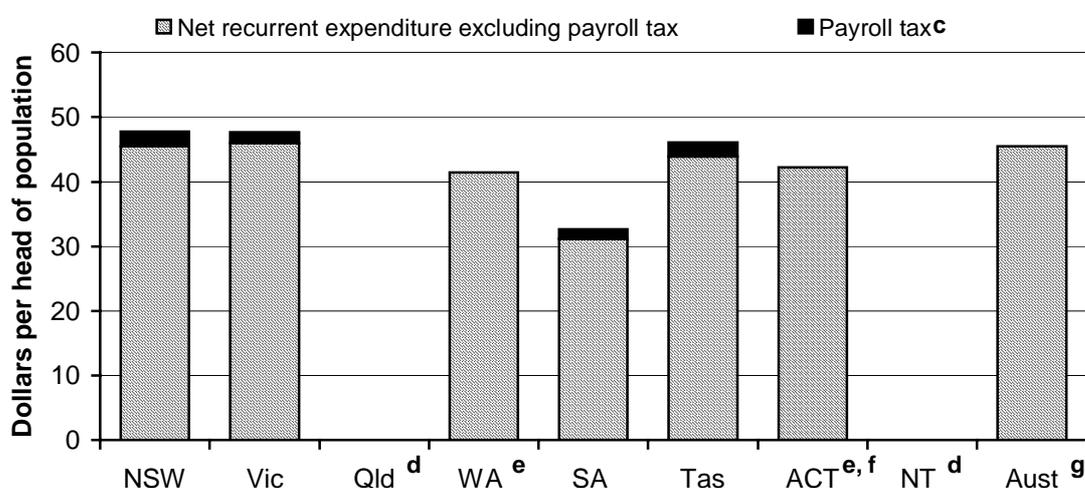
Source: table 8A.52.

## Efficiency

The NT and Queensland have not provided data in this area. The NT do not undertake activity surveys, and Queensland have doubts as to the accuracy and comparability of the whole data set.

Expenditure on crime investigation ranged from \$33 per head of population in SA to \$48 per head of population in both NSW and Victoria. Nationally, it was \$45 per head of population (figure 8.24).

Figure 8.24 Expenditure on crime investigation, 1999-2000<sup>a, b</sup>



<sup>a</sup> Some data are preliminary and thus have not been subjected to extensive tests to determine comparability. Further, some differences in counting rules may exist across jurisdictions as a result of the differing mixes of activities undertaken within each of the common service delivery areas. <sup>b</sup> Population based on ABS estimates for June 2000. <sup>c</sup> Calculated by multiplying the proportion of expenditure on salaries and payments for each service delivery area by the total payroll tax expenditure. <sup>d</sup> Data are only available for all key service delivery areas combined. <sup>e</sup> Exempt from payroll tax. <sup>f</sup> Results are based on a survey of staff directly involved in the delivery of community policing and related support services within the ACT region. Use of the teams based approach to investigations in the ACT means time spent on the preliminary investigation of an offence may have been counted in 'Community safety and support'. <sup>g</sup> Includes payroll tax where applicable.

Source: table 8A.53.

While comparisons can be made with last year, caution should be used due to changes in the methods employed. SA is excluded from comparisons with last year for this service delivery area, as its large decrease in expenditure was mainly the result of changes to activity survey definitions. The largest increase in expenditure over the past year occurred in the ACT, where expenditure on crime investigation rose by \$10 per head of population (up from \$32 to \$42). The largest decrease in expenditure over the past year occurred in Victoria, where expenditure fell by \$9 per head of population (down from \$57 to \$48). Nationally, expenditure on crime

investigations decreased by \$6 per head of population (down from \$51 to \$45) (table 8.12).

**Table 8.12 Expenditure on crime investigation, (dollars per head of population)<sup>a, b</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld<sup>c</sup></i>	<i>WA<sup>d</sup></i>	<i>SA<sup>e</sup></i>	<i>Tas</i>	<i>ACT<sup>d, f</sup></i>	<i>NT<sup>c</sup></i>	<i>Aust<sup>g</sup></i>
Net recurrent expenditure excluding payroll tax									
1998-99	48	55	na	40	62	39	32	na	51
1999-2000	46	46	na	41	31	44	42	na	45
Estimated payroll tax <sup>h</sup>									
1998-99	2	2	na	..	3	2	..	na	..
1999-2000	2	2	na	..	2	2	..	na	..
<b>Total<sup>i</sup></b>									
<b>1998-99</b>	<b>50</b>	<b>57</b>	<b>na</b>	<b>40</b>	<b>66</b>	<b>41</b>	<b>32</b>	<b>na</b>	<b>51</b>
<b>1999-2000</b>	<b>48</b>	<b>48</b>	<b>na</b>	<b>41</b>	<b>33</b>	<b>46</b>	<b>42</b>	<b>na</b>	<b>45</b>

<sup>a</sup> Some data are preliminary and thus have not been subjected to extensive tests to determine comparability. Further, some differences in counting rules may exist across jurisdictions as a result of the differing mixes of activities undertaken within each of the common service delivery areas. <sup>b</sup> Population based on ABS estimates for June 2000. <sup>c</sup> Data are only available for all key service delivery areas combined. <sup>d</sup> Exempt from payroll tax. <sup>e</sup> Data for 1998-99 included a wide range of crime prevention, reduction and response activities which are not appropriate to count as crime investigation activities. This has been corrected in the current year. <sup>f</sup> Results are based on a survey of staff directly involved in the delivery of community policing and related support services within the ACT region. Use of the teams based approach to investigations in the ACT means time spent on the preliminary investigation of an offence may have been counted in 'Community safety and support'. <sup>g</sup> Includes payroll tax where applicable. <sup>h</sup> Calculated by multiplying the proportion of expenditure on salaries and payments for each service delivery area by the total payroll tax expenditure. <sup>i</sup> May not add to sum of its components as a result of rounding. **na** Not available. **..** Not applicable.

Source: table 8A.53.

In 1999-2000, as a proportion of each jurisdiction's total expenditure, expenditure on crime investigations ranged from 16 per cent in SA to 22 per cent in each of NSW, Victoria and Tasmania. Nationally, it was 21 per cent of total expenditure (figure 8.2).

## 8.7 Road safety and traffic management

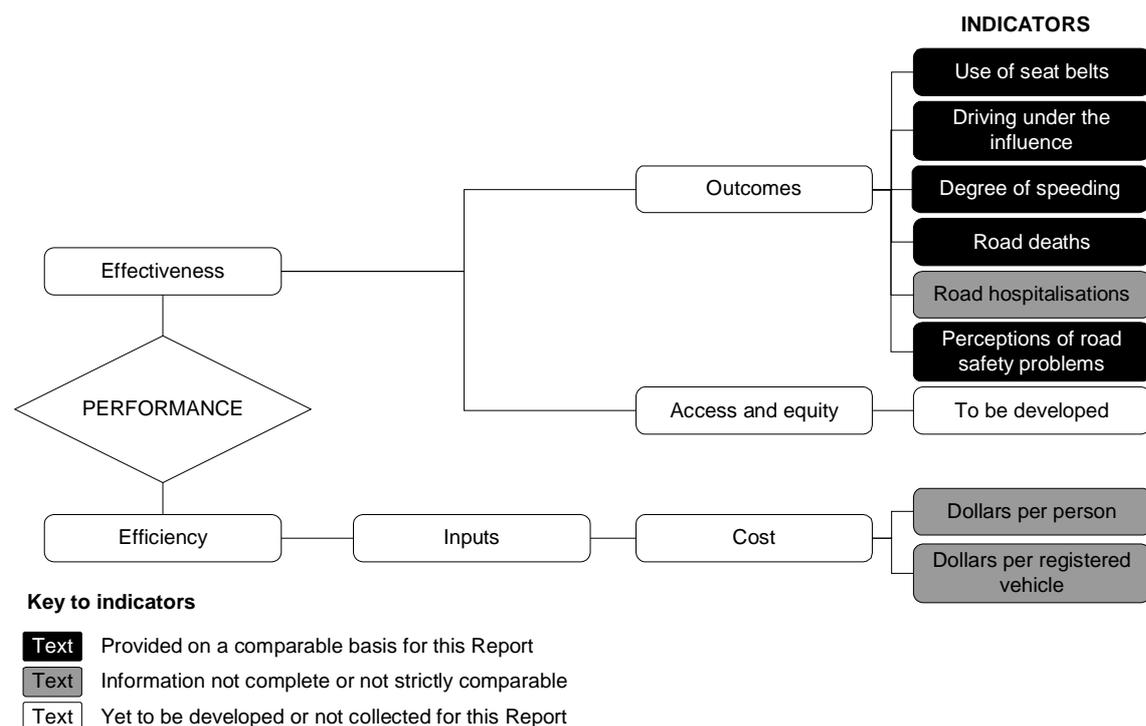
This service delivery area captures the role of police in maximising road safety through targeted operations to reduce the incidence of traffic offences, and through attendance at, and investigation of, road traffic accidents and incidents. Activities typically include:

- conducting speed and alcohol related traffic operations;
- undertaking general traffic management functions;
- attending and investigating road traffic accidents and incidents; and
- improving public education and awareness of traffic and road safety issues.

## Framework of performance indicators

The performance of the police in undertaking road safety and traffic management activities is measured using a suite of indicators that includes people's behaviour on the roads and the number of road hospitalisations and fatalities (figure 8.25).

Figure 8.25 Performance indicators for road safety and traffic management



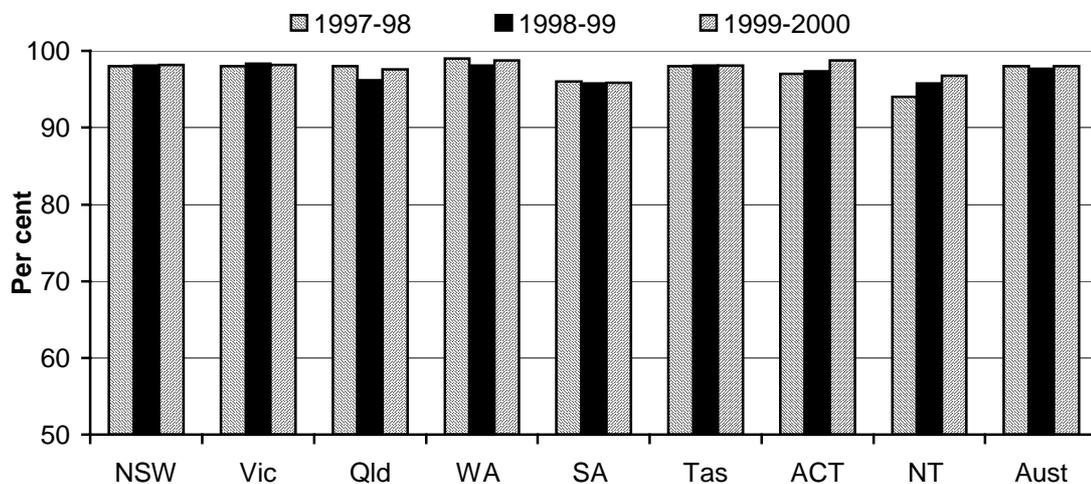
## Key performance indicator results

Comparable data on actual levels of seat belt use, speeding, and driving while under the influence are not available for reporting, so the performance indicators are based on survey responses from the Population Survey Monitor.

### *Use of seat belts*

An aim of police road safety programs is to influence road users' behaviour, such as to increase the use of seat belts to reduce the risk of injury from road crashes. This involves promoting the use of seat belts, speed reduction and sober driving. Nationally, in 1999-2000, 98 per cent of persons aged 18 years and over said they wear a seat belt 'most of the time' or 'always'. This proportion did not vary significantly across jurisdictions or across years (figure 8.26).

Figure 8.26 Persons who wear a seat belt 'most of the time' or 'always,' for persons aged 18 years and over <sup>a</sup>



<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an affect on the accuracy of the results.

Source: table 8A.55.

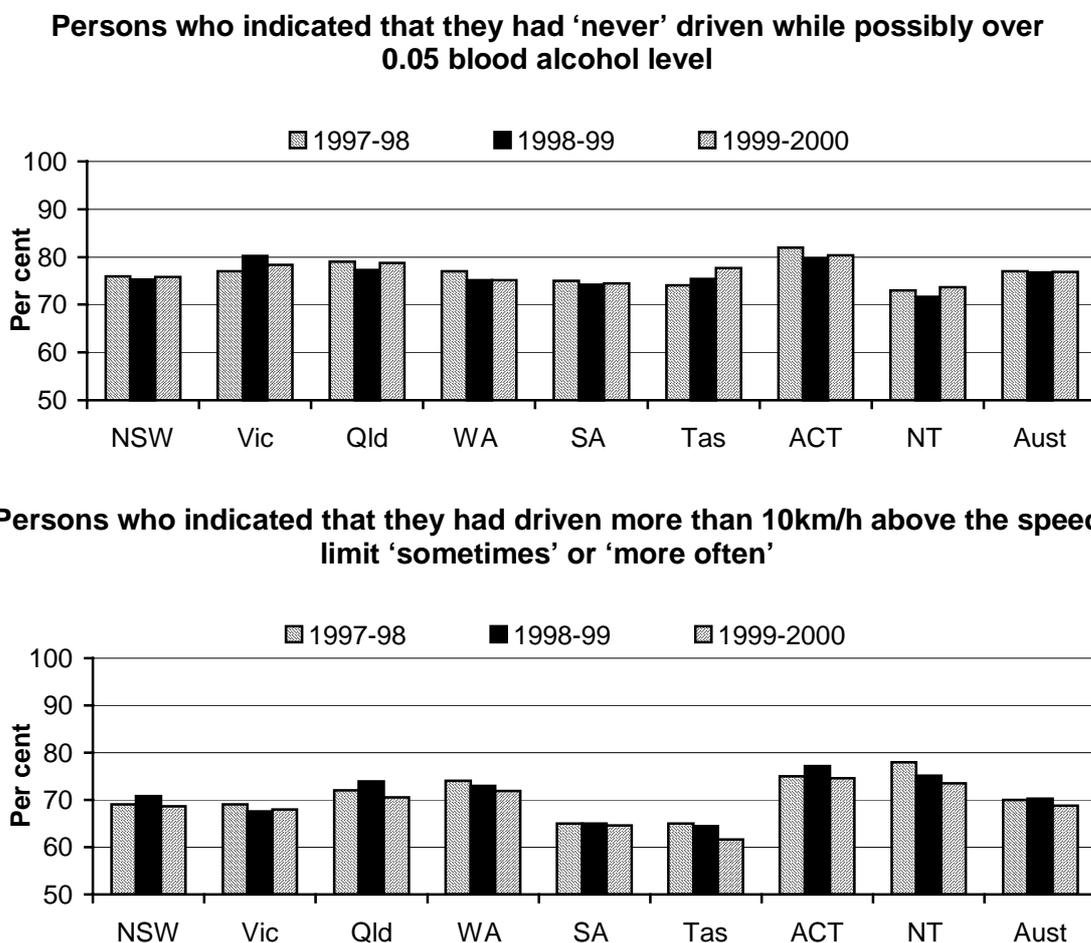
### *Road safety behaviour — speed and alcohol*

Nationally, 77 per cent of persons who drive and are aged 18 years and over in 1999-2000, indicated that they had 'never' driven when possibly over the 0.05 blood alcohol limit. This proportion ranged from 74 per cent in the NT to 80 per cent in the ACT. Nationally, 69 per cent of persons who drive reported travelling more than 10 kilometres per hour above the speed limit 'sometimes' or 'more often'. Across jurisdictions, the proportion ranged from 62 per cent in Tasmania to 75 per cent in the ACT (figure 8.27).

### *Road fatalities*

One aim of policing is to reduce road crashes and related road deaths and hospitalisations. The performance of the police in helping to minimise deaths and crashes that require a person to be admitted to hospital can affect the demand for many other government services (for example, hospital services).

**Figure 8.27 Persons aged 18 years and over: acknowledged road safety behaviour as a proportion of those who drive<sup>a</sup>**

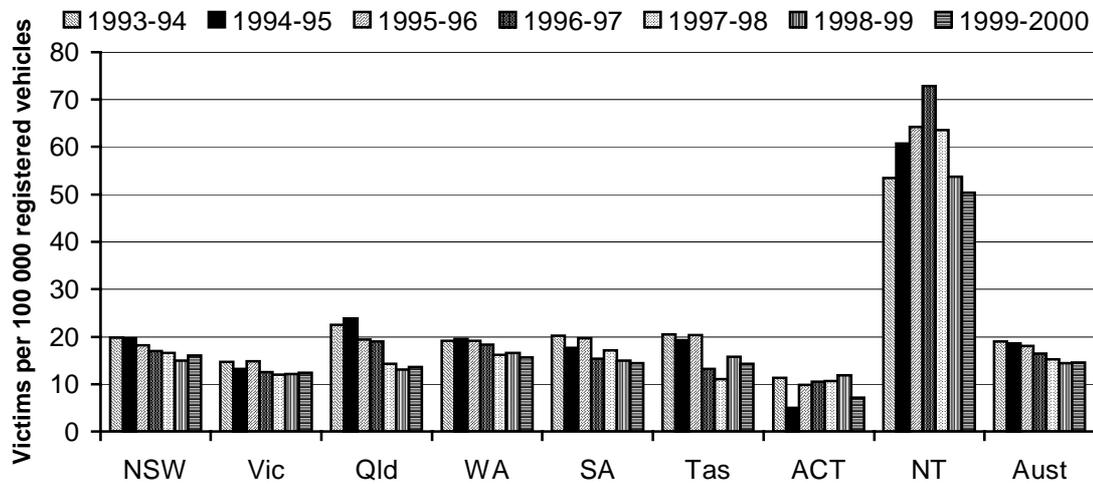


<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an effect on the accuracy of the results.

Source: tables 8A.56 and 8A.57.

Nationally, there were 1781 road deaths in 1999-2000. Across jurisdictions, this number ranged from 14 in the ACT to 588 in NSW (table 8A.58). There were 15 road deaths per 100 000 registered vehicles in Australia in 1999-2000, ranging from 7 in the ACT to 50 in the NT. The largest fall in deaths over the period 1993-94 to 1999-2000 occurred in Queensland (down 8 deaths per 100 000 registered vehicles) followed by Tasmania (down 7 deaths per 100 000 registered vehicles). There were no increases in deaths per 100 000 registered vehicles when comparing the results from 1993-94 with 1999-2000 for any jurisdiction (figure 8.28).

Figure 8.28 Road fatalities<sup>a</sup>



<sup>a</sup> Road fatalities data provided by the Australian Transport Safety Bureau for each of the respective years.  
Source: table 8A.58.

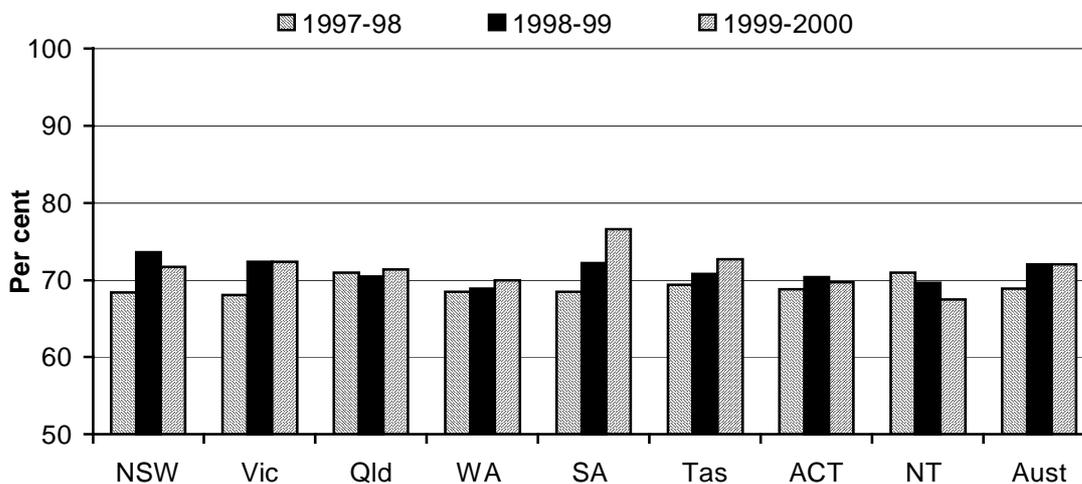
### Hospitalisations

In previous years, information on the level of hospitalisations has been provided by the Federal Office of Road Safety, subsequently re-named the Australian Transport Safety Bureau (ATSB). However, ATSB advises that data on the level of hospitalisations has become increasingly unreliable, and it is unable to provide data for this year or in future years. Jurisdictions are looking at other options to obtain this data – including the use of data from the Australian Institute of Health and Welfare – and there is a strong commitment that this indicator will be reported on next year once a reliable and comparable set of data can be established.

### Perceptions of road safety problems

Nationally, 72 per cent of persons aged 18 years and over believed speeding cars or dangerous, noisy driving to be a ‘major problem’ or ‘somewhat a problem’ within their neighbourhood. Across jurisdictions, this observation ranged from 68 per cent in the NT to 77 per cent in SA (figure 8.29).

**Figure 8.29 Persons aged 18 years and over: proportion who felt that speeding cars or dangerous, noisy driving was a 'major problem' or 'somewhat a problem' in their neighbourhood<sup>a</sup>**



<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. The size of the sample may have an impact on the accuracy of the results.

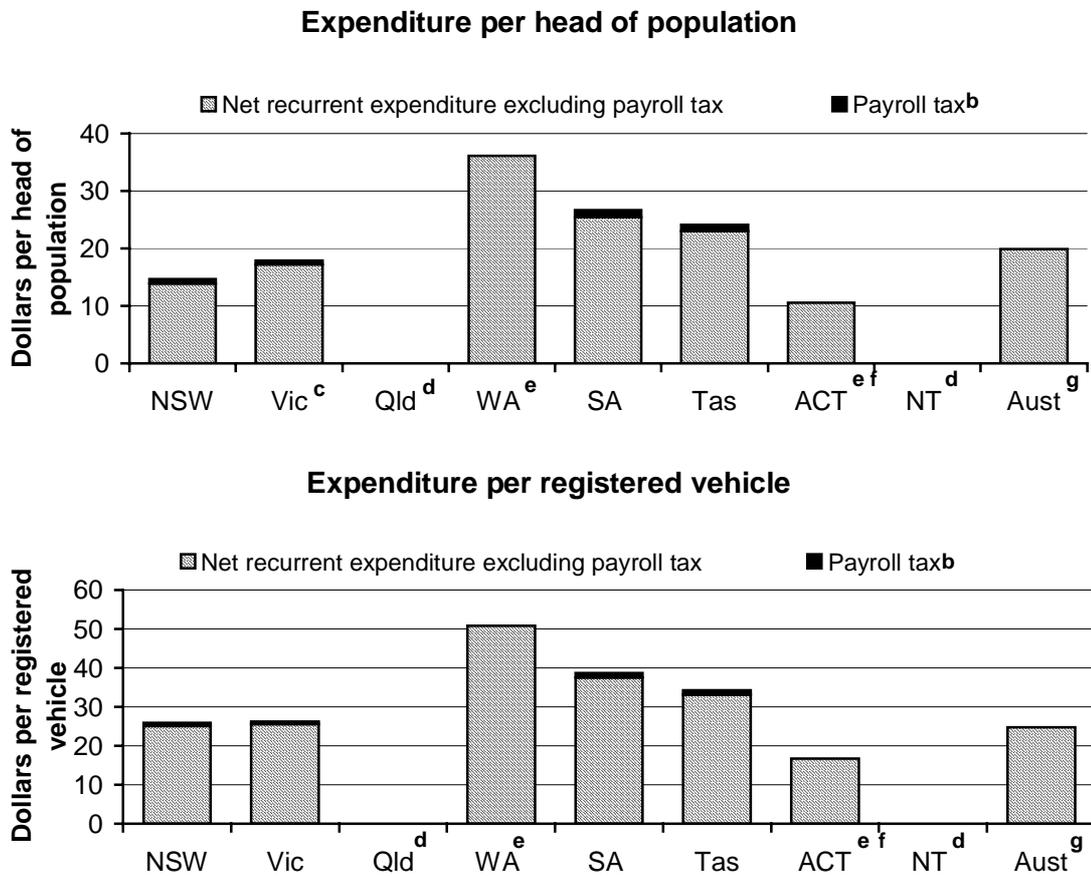
Source: table 8A.59.

### *Efficiency*

The NT and Queensland have not provided data in this area. The NT do not undertake activity surveys, and Queensland have doubts as to the accuracy and comparability of the whole data set.

Estimated expenditure on road safety and traffic management ranged from \$11 per head of population in the ACT to \$36 per head of population in WA. Nationally, \$20 per head of population was spent on road safety and traffic management. Estimated expenditure on road safety and traffic management per registered vehicle also varied across jurisdictions, from \$17 in the ACT to \$51 in WA (figure 8.30).

Figure 8.30 Expenditure on road safety and traffic management, 1999-2000<sup>a</sup>



<sup>a</sup> Some data are preliminary and thus have not been subjected to extensive tests to determine comparability. Further, some differences in counting rules may exist across jurisdictions as a result of the differing mixes of activities undertaken within each of the common service delivery areas. <sup>b</sup> Calculated by multiplying the proportion of expenditure on salaries and payments for each service delivery area by the total payroll tax expenditure. <sup>c</sup> In 1998-99, \$43 per head of population; in 1999-2000, \$18 per head of population. The variation results from a change in output costing method aligning services to financial allocations. Previous data used a historical cost formula. <sup>d</sup> Data are available only for all key service delivery areas combined. <sup>e</sup> Exempt from payroll tax. <sup>f</sup> Results are based on a survey of staff directly involved in the delivery of community policing and related support services within the ACT region. <sup>g</sup> Includes payroll tax where applicable.

Source: table 8A.60.

While comparisons can be made with last year, caution should be used due to changes in the methods employed. Victoria is excluded from comparisons with last year for this service delivery area, as its large decrease in expenditure results from a change in output costing method aligning services to financial allocations. The largest increase in expenditure on road safety and traffic management over the past year occurred in Tasmania, which increased expenditure by \$7 per head of population (from \$17 to \$24). The largest decrease in expenditure from last year occurred in the ACT, where expenditure decreased by \$5 per head of population

(from \$16 to \$11). Nationally, expenditure decreased by \$8 per head of population from \$28 to \$20 (table 8.13).

**Table 8.13 Expenditure on road safety and traffic management<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i> <sup>b</sup>	<i>Qld</i> <sup>c</sup>	<i>WA</i> <sup>d</sup>	<i>SA</i>	<i>Tas</i>	<i>ACT</i> <sup>d, e</sup>	<i>NT</i> <sup>c</sup>	<i>Aust</i> <sup>f</sup>
<i>Dollars per head of population</i>									
Net recurrent expenditure (excluding payroll tax)									
1998-99	18	41	na	34	22	16	16	na	28
1999-2000	14	17	na	36	25	23	11	na	20
Payroll tax <sup>g</sup>									
1998-99	1	2	na	..	1	1	..	na	..
1999-2000	1	1	na	..	1	1	..	na	..
<b>Total<sup>h</sup></b>									
<b>1998-99</b>	<b>19</b>	<b>43</b>	<b>na</b>	<b>34</b>	<b>23</b>	<b>17</b>	<b>16</b>	<b>na</b>	<b>28</b>
<b>1999-2000</b>	<b>15</b>	<b>18</b>	<b>na</b>	<b>36</b>	<b>27</b>	<b>24</b>	<b>11</b>	<b>na</b>	<b>20</b>
<i>Dollars per registered vehicle</i>									
Net recurrent expenditure (excluding payroll tax)									
1998-99	31	61	na	47	31	24	25	na	36
1999-00	25	25	na	51	37	33	17	na	25
Payroll tax <sup>g</sup>									
1998-99	1	3	na	..	2	1	..	na	..
1999-00	1	1	na	..	1	1	..	na	..
<b>Total<sup>h</sup></b>									
<b>1998-99</b>	<b>32</b>	<b>64</b>	<b>na</b>	<b>47</b>	<b>33</b>	<b>25</b>	<b>25</b>	<b>na</b>	<b>36</b>
<b>1999-2000</b>	<b>26</b>	<b>26</b>	<b>na</b>	<b>51</b>	<b>39</b>	<b>34</b>	<b>17</b>	<b>na</b>	<b>25</b>

<sup>a</sup> Some data are preliminary and thus have not been subjected to extensive tests to determine comparability. Further, some differences in counting rules may exist across jurisdictions as a result of the differing mixes of activities undertaken within each of the common service delivery areas. <sup>b</sup> In 1998-99, \$43 per head of population; in 1999-2000, \$18 per head of population. The variation results from a change in output costing method aligning services to financial allocations. Previous data used historical cost formula. <sup>c</sup> Data are available only for all key service delivery areas combined. <sup>d</sup> Exempt from payroll tax. <sup>e</sup> Results are based on a survey of staff directly involved in the delivery of community policing and related support services within the ACT region. <sup>f</sup> Includes payroll tax where applicable. <sup>g</sup> Calculated by multiplying the proportion of expenditure on salaries and payments for each service delivery area by the total payroll tax expenditure. <sup>h</sup> May not add to sum of its components as a result of rounding. **na** Not available. **..** Not applicable.

Source: table 8A.60.

In 1999-2000, as a proportion of each jurisdiction's total expenditure, expenditure on road safety and traffic management ranged from 5 per cent in the ACT to 15 per cent in WA. Nationally, the proportion of expenditure on road safety and traffic management was 9 per cent (figure 8.2).

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## 8.8 Services to the judicial process

This service delivery area captures the role of police in providing effective and efficient support to the judicial process, including the provision of safe custody for alleged offenders, and fair and equitable treatment of both victims and alleged offenders.

Activities typically include:

- preparing briefs;
- presenting evidence at court; and
- conducting court and prisoner security.

The role of police services in conducting court and prisoner security differs across jurisdictions.

### Framework of performance indicators

The performance of the police in undertaking these activities is measured using a suite of indicators that includes the number of court cases resulting in guilty pleas or guilty findings, and the effectiveness of police in diverting offenders from the criminal justice system (figure 8.31).

### Key performance indicator results

#### *Deaths in custody*

Nationally, there were 26 deaths in police custody and custody related operations in 1999. Across jurisdictions, this number ranged from five deaths in each of NSW, WA and the NT, to no deaths in the ACT and Tasmania. The overall number of deaths in 1999 was the same as in 1994 (figure 8.32). Nationally, there were six Indigenous deaths: three in WA, and one each in NSW, Queensland and the NT. More detail on the number of Indigenous deaths (including death rates by jurisdiction), over the period 1994–1999 appears in table 8A.61.

#### *Outcomes of court cases*

This is the first time that the outcomes of court cases have been published in the Report. The police assist the judicial process in a variety of ways, including by collecting evidence and testimony in court. Police work in this area can be measured to some extent by the success of the police in obtaining a guilty plea or conviction.

Figure 8.31 Performance indicators for services to the judicial process

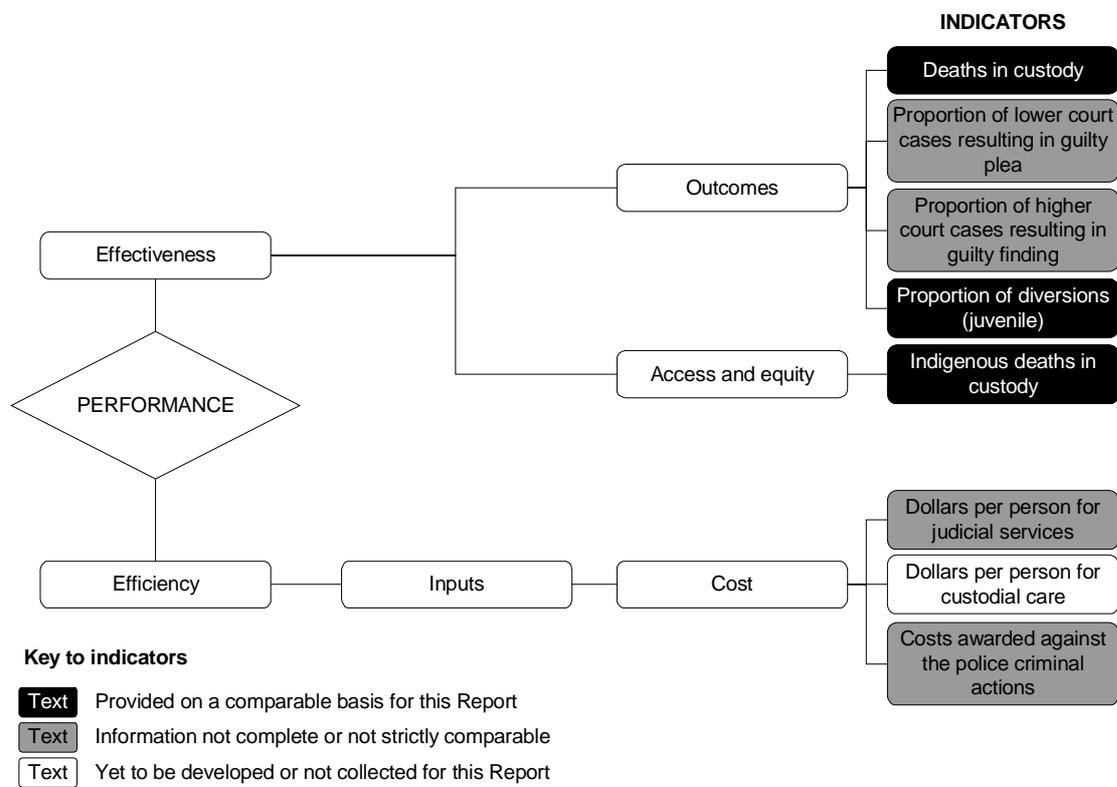
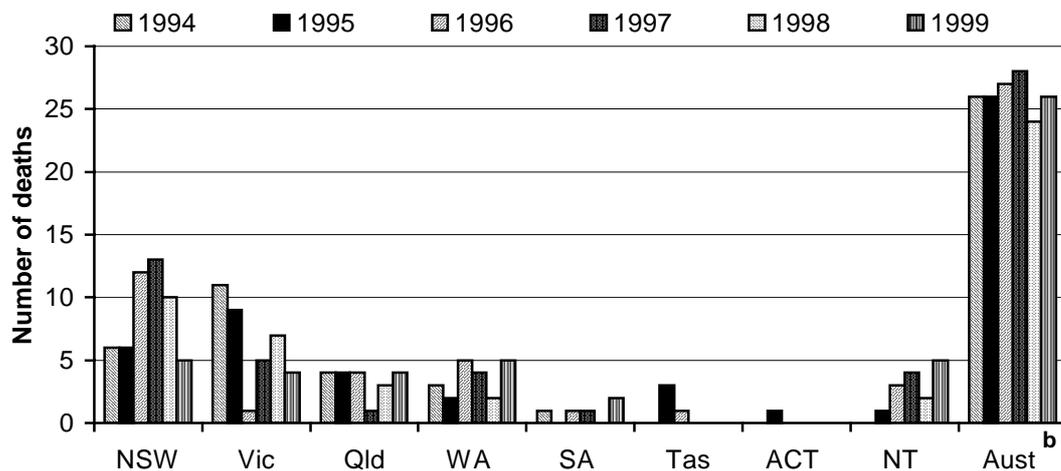


Figure 8.32 Number of deaths in police custody related operations<sup>a</sup>



<sup>a</sup> Deaths in police custody include: deaths in institutional settings (for example, police stations/lockups and police vehicles, or during transfer to or from such an institution, or in hospitals following transfer from an institution); and other deaths in police operations where officers were in close contact with the deceased (for example, most raids and shootings by police). Deaths in custody related operations cover situations where officers did not have such close contact with the person as to be able to significantly influence or control the person's behaviour (for example, most sieges and most cases where officers were attempting to detain a person, such as pursuits). <sup>b</sup> In 1994 and 1999 there was one Australian Federal Police (national, not the ACT) death in custody.

Source: table 8A.61.

The ACT and the NT were unable to provide any data for this in 1999. The proportion of lower court cases resulting in a guilty plea ranged from 70 per cent in SA to 85 per cent in WA. The proportion of higher court cases resulting in a guilty finding ranged from 68 per cent in SA to 84 per cent in Victoria (table 8.14). All jurisdictions that provided data on the outcome of higher court cases included guilty findings and guilty pleas, with the exception of Queensland that provided data only on guilty findings. Therefore, Queensland is excluded from any direct comparisons.

**Table 8.14 Outcomes of court cases, 1999 (per cent)<sup>a</sup>**

		<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Lower court cases resulting in guilty plea	%	80	84	na	85	70	na	na	na
Higher court cases resulting in guilty finding <sup>b</sup>	%	72	84	55 <sup>c, d</sup>	na <sup>d</sup>	68	71 <sup>d</sup>	na	na

<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. <sup>b</sup> All jurisdictions data include guilty findings and guilty pleas, except Queensland which only includes guilty findings. <sup>c</sup> Guilty findings for matters placed before a jury. <sup>d</sup> Higher court cases handled by the Director of Public Prosecutions. **na** Not available.

Source: table 8A.62.

### *Juvenile diversions*

This is the first time that the proportion of juveniles diverted has been included in the Report. When police apprehend offenders, they have a variety of options available. The police can charge the offender, in which case criminal proceedings occur through the traditional court processes. However, the police can also use their discretion to divert the offender away from this potentially costly, time consuming and stressful situation (for both the offender and victim). Diversionary mechanisms include cautions and attendances at community and family conferences. These options can be appealing because they allow the offender to be admonished, without the necessity of traditional court processes. They are particularly useful mechanisms for dealing with juvenile offenders.

Across jurisdictions, the proportion of juveniles diverted ranged from 32 per cent in Victoria to 53 per cent in SA in 1999-2000. The greatest increase in the use of juvenile diversions between 1997-98 and 1999-2000 occurred in Tasmania, where the proportion of juveniles diverted rose from 26 per cent to 50 per cent. There was no significant variation in the other jurisdictions over this period. The NT was unable to provide any data over the three-year period (table 8.15).

**Table 8.15 Juvenile diversions (per cent)<sup>a</sup>**

	NSW <sup>b</sup>	Vic <sup>c</sup>	Qld <sup>d</sup>	WA <sup>e</sup>	SA <sup>f</sup>	Tas <sup>g</sup>	ACT <sup>h</sup>	NT <sup>i</sup>
1997-98	na	33	43	40	54	26	36	na
1998-99	na	29	43	42	53	51	32	na
1999-2000	48	32	43	41	53	50	34	na

<sup>a</sup> Caution should be used when comparing differences in results across jurisdictions and over time. <sup>b</sup> Includes warnings, cautions, and youth conferencing. <sup>c</sup> Includes cautions, official warnings and other diversionary programs. <sup>d</sup> Includes all juveniles diverted by way of community conference, diversionary conference or cautioning by police. <sup>e</sup> Juvenile diversions include juvenile cautions, and referrals to Juvenile Justice Teams. The proportion of juvenile diversions has been calculated on total recorded police contacts with juvenile offenders comprising juvenile cautions, referrals to Juvenile Justice Teams, and charges pertaining to juveniles. A charge is counted as a separate 'arrest' even though the actual event of arrest may have involved more than one charge being laid. Hence, the number of 'arrests' will over estimate the number of actual events of arrest. The proportion of juvenile diversions may therefore be understated. Data is calendar year, not financial, for 1997, 1998 and 1999 respectively. <sup>f</sup> Includes all juveniles diverted to a family conference (not informal cautions). <sup>g</sup> Includes cautioning and conferencing (including community conferences), but excludes official warnings. <sup>h</sup> Includes all juveniles diverted by way of formal cautions and diversionary conferences. Excludes Simple Cannabis Offences Notices. <sup>i</sup> Currently developing a recording/reporting system to monitor police juvenile diversions. **na** Not available.

Source: table 8A.63.

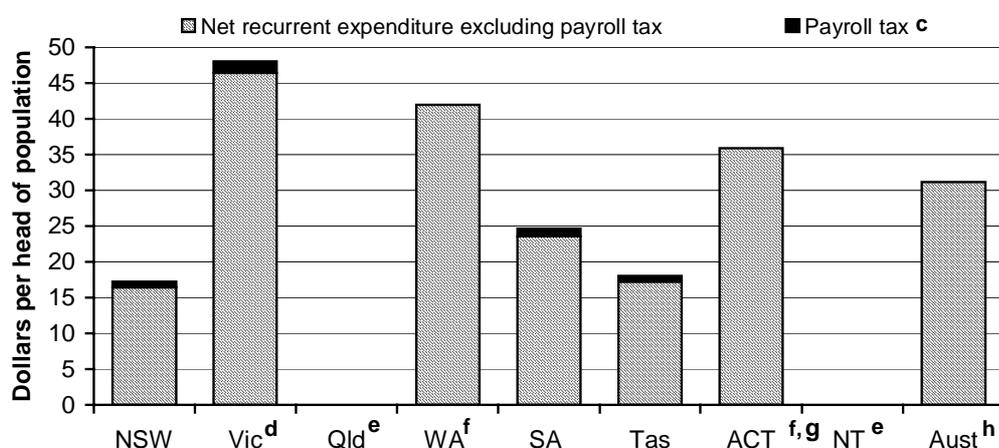
### Efficiency

The NT and Queensland have not provided data for this indicator. The NT does not undertake activity surveys, and Queensland have doubts as to the accuracy and comparability of the whole data set.

Estimated expenditure on services to the judicial process ranged from \$17 per head of population in NSW to \$48 per head of population in Victoria in 1999-2000. Nationally, expenditure was \$31 per head of population (figure 8.33).

While comparisons can be made with last year, caution should be used due to changes in the methods employed. Victoria is excluded from comparisons with last year for this service delivery area, as its large increase in expenditure results from a change in output costing method aligning services to financial allocations. The largest increase in expenditure on services to the judicial process between 1998-99 and 1999-2000 occurred in SA, where expenditure rose by \$11 per head of population (up from \$14 to \$25). NSW had the largest decrease in its expenditure, falling by \$13 per head of population (down from \$30 to \$17). Nationally, expenditure increased by \$7 per head of population (up from \$24 to \$31) (table 8.16).

Figure 8.33 Expenditure on services to the judicial process, 1999-2000<sup>a, b</sup>



<sup>a</sup> Some data are preliminary and thus have not been subjected to extensive tests to determine comparability. Further, some differences in counting rules may exist across jurisdictions as a result of the differing mixes of activities undertaken within each of the common service delivery areas. <sup>b</sup> Population based on ABS estimates for June 2000. <sup>c</sup> Calculated by multiplying the proportion of expenditure on salaries and payments for each service delivery area by the total payroll tax expenditure. <sup>d</sup> In 1998-99 data shows \$15 per head of population, in 1999-2000 the data shows \$49 per head of population. The variation results from a change in output costing method aligning services to financial allocations. Previous data used historical cost formula. <sup>e</sup> Data are only available for all key service delivery areas combined. <sup>f</sup> Exempt from payroll tax. <sup>g</sup> Results are based on a survey of staff directly involved in the delivery of community policing and related support services within the ACT region. <sup>h</sup> Includes payroll tax where applicable.

Source: table 8A.64.

Table 8.16 Expenditure on services to the judicial process (dollars per head of population)<sup>a, b</sup>

	NSW	Vic <sup>c</sup>	Qld <sup>d</sup>	WA <sup>e</sup>	SA	Tas	ACT <sup>e, f</sup>	NT <sup>d</sup>	Aust <sup>g</sup>
Net recurrent expenditure excluding payroll tax									
1998-99	28	15	na	39	13	25	29	na	24
1999-2000	16	46	na	42	24	17	36	na	31
Payroll tax <sup>h</sup>									
1998-99	1	1	na	..	1	1	..	na	..
1999-2000	1	2	na	..	1	1	..	na	..
<b>Total<sup>i</sup></b>									
<b>1998-99</b>	<b>30</b>	<b>15</b>	<b>na</b>	<b>39</b>	<b>14</b>	<b>26</b>	<b>29</b>	<b>na</b>	<b>24</b>
<b>1999-2000</b>	<b>17</b>	<b>48</b>	<b>na</b>	<b>42</b>	<b>25</b>	<b>18</b>	<b>36</b>	<b>na</b>	<b>31</b>

<sup>a</sup> Some data are preliminary and thus have not been subjected to extensive tests to determine comparability. Further, some differences in counting rules may exist across jurisdictions as a result of the differing mixes of activities undertaken within each of the common service delivery areas. <sup>b</sup> Population based on ABS estimates for June 2000. <sup>c</sup> In 1998-99, data shows \$15 per head of population; in 1999-2000, data shows \$48 per head of population. The variation results from a change in output costing method aligning services to financial allocations. Previous data used historical cost formula. <sup>d</sup> Data are available only for all key service delivery areas combined. <sup>e</sup> Exempt from payroll tax. <sup>f</sup> Results are based on a survey of staff directly involved in the delivery of community policing and related support services within the ACT region. <sup>g</sup> Includes payroll tax where applicable. <sup>h</sup> Calculated by multiplying the proportion of expenditure on salaries and payments for each SDA by the total payroll tax expenditure. <sup>i</sup> May not add to sum of its components as a result of rounding. **na** Not available. **..** Not applicable.

Source: table 8A.64.

In 1999-2000, as a proportion of each jurisdiction's total expenditure, expenditure on judicial processes ranged from 8 per cent in NSW to 22 per cent in Victoria. Nationally, the proportion of expenditure on judicial processes was 14 per cent (figure 8.2).

Another indicator of efficiency is the court costs awarded against the police in criminal actions. Court costs will generally be awarded when a criminal action against an offender has failed; in this respect it represents at least some of the resources expended in failing to achieve a conviction (table 8.17). While most jurisdictions are able to report on this indicator, further work remains in improving the comparability of data.

**Table 8.17 Costs awarded against the police through criminal actions (dollars)<sup>a, b</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Total costs								
1998-99	na	1 543 554	178 467	861 800	349 067	34 980	na	na
1999-2000	na	1 295 573 <sup>c</sup>	191 627	388 157 <sup>d</sup>	366 000	21 871	177 008	na
Total costs per head of population								
1998-99	na	0.33	0.05	0.47	0.23	0.07	na	na
1999-2000	na	0.27	0.05	0.21	0.24	0.05	0.57	na

<sup>a</sup> Total costs awarded against the police resulting from summary offences and indictable offences tried summarily before a court of law. <sup>b</sup> Caution should be used when comparing differences in results across jurisdictions and over time. <sup>c</sup> Costs reflect a total of 416 cases in 1999-2000. They are based on when the matter was processed by Victoria Police rather than when awarded at court. <sup>d</sup> Relates to costs awarded at courts of petty sessions and the Children's Court. **na** Not available.

Source: table 8A.65.

## 8.9 Future directions in performance reporting

### Improving the comparability of indicators

Jurisdictions will continue to work at improving the comparability of indicators within the chapter. In particular, further work will be undertaken to improve data collection and comparability in the following areas:

- road hospitalisations;
- complaints;
- juvenile diversions;
- costs awarded against police;
- outcomes of court cases; and

- 
- recurrent expenditure by key service delivery area.

While these are areas that have been identified as requiring further work, the improvements to the chapter and progress on performance reporting will not be limited to these indicators.

### **Rural and remote data**

No data disaggregating police activities in metropolitan, urban, rural and remote areas are reported within the chapter. However, the Steering Committee is working with the Police Working Group to improve the reporting of police service delivery in these areas. The police services acknowledge that the reporting of rural and remote data is an important area to develop. Currently, two jurisdictions (the NT and NSW) are working to articulate the Accessibility/Remoteness Index of Australia framework with police cost data by June 2001.

There should be scope to incorporate the results from this work into the 2002 Report. Depending on the results, the data arising from this work could form part of the descriptive section of the chapter or possibly be incorporated within parts of the performance indicator framework.

### **Agreed indicators for best practice that can be measured for both effectiveness and efficiency**

The challenge for the Review is to develop useful output measures (and methods to collect the data) for all the key service delivery areas of police services, given the objectives of police, the resources at their disposal, and the desired intermediate and final outcomes.

In this respect, police jurisdictions are examining more robust and suitable ways to measure levels of efficiency in the range of services that they provide to the community. An important factor is the development of a matrix of issues that have an impact on the way in which policing services are provided in different jurisdictions, different geographic regions, and different population density areas according to the relevant legal framework and resourcing levels.

In response to this challenge, over the next year the police services will develop a suite of best practice efficiency measures for specific high priority policing services. Research shows, for example, that police should undertake random breath tests and speed checks (particularly in collision/crash 'black spots' areas) to maximise road safety in the community. In addition, trend data suggest that high visibility patrolling has a significant impact on road safety. Further examination of these

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influences is expected to contribute to an understanding of how policing resources are best allocated to specific road safety initiatives and strategies. Similar work is underway for domestic violence (as a subcomponent of the key service delivery area 'Community safety and support').

### **Reporting on Indigenous Australians' access to mainstream services**

In May 1997 the Prime Minister requested that the Steering Committee give priority to developing indicators that measure the performance of mainstream services in meeting the needs of Indigenous Australians. This is an important task, but large gaps remain. This chapter contains information on the number of Indigenous deaths in police custody for all jurisdictions, and the number of Indigenous police officers for all jurisdictions except NSW, Victoria, Queensland and Western Australia.

These jurisdictions are unable to report on the number of Indigenous police officers because the information on Indigenous status is based on self reporting and is collected only on recruitment. This means that information is often unreliable and dated, and it is not electronically recorded on personnel files. Enhancements of personnel systems may allow the collection of more consistent information in the future.

Police do collect, for their own purposes, Indigenous statistics on a range of other indicators (for example, racial appearance of an offender). However, the quality of data based on visual appearance is not known, and caution should be used in its reporting.

As a result of these difficulties, recent work has been undertaken by the Australian Bureau of Statistics to analyse the quality of the Indigenous status data and racial appearance data collected by the NSW Police. The purpose of this study was to review the current approach to the collection of Indigenous status and related data, and to develop a model for a consistent and reliable method to be adopted by police services in Australia.

The NSW Police has collected Indigenous information for both victims and offenders using the two questions:

- Are you Aboriginal?
- Are you Torres Strait Islander?

Four response categories are provided:

- Yes

- No (includes offender/victim who doesn't know about his/her Indigenous status)
- Refused
- Not obtained by police

These two data items are mandatory fields which accept one of the above responses only. The preliminary results of the work undertaken by the Australian Bureau of Statistics are shown in box 8.4.

**Box 8.4 Pilot study of NSW Indigenous identification data**

In 1998-99, there were approximately 288 900 offender records and 643 500 victim records created by the NSW Police.

***Racial appearance***

- 9.9 per cent of the offenders were perceived by the police as Aboriginal and 0.8 per cent were perceived as Torres Strait Islanders. There were approximately 67 900 (23.5 per cent) of offenders' records for which police did not fill in one of the racial appearance codes.

***Asking questions***

*Whether an Aboriginal or not? Whether a Torres Strait Islander or not?*

- 83.7 per cent of offenders (241 700) indicated that they are not an Aborigine and 11.9 per cent (34 300) said they are.
- 95.3 per cent (275 200) of the offenders indicated that they are not a Torres Strait Islanders, and 0.4 per cent (1100) indicated they are.

There were about 4.2 per cent of records for which the police did not obtain/record the Indigenous status response to both questions. In addition, the refusal rates were very low (0.1 per cent) when these two questions were asked by the police.

***Comparison of data quality between racial appearance and self identified Indigenous status***

Of those offenders who indicated that they were an Aborigine, 72.8 per cent of them were also perceived by the police as Aboriginal according to their racial appearance; 14.1 per cent were perceived as Caucasian and 11.2 per cent had no such information provided by the police.

Of those offenders who indicated that they were a Torres Strait Islander, only 3.1 per cent were perceived by the police as Torres Strait Islander according to their racial appearance. Fairly high proportions of them were being regarded either as Pacific Islanders or Aboriginal.

(Continued next page)

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Box 8.5 (Continued)

***What are the likely types of incidents for which the police did not obtain/record Aboriginal status?***

The five most common incidents for which the police did not record an offender's aboriginal status were assault (20.6 per cent), traffic offence (13.9 per cent), fraud (8.8 per cent), stealing (8.7 per cent) and malicious damage (6.9 per cent).

*Source: National Centre for Crime and Justice Statistics (ABS) and NSW Police*

These results provide an insight into the quality of Indigenous status and related data collected by the NSW Police. The main findings include:

- When police asked questions about Indigenous status, the refusal rates were very low for both victims and offenders;
- The proportions of records for which the police did not obtain/record Indigenous status information were fairly low for both victims and offenders;
- The proportion of records with missing values was significantly higher for victims than offenders; and
- When racial appearance data was compared with the Indigenous status data asked by the police, the data quality of Indigenous status based on racial appearance was fairly good, but the data quality for Torres Strait Islanders was poor.

## **8.10 Jurisdictions' comments**

This section provides comments from each jurisdiction on the services covered in this chapter and attachment 8A in the CD-ROM. Appendix A (Descriptive Statistics Appendix) contains short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter. In addition, detailed statistics covering various aspects such as age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (such as Indigenous status and ethnicity) are also found in Appendix A.

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## **New South Wales Government comments**

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NSW is the most populous State of Australia, is culturally diverse and attracts the most immigrants and international travellers. Responsibility for policing in such an environment requires the judicious use of police powers.

The mission of the NSW Police Service is ‘Police and community working together to establish a safer environment by reducing violence, crime and fear.’ The Service has adopted ethical cost-effective crime reduction as its primary objective. In particular, the Service has focussed on the most traumatic personal crimes of assault and robbery, and the most voluminous property crimes of break & enter, motor vehicle theft and stealing. In redressing these crimes, the Service takes a whole of crime approach and with the cooperation of local communities, has put in place many problem-solving operations, designed to ensure all people can freely enjoy their lawful pursuits.

The NSW Police Service uses many of the performance indicators shown in this Report to assess performance. Overall ‘success’ is measured in terms of general community satisfaction and confidence in police honesty, acting professionally, and treating people fairly. On these last three measures the community has increased confidence in police. There are, however, many influences on general satisfaction and a more useful measure is the level of satisfaction of those who had contact with police which has remained fairly constant at about 80% over the last few years.

Other measures, such as the level of crime and finalisation of investigations are internally benchmarked within the NSW Police Service against the objective of reduced crime. Comparison to other States/Territories is less useful operationally and the Service relies on the comparison of Local Area Commands to identify good practice and successful initiatives.

Service to the community is assessed in terms of calls for assistance. During 1999-2000, there were over 1 million emergency ‘000’ calls received and approximately 2.8 million radio broadcasts to police. In all, police attended over 1.5 million jobs, of which about 110,000 were urgent. Over 80% of urgent jobs were attended within 11 minutes and 80% of non-urgent jobs were attended within 40 minutes. This level of service is considered among the best in the world given the dispersed nature of this Statewide coverage.

In the last year, there were over 3 million interactions between NSW police and members of the public. Many of these interactions were potentially confrontational (eg police demanding a member of the public submit to (temporary) detention), yet less than 1 in 900 of these interactions resulted in a public complaint against police.

In all, the NSW Police Service believes the level of achievement in delivering policing services to the NSW community is high and will further improve with increased emphasis on ethical crime investigations and crime prevention initiatives.

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## Victorian Government comments

“ Victoria Police is proud of its strong record of achievement in serving the community and the law. Providing policing services to a culturally diverse Victorian community is both challenging and rewarding, as this Report clearly demonstrates.

To maximise the available policing resources while continuing to respond to the demands and needs of the community, Victoria Police has implemented the first two stages of its Local Priority Policing initiative. Substantial progress towards the third and final stage, the Community Consultation Model, has been also made. Local Priority Policing has enabled Victoria Police to align all its resources (management, operational, infrastructure) to better deliver services to the community. In effect, Local Priority Policing in Victoria will ensure that police work in partnership with key agencies, local government and the local community in addressing crime and safety issues. A key element in this initiative is the establishment of Local Safety Committees across Victoria, including regional and rural communities.

Already Victorians and those visiting our State, receive over two million hours of police patrols per year, a further 500 000 hours of police service at police stations, approximately 800 000 responses per annum to calls for assistance and two million hours of investigation of crimes against the person and against property.

The Victoria community continues to inform Victoria Police of the services it requires and the quality of those services. Victoria recorded the highest level of satisfaction rating of police services from the community and again recorded the lowest major offences rate per 100 000 persons for both crimes against the person and against property, of all states and territories.

Victoria Police welcomes the “Report on Government Services” as a document that both record achievements and provides challenges to agencies for improved performance as a mechanism for accountability and transparency in service delivery. At the State and National levels, but most importantly, at the community level, Victoria Police is able to demonstrate sound operational and management performance. This involves exploring with other police jurisdictions across Australia, the best way of delivering our services and maximising the safety and security of all Victorians.

Victoria Police seeks to achieve “a safer community through service excellence”. Understanding performance and those factors that affect the Force’s performance of its functions continue to play a vital role in Victoria Police.

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## Queensland Government comments

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The Queensland Police Service (QPS) has introduced several new initiatives throughout the last year aimed at improving the quality of service delivered to the community, continuing with its focus on a problem solving philosophy, and working with the community to solve problems. A 12-month trial was commenced to assess the impact of transferring responsibility for Aboriginal and Torres Strait Islander Community Police from Aboriginal and Torres Strait Islander Councils to the QPS. During this trial 15 additional Queensland Aboriginal and Torres Strait Islander police have been employed, trained and appointed to three trial locations.

The Service has reinforced its commitment to delivering a highly professional, ethical and accountable service to the community in a joint initiative with the Criminal Justice Commission (CJC) developing and trialing a revised process for managing discipline complaints. The revised process focuses on improving service delivery, accountability, cost effectiveness of discipline investigations, and complainant satisfaction, and to date has resulted in significant time savings.

During the year the QPS conducted extensive planning and preparation exercises for events associated with the Sydney 2000 Olympics. Queensland hosted Olympic Football matches, and 147 Olympic teams trained in Queensland. During this period security planning also commenced for the 2001 Commonwealth Heads of Government Meeting (CHOGM) and the Goodwill Games.

To facilitate the development of a Client Service Charter the QPS established a project team, and commenced surveying Service personnel to determine their views on policing priorities for the community. The project has the aim of improving service to the community by identifying and focussing on their priorities for police services.

During the period a new legislative framework for the Service's operations was also established, with the enactment of the *Police Powers and Responsibilities Act 2000*. The Act includes a range of new powers for police, and commenced on July 1 2000. Other recently enacted legislation impacting on service delivery included the *Prostitution Act 1999*, the Australian Road Rules, and a wide range of amendments to the *Domestic Violence (Family Protection) Act 1989*.

Recognising that adequate resources are necessary to provide a quality service to the community the QPS enhanced its asset base throughout the year. Expenditure was directed toward: capital works (\$34.3M); additional communications equipment (\$1.8M); upgrading information technology (\$10.8M); replacement operational equipment including the transition to Glock pistols (2500 pistols and 80 clearing stations); and 15 additional speed cameras, 10 red light cameras, and 5 new mini booze buses.

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## Western Australian Government comments

“The mission of the WAPS is – **“In partnership with the community create a safer and more secure Western Australia by providing quality police services”**. To facilitate the achievement of this mission the following outcomes are sought by the WAPS.

- **Community Safety** – *A level of public safety and security in which individuals are confident to go about their daily activities*
- **Road Safety** – *Road-users behave safely*
- **Crime and Justice** – *Individuals committing offences are brought before the justice system*

It is generally recognised that the achievement of these outcomes cannot be attained without support from a wide range of groups, as they are influenced by many factors. Therefore, the WAPS continues to work with other government agencies, local government and community organisations to identify and respond to community safety and security issues as well as addressing the causes of crime. Many of these partners have contributed to these outcomes through whole-of-government initiatives such as *Safer WA*.

The ongoing change management program, Delta, remains a world-class strategy consistent with best policing methods being practised overseas and within Australasia. This year the WAPS is beginning to see tangible benefits, with victims-of-crime rates down or stable in all major offence categories, and improvements in the percentage of investigations finalised within 30 days. The new developments through the Delta Communications and Technology (DCAT) project have started to provide support to the intelligence-led policing approach through innovations such as INSIGHT, a system that provides mapping of incident patterns and trends.

In December 1999 a review of regional boundaries was undertaken, which included consultation with a large number of external stakeholders. Following consideration of the feedback, boundary changes to country regions were adopted. The changes, which will align more closely with the State Government’s Regional Development Boundaries, will improve service delivery by freeing up resources to be diverted to frontline policing and enable police to work more effectively with other government agencies. One of the key changes is a reduction in the number of police country regions from three to two regions. These changes are consistent with the Delta philosophy, which places emphasis on devolvement of responsibility to districts as being the key providers of a police service to local communities.”

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## South Australian Government comments

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Recognition of the need to translate the desired outcomes of corporate governance as they relate to the South Australia Police (SAPOL) into visible outputs (in the form of activities provided to the community) has prompted a focus on the efficiency and adequacy of internal procedures. The strategic use of resources and the maximisation of results are two key factors in the strategic planning approach adopted by SAPOL. To build upon, direct and improve the significant structural and process changes introduced during 1998-99, an holistic planning model has been developed. The further development of the State Government Management Framework provided an impetus for a review of SAPOL's internal planning processes, and the resulting recommendations focused upon producing purpose-driven results from a whole of organisation perspective. The SAPOL Progressive Planning Model is premised upon all units within SAPOL contributing to output classes and outputs with identifiable objectives that are measured regularly by performance indicators.

The model ensures that information gathered as part of the environmental scan is utilised according to the focus of various operational sections within SAPOL. Issues are prioritised according to the South Australian context and form the basis for strategies designed to achieve corporate outcomes. A new emphasis has been placed on accountability and evaluation, and therefore the planning model includes performance measurement as one of the key phases. Of more significance to SAPOL, however, is the *review* of the performance measures, and using information intelligently.

Performance measurement as a management tool has been emphasised during the past twelve months in SAPOL. It is both a strategic practice and a source of strategic information and constitutes an organisation-wide shift in both practice and philosophy. SAPOL is being proactive in encouraging targeted localised initiatives that are consistent with the output-based planning framework by introducing Performance Outcome Reviews (PORs). In addition to the emphasis on accountability and performance measurement, these forums provide different sections with an opportunity to showcase successful strategies and to identify any issues or problems that have arisen. These have been particularly innovative in involving local council areas as part of the localised crime reduction programs.

As an organisation, SAPOL is in the process of developing an output-based budgeting system. The activity survey itself is being refined, while the hand-held computers intended for activity recording within Local Service Areas are being streamlined and simplified. These are examples of translating the principles of a planning framework into projects that deliver functional information that has multiple uses at all levels.

A strong organisational foundation has been established following the complete implementation of recommended structural changes. SAPOL is positioned to go into the 21<sup>st</sup> century, providing well-defined outputs to the community with mechanisms to monitor and further improve policing strategies.

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## Tasmanian Government comments

“ This year’s Business Plan of the Department of Police and Public Safety highlighted a number of corporate priorities. In terms of commitment of resources and energy however, the following two stand out:

- reduce the incidence and effect of property crime in the community and increase the detection of those responsible; and
- continue comprehensive human resource management focusing on:
  - attainment of partnerships with tertiary education and other providers;
  - implementation of a personal assessment process; and
  - implementation of equal opportunity practices ensuring fairness and equity.

Although overall a very safe community, Tasmania still experiences high rates of property crime and motor vehicle theft.

Our approach to reducing crime has been to implement a more integrated crime management strategy focusing equally on proactive crime reduction programs as well as improved investigative techniques. Crime Management Units are now better targeting crime ‘hot spots’ and identifying crime trends, and the single visit resolution by Crime Response Units has enabled a more efficient completion of victim and forensic procedures. This approach, in combination with our repeat burglary victimisation strategy, Project Samaritan, and a reactivation of beat policing, are reaping rewards. Recently released national crime statistics indicate that Tasmania is below the national average in 10 of the 13 categories. Assaults and motor vehicle theft were still unacceptably high but a significant reduction of 14 per cent was achieved in burglary and break-and-enter offences.

The department has forged a strong relationship with the University of Tasmania and this has resulted in the introduction of a Bachelor Degree in Social Science. To complement this, we have introduced a Tertiary Education Assistance Scheme to facilitate loans, study time and scholarships for staff studying or wishing to study an approved tertiary course.

Another far-reaching initiative has been the implementation of a performance feedback program which aims to identify, evaluate and develop the work performance of all staff. At the same time, employees will receive feedback and recognition, have their work needs catered for and be offered career guidance.

Planning has now been completed on an access and equity program that commits the department to the principles of diversity, equal employment opportunities, the provision of a flexible workplace and one that is free from harassment and discrimination.

Each of these initiatives has been part of a strategic reform agenda designed to improve the delivery of policing services to the Tasmanian community.”

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## Australian Capital Territory Government comments

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The reporting period has been characterised by a number of major organisational and structural changes, which have occurred in response to the evolving crime environment in the ACT and more generally at national and international levels. The most significant of these changes are listed below.

The reviewing of the work value of all positions within ACT Policing using the management tool “JobSize”. The objective of this exercise was to balance remuneration and work requirements to ensure the most efficient allocation of resources to core business priorities. Amongst other things this resulted in the creation of two new levels of sergeant classification, an identified need to rationalise existing sergeant positions and redirection of resources to operational activity.

The implementation of a productivity based certified agreement which significantly changed employees terms and conditions including the elimination of accrued days-off, introduction of composite allowances in lieu of penalty payments and more flexible rostering systems to allow better utilisation of resources in the fight against crime.

The introduction of an intelligence led policing model, which allocates operational and support resources to tasking priorities on the basis of criminal intelligence. This is managed through an operations committee formed to ensure police resources are targeted in such a way as to provide maximum benefit to the community and will be supported by increased Government funding for specialised strike teams established to target burglary and stolen motor vehicle offences.

The signing of a new Policing Arrangement on 15 March 2000 following an extensive review of policing in the ACT. The most important features of the new Arrangement are that it establishes formal accountability measures to the responsible ACT Minister similar to those in other jurisdictions, provides ministerial control over appointments to the position of Chief Police Officer, requires the Chief Police Officer to maintain the confidence of the Minister to continue in the position, allows for the Minister to issue general directions to the Chief Police Officer and requires the Chief Police Officer to provide information to the Minister. The current Arrangement is for a five-year period and establishes a number of other administrative conditions for the provision of police services.

The negotiation of a Purchase Agreement under the Policing Arrangement which details the types of police services that the ACT Government wishes to purchase from the Australian Federal Police. The Purchase Agreement specifies outcomes and outputs required by Government along with performance measures and agreed targets.

The combined effect of these changes has been to increase ACT Policing’s accountability to Government, release police resources for the fight against crime, ensure that the right people are in the right jobs and increase the overall flexibility of police in responding to continually changing crime environments.

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## Northern Territory Government comments

“ The Northern Territory Police, as part of the tri-service agency of Northern Territory Police, Fire and Emergency Services, provide services to the community of the Northern Territory under the motto of **"To Serve and Protect"**. The Territory is over one-sixth of Australia's land mass, has an extensive and resource rich coastline and has around one percent of the population. Providing police services in the often remote, geographically diverse, topographically challenging and sparsely populated Territory represents many challenges. For these reasons and due to the combined nature of the Agency, the manner in which services are provided is often quite different to other parts of the nation.

Two important factors should be kept in mind and inform the debate about the resourcing and activity levels as identified in this report. Firstly, remoteness and a small population should not mean that the community should have lesser expectations of service delivery than those in the more populated regions of the nation. Secondly, and despite the small and sparse population, the task of delivering policing services is just as, if not more, complex in the Northern Territory than it is in other parts of the nation.

This report identifies that the cost of providing services in the Territory remains higher than for the rest of the nation. This will not change quickly over time. Much of the disparity can be explained by the fact that the economies of scale inherent in providing police services and their support infrastructure in the larger cities often disguise the high cost of providing the same services in the same jurisdiction in the remote areas of that jurisdiction. In the Territory's case there is no such disguising of these higher costs. The Territory also continues to have a higher than average police to population ratio for similar reasons.

Targeted responses to communal problems and focusing on the causes of social disorder have produced a number of desirable results. Importantly, the data in this report suggests that strategies are working as the rate of victimisation in key areas continues to decline. It is also to be noted that the survey data indicates that compliance with traffic safety laws is increasing whilst road fatalities are decreasing.

Equity in staffing continues to be a high priority and the Territory has the highest proportion of female and indigenous staff of any jurisdiction. The strategies that were developed to achieve this result, and to continue to increase the proportion of staff who are indigenous, female or of a non-English speaking background, have been recognised by a number of awards bestowed upon the Agency.

Prisoner safety is a high risk activity and remains a matter of high priority. The Agency has put considerable effort into better cell management, cell safety and training.

The Northern Territory will continue to remain a challenging jurisdiction to provide police services to and the Agency will continue to be innovative as it meets these challenges through integrated service delivery arrangements and in close cooperation with the community it serves and protects.”

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## 8.11 Information on sample data

Some of the results reported are estimates obtained by conducting surveys of samples of the group or population in question. Results are therefore subject to *sampling error*. The data obtained from a sample may be different from the ‘true’ data which would have been obtained from the entire group or population — not just a sample — using the same methods. Consequently, when using survey results, it is necessary to be cautious (see Statistical Appendix A of the Report).

The *standard error* is a measure of sampling error. It indicates the extent to which the estimate may differ by chance from the ‘true value’ because only a sample was taken. If the survey is performed repeatedly, the difference between the sample estimate and the population value will be less than one standard error about 68 per cent of the time. The difference will be less than two standard errors 95 per cent of the time. It will be less than three standard errors 99 per cent of the time. Another way of expressing this is to say that, in 68 (95, 99) of every hundred samples, the estimate obtained from a single survey will be within one (two, three) standard errors of the ‘true’ value.

The chance that an estimate falls within a certain range of the true value is known as the confidence of the estimate. For any particular survey, there is a tradeoff between the confidence of the estimate (68, 95 or 99 per cent) and the acceptable range of error (in terms of standard errors) attached to the estimate. The appropriate level of confidence chosen depends on the purpose of obtaining the estimate.

The *relative standard error* is the standard error, expressed as a percentage, which should be attached to the estimate. It indicates the margin of error which should be attached to the estimate. The smaller the estimate, the higher is the relative standard error.

In table 8.18, relative standard errors are presented for various estimates of the number of people. Some tables in this publication present the results as a percentage of the total population. To calculate a relative standard error for these cases, the percentage estimate must be converted back to an estimate of the number of people. Selected tables throughout this attachment show the estimated population sizes for the questions in the survey.

**Table 8.18 Relative standard error of estimates for the *Population Survey Monitor* by jurisdiction<sup>a</sup>**

<i>Estimate</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
'000	%	%	%	%	%	%	%	%	%
<b>Three quarter survey questions<sup>b</sup></b>									
5	70.4	67.0	55.4	40.4	46.2	23.1	18.5	19.6	56.6
10	49.8	47.4	39.2	28.6	32.7	16.3	13.1	13.9	40.0
20	33.9	31.8	27.8	19.6	21.2	9.8	8.6	9.4	28.2
50	20.1	18.8	16.2	11.4	12.7	5.4	5.4	5.1	17.5
100	13.5	12.5	10.6	7.4	8.3	3.3	3.7	3.3	12.0
200	8.8	8.2	7.1	4.8	5.4	1.9	2.5	2.1	8.0
500	5.0	4.6	4.0	2.7	3.0	0.9	..	..	4.7
800	3.7	3.4	2.9	1.9	2.2	..	..	..	3.5
1 000	3.2	3.0	2.5	1.7	1.9	..	..	..	3.1
1 500	2.5	2.3	2.0	1.3	1.5	..	..	..	2.3
2 000	2.0	1.9	1.6	1.0	1.2	..	..	..	2.0
5 000	1.1	1.0	0.9	..	..	..	..	..	1.1
<b>Four quarter survey questions<sup>b</sup></b>									
5	60.8	58.0	48.1	39.6	35.4	19.8	17.0	15.6	49.5
10	43.0	41.0	34.0	28.0	25.0	14.0	12.0	11.0	35.0
20	29.5	27.5	24.0	18.5	17.0	8.5	8.0	7.5	24.5
50	17.4	16.2	14.0	11.0	10.0	4.6	4.4	4.6	15.2
100	11.7	10.8	9.2	7.2	6.4	2.8	2.9	3.2	10.4
200	7.7	7.2	6.1	4.7	4.2	1.7	1.8	2.2	7.0
500	4.3	4.0	3.4	2.6	2.3	0.8	..	..	4.0
800	3.2	3.0	2.6	1.9	1.7	..	..	..	3.0
1 000	2.8	2.6	2.2	1.7	1.5	..	..	..	2.7
1 500	2.2	2.0	1.7	1.3	1.1	..	..	..	2.0
2 000	1.8	1.6	1.4	1.1	0.9	..	..	..	1.7
5 000	1.0	0.9	0.8	..	..	..	..	..	0.9

<sup>a</sup> The ABS considers that only estimates with relative standard errors of 25 per cent or less are sufficiently reliable for most purposes. Estimates greater than 25 per cent are subject to sampling variability too high for most practical purposes and should be treated with caution and viewed as merely indicative of the magnitude involved. <sup>b</sup> Police service *Population Survey Monitor* estimates are based on data collected in August 1999, November 1999, February 2000 and May 2000. .. Not applicable.

Source: ABS (*Population Survey Monitor*, Cat. no. 4103.0, unpublished).

## 8.12 Definitions

Table 8.19 Terms

<i>Term</i>	<i>Definition</i>
Armed robbery	Robbery conducted with the use (actual or implied) of a weapon, where a weapon can include, but is not restricted to: <ul style="list-style-type: none"> <li>• firearms — pistol, revolver, rifle, automatic/semi-automatic rifle, shotgun, military firearm, airgun, nail gun, cannon, imitation firearm and implied firearm; and</li> <li>• other weapons — knife, sharp instrument, blunt instrument, hammer, axe, club, iron bar, piece of wood, syringe/hypodermic needle, bow and arrow, crossbow, spear gun, blowgun, rope, wire, chemical, acid, explosive, vehicle, other dangerous article and imitation weapons.</li> </ul>
Assault	The direct (and immediate/confrontational) infliction of force, injury or violence on a person(s) or the direct (and immediate/confrontational) threat of force, injury or violence where there is an apprehension that the threat could be enacted.
Blackmail and extortion	The unlawful demanding with intent to gain money, property or any other benefit from, or with intent to cause detriment to, another person, accompanied by the use of coercive measures, to be carried out at some point in the future if the demand is not met. This may also include the use and/or threatened use of face-to-face force or violence, provided there is a threat of continued violence if the demand is not met.
Driving causing death	The unlawful killing of another person, without intent to kill, as a result of culpable, dangerous, reckless or negligent driving.
Full time equivalent (FTE)	The equivalent number of full time staff required to provide the same hours of work as performed by staff actually employed. A full time staff member is equivalent to an full time equivalent of one, while a part time staff member is greater than zero but less than one.
Investigation	The assigning of an investigative officer to look into the reported offence. This may involve simply reading a crime report and determining that an offence is unfounded; or proceeding with an investigation by interviewing an offender; or assessing that an investigation is pending/suspended and will only be actively pursued if additional evidence can be brought to the attention of the investigating officer. With these examples, an investigating officer has undertaken some type of process to determine what action should be taken to further proceed with the reported offence.
Kidnapping/abduction	The unlawful taking away of another person against that person's will, or against the will of any parent, guardian or other person having lawful custody or care of that person.
Manslaughter	The unlawful killing of another person while deprived of the power of self control by provocation or under circumstances amounting to diminished responsibility or without intent to kill, as a result of a careless, reckless, negligent, unlawful or dangerous act (other than the act of driving).

(continued next page)

**Table 8.19 (continued)**

<i>Term</i>	<i>Definition</i>
Motor vehicle theft	The taking of another person's motor vehicle illegally and without permission.
Murder	The wilful killing of a person either intentionally or with reckless indifference to life.
Other theft	The taking of another person's property with the intention of depriving the owner of the property illegally and without permission, but without force, threat of force, use of coercive measures, deceit or having gained unlawful entry to any structure even if the intent was to commit theft.
Registered vehicles	Total registered motor vehicles, including motorcycles.
Recorded crime	Crimes reported to, and recorded (or detected) by, police.
Reporting rate	The proportion of crime victims who told police about the last crime incident of which they were the victim, as measured through a crime victimisation survey.
Road hospitalisations	Hospitalisation as a result of a motor vehicle accident as defined by the Australian Institute of Health and Welfare.
Robbery	The unlawful taking of property from the immediate possession, control, custody or care of a person, with the intent to permanently deprive the owner of the property accompanied by the use, and/or threatened use of immediate force or violence.
Sexual assault	Physical contact of a sexual nature directed toward another person where that person does not give consent, that person gives consent as a result of intimidation or fraud, or consent is proscribed (that is, the person is legally deemed incapable of giving consent as a result of youth, temporary/permanent (mental) incapacity or a familial relationship). Includes rape, attempted rape, indecent assault and assault with intent to commit sexual assault. Excludes sexual harassment not leading to assault.
Total crime — reported — and unreported	Crime measured by direct survey of the Australian population, aged 15 years and over, about whether they had experienced certain criminal events in the past 12 months.
Unarmed robbery	Robbery conducted without the use (actual or implied) of a weapon.
Unlawful entry with intent — involving the taking of property	The unlawful entry of a structure with intent to commit an offence resulting in the taking of property from the structure, where the entry is either forced or unforced. Includes burglary and break and enter offences. Excludes trespass or lawful entry with intent.
Unlawful entry with intent — other	The unlawful entry of a structure with intent to commit an offence, but does not result in the taking of property from the structure, where the entry is either forced or unforced. Excludes trespass or lawful entry with intent.

Sources: ABS 2000 (*Recorded Crime Australia*, Cat. no. 4510.0).

**Table 8.20 Descriptors**

<i>Descriptor</i>	<i>Definition</i>
Available full time equivalent staff	Any full time equivalent category where the individual is on duty performing a function. To be measured using average staffing level for the whole reporting period.
Average non-police staff salaries	Salaries and payments in the nature of salary paid to civilian and other employees, divided by the total number of such employees.
Average police salaries	Salaries and payments in the nature of salary paid to sworn police officers, divided by the number of sworn officers.
Civilian staff	Unsworn staff, including specialists (civilian training and teaching medical and other specialists) and civilian administrative and management staff.
Depreciation	Where possible, based on current asset valuation.
Executive full time equivalent staff	Number of executive full time equivalent staff, including civilian senior executive service and sworn (chief superintendent to assistant commissioner) staff.
Indigenous full time equivalent staff	Number of full time equivalent staff who are identified as Aboriginal or Torres Strait Islander.
Management full time equivalent staff	Number of management full time equivalent staff, including civilian (managers) and sworn (Inspector to Superintendent) staff.
Non-Indigenous full time equivalent staff	Number of full time equivalent staff who do not satisfy the Indigenous staff criteria.
Non-operational full time equivalent staff	Any person who does not satisfy the operational staff criteria, including functional support staff only. Functional support full time equivalent staff include any person (sworn or unsworn) not satisfying the <i>operational</i> or <i>operational support</i> staff criteria (for example, finance, policy, research, personnel services, building and property services, transport services, and management above the level of station and shift supervisors).
Operational full time equivalent staff	Any person (sworn or unsworn) who delivers a police or police related service to an external customer directly (where an external customer refers to members of the public, other government departments, courts and the government). This category includes both operational staff and operational support staff serving in a unit: <ul style="list-style-type: none"> <li>• Operational full time equivalent staff include patrols, beat officers, detectives, traffic, Special Operation Group, community policing and station counter staff.</li> <li>• Operational support full time equivalent staff are any person (sworn or unsworn) directly supporting the operational provider (the internal customer), including technical staff, legal staff, unsworn staff supporting investigations, communications, records staff, training staff, intelligence staff, station and shift supervisors where these persons do not directly provide services to external customers.</li> </ul>
Other recurrent expenditure	Maintenance and working expenses; expenditure incurred by other departments on behalf of police; expenditure on contracted police services; and other recurrent costs not elsewhere classified. Expenditure is disaggregated by service delivery area.
Other staff	All unsworn, non-civilian staff, including all auxiliary police personnel who are neither sworn officers nor strictly civilians because they are authorised to exercise statutory powers normally restricted to sworn officers. This category includes police cadets, police aides and special constables.

(continued next page)

**Table 8.20 (continued)**

<i>Descriptor</i>	<i>Definition</i>
Practitioner full time equivalent staff	Number of Practitioner full time equivalent staff, including civilian (administration) and sworn (constable to senior constable) staff.
Real expenditure	Actual expenditure adjusted for changes in prices, using the GDP(E) price deflator, and expressed in terms of final year prices.
Revenue from own sources	Revenue from activities undertaken by police, including revenue from the sale of stores, plant and vehicles; donations and industry contributions; user charges; and other revenue (excluding fine revenue and revenue from the issuing of firearm licenses). Revenue is disaggregated by service delivery area.
Salaries and payments in the nature of salary	<p>Includes:</p> <ul style="list-style-type: none"> <li>• base salary package;</li> <li>• motor vehicle expenses that are part of employer fringe benefits;</li> <li>• superannuation, early retirement schemes and payments to pension schemes (employer contributions);</li> <li>• workers compensation (full cost) including premiums, levies, bills, legal fees;</li> <li>• higher duty allowances (actual amounts paid);</li> <li>• overtime (actual amounts paid);</li> <li>• actual termination and long service leave;</li> <li>• actual annual leave;</li> <li>• actual sick leave;</li> <li>• actual maternity/paternity leave;</li> <li>• fringe benefits tax paid;</li> <li>• fringe benefits provided (for example, school fee salary sacrifice at cost to the government, car parking, duress alarms, telephone account reimbursements, 'gold passes', other salary sacrifice benefits, frequent flier benefits, overtime meals provided, and any other components that are not part of a salary package); and</li> <li>• payroll tax.</li> </ul> <p>These are disaggregated by service delivery area.</p>
Senior executive full time equivalent staff	Number of senior executive full time equivalent staff, including civilian (top senior executive service) and sworn (Commissioner, Deputy Commissioner and equivalent civilian executives) staff.
Service delivery areas	<p>The core areas of police work. Four service delivery areas are identified for the purposes of this Report:</p> <ul style="list-style-type: none"> <li>• community safety and support;</li> <li>• crime investigation;</li> <li>• road safety and traffic management; and</li> <li>• services to the judicial process.</li> </ul> <p>A fifth service delivery area ('other' or 'other services') was identified to account for those unique functions of jurisdictions that were not directly associated with the aforementioned areas.</p> <p>While this is an attempt to identify common areas of core service delivery, their exact formats do not neatly fit with any jurisdiction or how they measure or plan for performance.</p>

(Continued on next page)

Table 8.20 (continued)

<i>Descriptor</i>	<i>Definition</i>
Supervisory full time –equivalent staff	Number of supervisory full time equivalent staff, including civilian (team leaders) and sworn (Sergeant to Senior Sergeant) staff.
Sworn staff	Sworn police staff recognised under each jurisdiction's Police Act.
Total capital expenditure	Total expenditure on the purchase of new or second-hand capital assets, and expenditure on significant repairs or additions to assets that add to the assets' service potential or service life.
Total expenditure	Total capital expenditure plus total recurrent expenditure (less revenue from own sources).
Total FTE staff	Operational staff and non-operational staff, including full time equivalent staff on paid leave or absence from duty (including secondment and training), as measured using absolute numbers for the whole reporting period.
Total number of staff	Full time equivalent staff directly employed on an annual basis (excluding labour contracted out).
Total recurrent expenditure	Includes: <ul style="list-style-type: none"> <li>• salaries and payments in the nature of salary;</li> <li>• other recurrent expenditure; and</li> <li>• depreciation</li> </ul> less revenue from own sources.
Unavailable full time equivalent staff	Any full time equivalent category where the individual is on paid leave or absence from duty (including secondment and training), as measured using the average staffing level for the whole reporting period.
Value of physical assets — land	The value of land under direct control of police.
Value of physical assets — buildings and fittings	The value of buildings and fittings under direct control of police.
Value of physical assets — other	The value of motor vehicles, computer equipment, and general plant and equipment under the direct control of police.

**Table 8.21 Indicators**

<i>Indicator</i>	<i>Definition</i>
Complaints	Number of statements of complaint by members of the public regarding police conduct.
Crimes against property	Total reported crimes against property, including: <ul style="list-style-type: none"> <li>• unlawful entry with intent;</li> <li>• motor vehicle theft; and</li> <li>• other theft.</li> </ul>
Crimes against the person	Total reported crimes against person, including: <ul style="list-style-type: none"> <li>• murder;</li> <li>• attempted murder;</li> <li>• driving causing death;</li> <li>• manslaughter;</li> <li>• assault;</li> <li>• kidnapping/abduction;</li> <li>• armed robbery;</li> <li>• unarmed robbery;</li> <li>• sexual assault; and</li> <li>• blackmail/extortion.</li> </ul>
Deaths in police custody and custody related incidents	At least one of the following deaths: death of a person who was in police custody; death caused or contributed to by traumatic injuries while in custody; death of a person who was fatally injured when police officers attempted to detain that person; and/or death of a person who was fatally injured when escaping or attempting to escape from police custody.
Outcome of investigations	The stage reached by a police investigation after a period of 30 days has elapsed since the recording of the incident.
Proportion of higher court cases resulting in guilty finding	Total number of higher court cases for which there was a finding of guilty or where the person pleads guilty, as a proportion of the total number of higher court cases. Higher court is either: <ul style="list-style-type: none"> <li>• an intermediate court (known either as the district court or county court) that has legal powers that are intermediate between those of a court of summary jurisdiction (lower level courts) and a supreme court, and deals with the majority of cases involving serious criminal charges; or</li> <li>• a supreme court (a higher court level which deals with the most serious criminal charges and has the greatest legal powers of all the State and Territory court levels) (ABS cat. no. 4513.0).</li> </ul> Guilty finding is an outcome of a trial in which a court determines that the criminal charge against a defendant has been proven (ABS cat. no. 4513.0).

(Continued on next page)

Table 8.21 (Continued)

<i>Indicator</i>	<i>Definition</i>
Proportion of juvenile diversions	Total number of juvenile offenders who are diverted by police (for example, through the use of cautions, official warnings or other diversionary programs), away from the criminal justice system, as a proportion of the total number of juvenile offenders either diverted from or dealt with by the criminal justice system (that is, those who are either diverted or prosecuted), divided by the total number of juvenile offenders, or the total number of juvenile offenders diverted or dealt with by the criminal justice system.
Proportion of lower court cases resulting in guilty plea	<p>Total number of cases (excluding committal hearings) heard before lower courts of law only, for which there was a plea of guilty, as a proportion of the total number of cases (excluding committal hearings) heard before lower courts of law only.</p> <p>Lower court: a court of summary jurisdiction, or lower court level (commonly referred to as magistrates' court, local court or court of petty sessions), deals with relatively less serious charges and has the most limited legal powers of all State and Territory court levels. Such courts are presided over by a magistrate and have jurisdiction to hear trial and sentence matters relating to summary offences. Under some circumstances, this court level may also deal with the less serious indictable offences known as 'minor indictable' or 'triable either way' offences (ABS cat. no. 4513.0).</p> <p>Plea: a guilty plea is the formal statement by a defendant admitting culpability in relation to a criminal charge. A not guilty plea is the formal statement by a defendant denying culpability in relation to a charge (ABS cat. no. 4513.0).</p> <p>For the purposes of this data collection, a plea of 'not guilty' should also include 'no plea', 'plea reserved' and 'other defended plea'</p> <p>Further, these definitions:</p> <ul style="list-style-type: none"> <li>• exclude preliminary (committal) hearings for indictable offences dealt with by a lower court; and</li> <li>• count cases that involve multiple charges as a 'lower court case resulting in a plea of guilty' if a plea of guilty has resulted for at least one of those charges.</li> </ul>
Road deaths	Fatal road injury accidents as defined by the Australian Transport Safety Bureau.



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## 9 Court administration

This chapter covers the performance of court administration for State and Territory supreme, district/county and magistrates' courts, coroners' courts, probate registries, the Federal Court of Australia, the Family Court of Australia and the Family Court of Western Australia. The focus of this Report is on the administration of the courts, not the outcomes of the legal process.

A profile of court administration is presented in section 9.1 and policy developments are summarised in section 9.2. A framework of performance indicators is outlined in section 9.3 and data are discussed in section 9.4. There have been no major changes to the framework or scope of this year's data collection, but data quality continually improves. Future directions for performance reporting are discussed in section 9.5. Jurisdictions' comments are provided in section 9.6 and the chapter concludes with definitions (section 9.7).

Supporting tables for chapter 9 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as `\Publications\Reports\2001\Attach9A.xls` and in Adobe PDF format as `\Publications\Reports\2001\Attach9A.pdf`.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 9A.3 is table 3 in the electronic files). They may be subject to revision. The most up-to-date versions of these files can be found on the Commission's Review web page ([www.pc.gov.au/service/gsp/2001/](http://www.pc.gov.au/service/gsp/2001/)). Users without Internet access can contact the Secretariat to obtain up-to-date versions of these tables (see details inside of the front cover of the Report).

### 9.1 Profile of court administration services

#### Service overview

Court administration agencies throughout Australia provide a range of services integral to the effective performance of the judicial system. The primary functions of court administration agencies are to:

- 
- manage court facilities and staff, including buildings, court security and ancillary services such as registry, libraries and transcription services;
  - provide case management services, including client information, scheduling and case flow management; and
  - enforce court orders through the sheriff's department or a similar mechanism.

## **Roles and responsibilities**

### *Court structures*

There is a hierarchy of courts at both the State and Territory level and the Commonwealth level. All courts handle a number of matters that appear in the court system for the first time (an originating jurisdiction). Higher courts hear disputes of greater seriousness than those in the lower courts. They also develop the law and operate as courts of judicial review or appeal (figure 9.1).

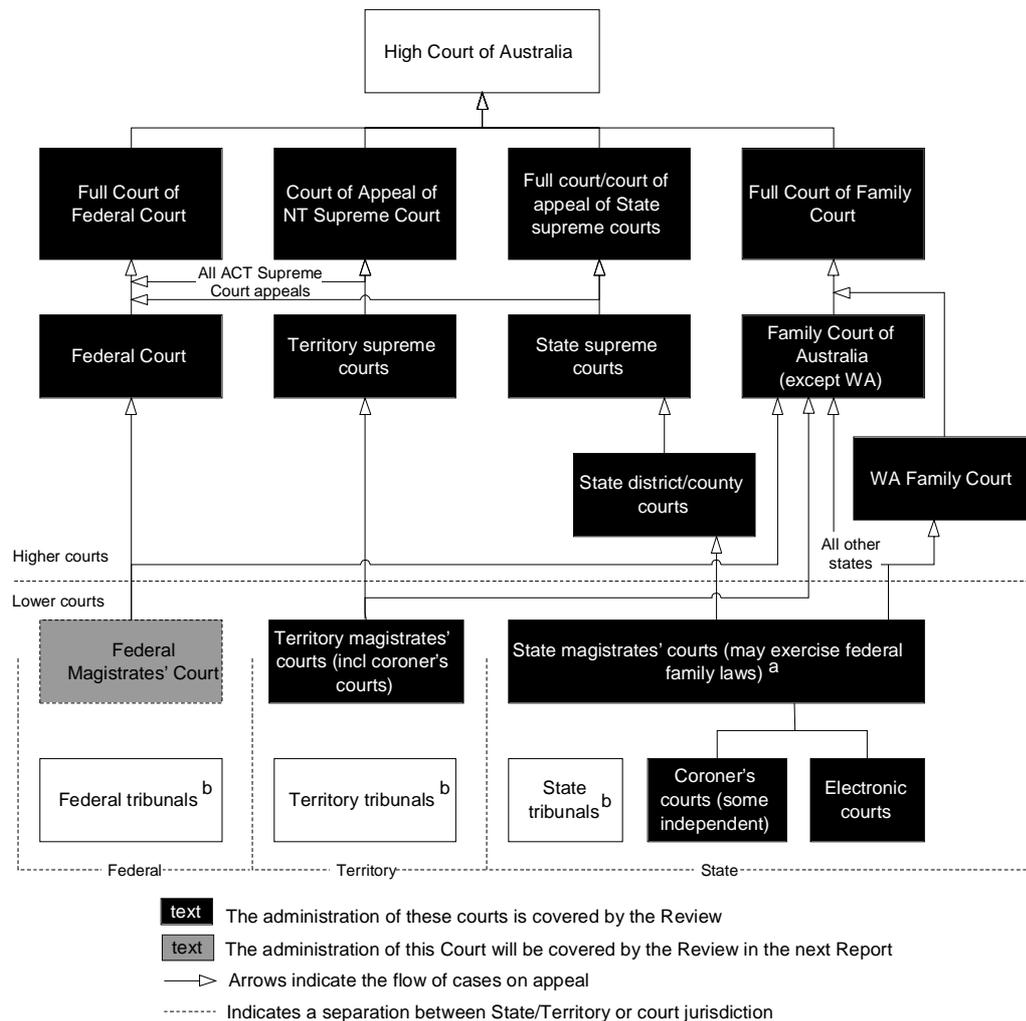
The structure of courts differs across States and Territories. Tasmania and the Territories do not have district/county courts (two-tier systems), and only WA has a Family Court (that is, the Family Court of Australia has jurisdiction in all other States and Territories).

There are also differences in the jurisdictions of courts across States and Territories. In general, magistrates' courts have jurisdiction over summary criminal matters, traffic infringements and committal proceedings. District/county courts have jurisdiction over indictable criminal matters and appeals from magistrates' courts. Generally, supreme courts have jurisdiction over serious criminal matters.

Differences in court jurisdictions can mean that the allocation of cases to courts varies across States and Territories. As a result, the seriousness and complexity of cases heard in each jurisdiction's equivalent court often varies. These factors should be taken into account when comparing performances across States and Territories for specific court jurisdictions' indicators. Differences in the allocation of cases to courts are shown in table 9A.21. The allocation of responsibility between court administration and other elements of the system (including the judiciary) also varies across the State, Territory and Commonwealth legal systems.

Most courts operate in both the civil and criminal jurisdictions. The essential difference between these jurisdictions is the source of the lodgment and the parties in dispute. Criminal matters are brought to the court by a government prosecuting agency, which is generally the Director of Public Prosecutions, but can also be the Attorney-General, the police, local councils and traffic camera branches.

Figure 9.1 Major relationships between courts in Australia



<sup>a</sup> Appeals from lower courts in NSW go directly to the Court of Appeal in the NSW Supreme Court. <sup>b</sup> Appeals from Federal, State and Territory tribunals may go to any higher court in their jurisdiction.

Civil matters are lodged by individuals or organisations (the plaintiff or applicant) against another party (the defendant or respondent) who responds to the file. Further, coroners' courts (which generally operate under the auspices of State and Territory magistrates' courts), inquire into the cause of sudden and unexpected deaths and into suspicious fires; their findings can be the source of criminal prosecutions.

### Administrative structures

Most courts use the same court infrastructure (such as court buildings and facilities) for civil and criminal case types. Because separate information systems and case flow management practices have been established for each of the civil and criminal

jurisdictions, the Steering Committee has sought to distinguish between them where possible.

## Expenditure

Total expenditure less in-house revenue by Commonwealth, State and Territory court authorities (excluding the High Court) was approximately \$850 million in 1999-2000. Nationally, court administration expenditure less in-house revenue in the civil jurisdiction (\$330 million) was higher than in the criminal jurisdiction (\$380 million). Nationally, court administration expenditure less in-house revenue for family courts was around \$120 million, while coroners' courts and probate registries accounted for around \$20 million and \$3 million respectively (table 9.1).

Table 9.1 **Court administration expenditure less in-house revenue, 1999-2000 (\$ million)<sup>a, b, c</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas<sup>d</sup></i>	<i>ACT</i>	<i>NT</i>	<i>Cwlth</i>	<i>Total</i>
All civil courts <sup>e</sup>	95.9	49.2	32.7	38.0	23.4	3.3	6.7	9.6	68.9	327.8
All criminal courts	134.4	64.8	74.3	43.3	36.0	7.8	6.6	10.7	..	377.9
Family courts	..	..	..	10.4	..	..	..	..	113.0	123.3
Coronial										
Magistrates' courts <sup>f</sup>	4.1	3.8	1.9	5.1	3.2	0.5	1.0	0.7	..	20.3
Probate										
Supreme courts <sup>g</sup>	1.1	0.5	0.1	0.3	0.4	0.1	–	–	..	2.5
Total	235.5	118.4	108.9	97.2	63.0	11.7	14.3	21.0	181.8	851.8

<sup>a</sup> In-house revenue includes revenue earned by in-house providers of library, court reporting and civil bailiff services to external purchasers. <sup>b</sup> District/county courts do not operate in Tasmania, the ACT or the NT. The Commonwealth does not operate magistrates', district/county or supreme courts. <sup>c</sup> Payroll tax was excluded from reported expenditure (SCRCSSP 1999). <sup>d</sup> Five per cent of the total operating costs of the magistrates' court was attributable to other work by that court, such as antidiscrimination tribunal work. This has been excluded from 1999-2000 data. <sup>e</sup> Excludes family courts. <sup>f</sup> Excludes the cost of conducting autopsies in all jurisdictions except WA. <sup>g</sup> Payroll tax was not estimated for probate registries. .. Not applicable. – Nil or rounded to zero.

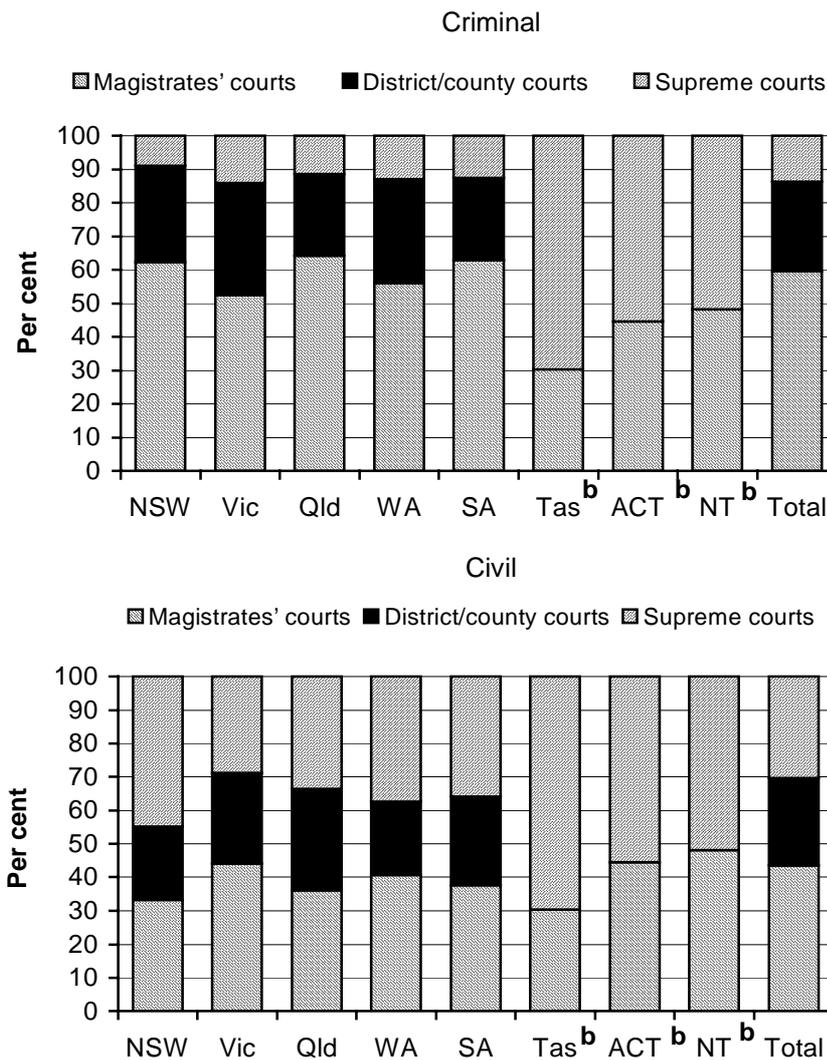
Source: table 9A.6.

The proportion of criminal and civil court administration expenditure less in-house revenue shared between magistrates', district county and supreme courts varied across States and Territories. For example, the proportions of court administration expenditure less in-house revenue in the supreme courts of Tasmania and the ACT (under the two-tier court system) were larger than the proportions of supreme courts in other jurisdictions (under the three-tier court system).

Nationally, magistrates' courts accounted for 60 per cent of total expenditure less in-house revenue in the criminal jurisdiction in 1999-2000, followed by district/county courts (27 per cent), then supreme courts (14 per cent). Across States

and Territories, Queensland had the highest magistrates' court share (64 per cent) while Tasmania had the lowest (30 per cent); Victoria had the highest district/county court share (33 per cent) while Queensland had the lowest (24 per cent); Tasmania had the highest supreme court share (70 per cent) and NSW had the lowest (9 per cent) (figure 9.2).

Figure 9.2 **Proportion of court administration expenditure less in-house revenue, by court level, 1999-2000<sup>a</sup>**



<sup>a</sup> In-house revenue includes revenue earned by in-house providers of library court reporting and civil bailiff services to external purchasers. <sup>b</sup> There is no district/county court in these States/Territories.

Source: table 9A.6.

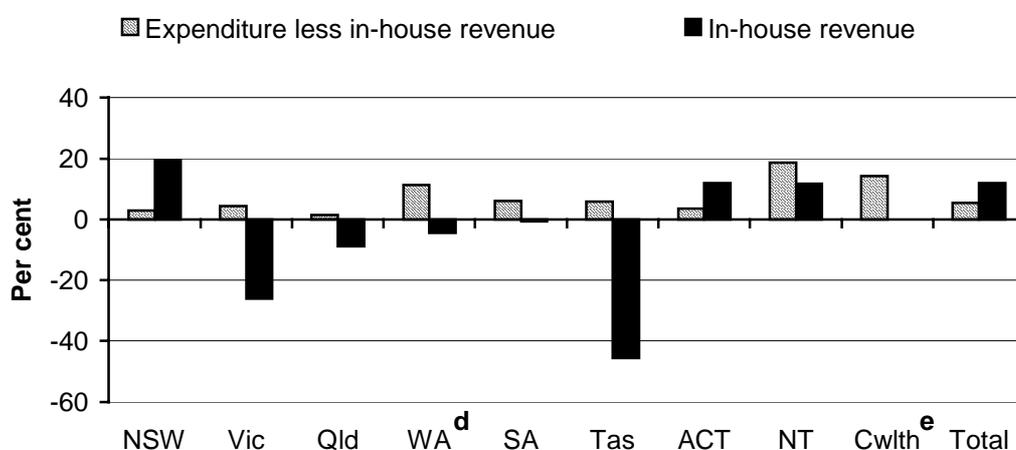
Nationally, magistrates' courts accounted for 44 per cent of civil expenditure less in-house revenue in 1999-2000, followed by supreme courts (30 per cent) and district/county courts (26 per cent). Across jurisdictions, the share of magistrates' courts varied from 30 per cent in Tasmania to 48 per cent in the NT; supreme courts

ranged from 70 per cent in Tasmania to 29 per cent in Victoria; and district/county courts ranged from 30 per cent in Queensland to 22 per cent in WA (figure 9.2).

Real expenditure less in-house revenue on court administration increased on average by 5 per cent a year (in real terms) between 1997-98 and 1999-2000. The trend in expenditure varied across the States and Territories. Queensland exhibited an increase in average annual expenditure less in-house revenue of slightly over 1 per cent a year, while the increase in the NT's average annual expenditure less in-house revenue was 19 per cent a year (figure 9.3).

In-house revenue from library, court reporting and civil bailiff services increased by 11 per cent per year (in real terms) between 1997-98 and 1999-2000. The reduction in revenue was greatest in Tasmania (46 per cent per year), while revenue increased on average by 20 per cent per year in NSW. The Federal Court and Family Court of Australia did not collect any revenue from library, court reporting or civil bailiff services in 1997-98 or 1999-2000 (figure 9.3).

Figure 9.3 **Average annual change in expenditure less in-house revenue, and in-house revenue, 1997-98 to 1999-2000 (real dollars)<sup>a, b, c</sup>**



<sup>a</sup> In-house revenue includes revenue earned by in-house providers of library, court reporting and civil bailiff services to external purchasers. <sup>b</sup> Excludes coronial and probate expenditure. <sup>c</sup> Includes payroll tax payments for NSW, Victoria, Queensland, SA, Tasmania and the NT for all years to maintain comparability over time. <sup>d</sup> Includes the WA Family Court. <sup>e</sup> Includes the Federal Court and Family Court of Australia.

Source: table 9A.6.

## Size and scope of court activity

The numbers of lodgments, hearings and finalisations are reported as measures of court activity. Lodgments are matters initiated in the court system. A significant

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proportion of these matters, particularly in the lower courts, are largely routine or minor and are less costly to finalise because they do not require full court hearings. Minor lodgments include:

- civil lodgments before registrars — for example, probate applications, winding up applications, and joint applications for divorce;
- undefended civil lodgments;
- criminal lodgments processed by magistrates' courts (for example, defended minor traffic matters); and
- criminal lodgments processed by electronic courts in some jurisdictions (for example, traffic infringements).

Other lodgments include primary, workers' compensation, probate and coronial lodgments. The Report treats committals and appeals as separate lodgments. Probate lodgments are heard in supreme courts and encompass applications for the appointment of an executor or administrator to the estate of a deceased person. The two most common applications are where the executor nominated by a will applies to have the will proved, and where the deceased died intestate (without a will) and a person entitled to administer the estate applies for letters of administration.

Coronial lodgments are heard in coroners' courts and investigate the cause and circumstances of reportable deaths. The definition of a reportable death differs across States and Territories but generally includes deaths for which the cause is violent, suspicious or unknown. The coroner in some States and Territories has the power to commit for hearing, while in others they are prohibited from making any finding of criminal or civil liability.

Each lodgment may be subject to only one hearing, although it may be adjourned at various times. Hearings, particularly full court hearings and trials, are the primary cost driver for court administrations. Hearings encompass court trials, appeals and rehearings heard before a judicial officer for adjudication or determination. Hearings do not include conferences, mediation and arbitration sessions, or hearings to process secondary case applications. Most jurisdictions attempt to encourage pre-trial settlement of civil disputes through mediation and arbitration to minimise the cost to the court and parties, and to ensure that only cases that require judicial determination proceed to a full hearing. Similarly, a guilty plea by the defendant generally reduces hearing length and cost in the criminal jurisdiction.

Finalisations represent the completion of matters in the court system. Each lodgment can only be finalised once. Finalisations are an important measure of activity because they indicate where the majority of court administration costs are committed to court matters. Matters may be finalised either by adjudication, transfer

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or other non-adjudicated method (such as withdrawal of a matter by the prosecution, issue of a bench warrant or settlement of an out-of-court matter).

Finalisations data are not strictly comparable with lodgments data in the reported year because some lodgments may be pending (unfinalised). Changes in court jurisdictions during the reported year will also affect the comparability of lodgments and finalisations data.

### *Lodgments*

Approximately 2.5 million matters were lodged with courts in 1999-2000. The largest numbers of lodgments were processed by magistrates' courts in their criminal jurisdictions, with approximately 800 000 cases initiated in these courts in 1999-2000 (excluding electronic courts). District/county courts accounted for only 26 200 lodgments in criminal matters and supreme/federal courts processed a further 5200 lodgments. Across jurisdictions, the largest number of criminal matters were lodged in NSW magistrates' courts which received almost 287 500 lodgments. (In NSW magistrates' courts are known as Local Courts.) Electronic courts received 830 000 lodgements, with the Victorian Penalty Enforcement and Registration of Infringement Notice (PERIN) Court receiving 522 000 lodgements (table 9A.1).

In the civil jurisdiction, there were a total of 718 000 lodgments in 1999-2000 (excluding the family courts). Across jurisdictions, the largest number of civil matters were lodged in NSW Local Courts (which received 233 000 lodgments), followed by the Victorian Magistrates' Court (which received 191 000 lodgments). There were also 123 000 lodgments in the Family Court of Australia and 15 100 lodgments in the Family Court of WA (table 9A.1).

Nationally, 22 900 coronial matters were lodged in 1999-2000. Across jurisdictions, the largest number of coronial matters were lodged in NSW (7100), while 300 coronial matters were lodged in the NT. There were 49 900 probate applications in 1999-2000, with the highest in NSW (20 300 applications), followed by Victoria (14 700) (table 9A.1). The majority of matters initiated in the magistrates' and district/county courts were criminal cases. Civil matters predominated in the supreme/federal courts. Tasmania had the highest proportion of criminal matters in their magistrates' courts (99 per cent). The NT had the highest proportion of civil cases in its magistrates' courts (92 per cent), followed by Victoria (94 per cent) (table 9.2).

**Table 9.2 Proportion of court lodgments, by court level, 1999-2000<sup>a</sup>**

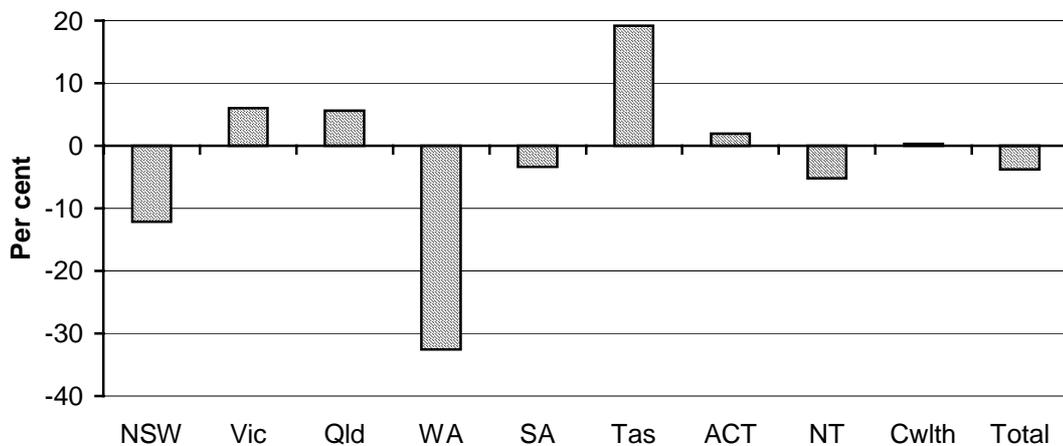
		Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Cwlth <sup>b</sup>	Total
<b>Criminal</b>												
Magistrates' courts <sup>c</sup>	%		96.4	95.7	95.0	94.8	98.1	98.6	97.8	98.2	..	96.2
District/county courts	%		3.2	3.7	4.3	4.5	1.4	..	..	..	..	3.2
Supreme/federal courts	%		0.3	0.6	0.7	0.8	0.5	1.4	2.2	1.8	100.0	0.6
All courts <sup>d</sup>	'000		298	111	194	66	78	50	11	19	-	828
<b>Civil</b>												
Magistrates' courts	%		90.6	94.1	88.9	88.0	90.0	84.9	89.5	91.5	..	90.1
District/county courts	%		5.7	3.7	6.3	7.5	6.9	..	..	..	..	5.2
Supreme/federal courts	%		3.7	2.1	4.8	4.5	3.1	15.1	10.5	8.5	100.0	4.7
All courts	'000		257	203	109	66	44	15	11	5	6	718

<sup>a</sup> Totals may not sum to 100 per cent as a result of rounding. <sup>b</sup> Twenty-nine criminal matters were lodged with the Federal Court. <sup>c</sup> Includes minor lodgments. <sup>d</sup> Excludes matters lodged in electronic courts... Not applicable.

Source: table 9A.1.

There has been an average annual decrease of 4 per cent in the number of lodgments received by courts throughout Australia since 1997-98. The largest average increase occurred in Tasmania (19 per cent a year). While lodgments in WA decreased on average by 33 per cent a year, this decrease was mainly a result of the exclusion of a large number of minor traffic lodgments since 1998-99, which have since been heard in the WA Fines Enforcement Registry (figure 9.4).

**Figure 9.4 Average annual change of court lodgments, 1997-98 to 1999-2000<sup>a</sup>**

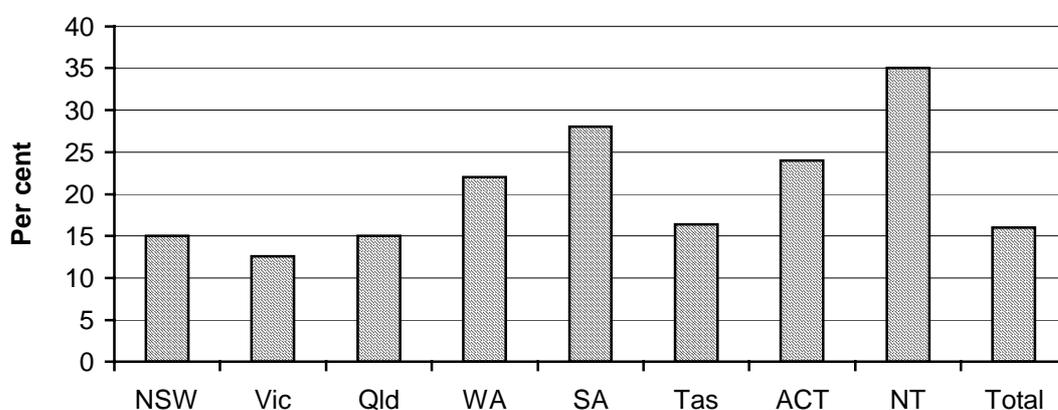


<sup>a</sup> Excludes probate.

Source: table 9A.1.

The total number of deaths reported to a coroner was approximately 20 900 across Australia in 1999-2000. The highest number of reported deaths was in NSW (6700), followed by Victoria (approximately 4000) (table 9A.1). Reporting rates varied as a result of different reporting requirements — for example, deaths in institutions such as nursing homes of persons suffering intellectual impairment of any kind must be reported in SA. The number of deaths reported to the coroner as a proportion of total deaths across Australia in 1999-2000 was 16 per cent. This proportion ranged from 35 per cent in the NT to 13 per cent in Victoria (figure 9.5).

**Figure 9.5 Deaths reported to a coroner as a proportion of total deaths, 1999-2000<sup>a</sup>**



<sup>a</sup> Calculated as deaths reported to the Coroner as a proportion of the total number of deaths in 1998.

Source: table 9A.1.

The total number of fires reported to a coroner was approximately 2070 for NSW, Victoria, Queensland and the ACT in 1999-2000. The highest number of reported fires was in Queensland (approximately 1300), followed by NSW (approximately 420) (table 9A.1). Reporting requirements also varied for fires: for example, fires may be reported and investigated in Victoria and SA at the coroners' discretion, but they are excluded from the coroners' jurisdiction in WA and the NT.

Minor lodgments were particularly common in magistrates' courts in 1999-2000. Across Australia 24 per cent of criminal lodgments in magistrates' courts were minor. Across jurisdictions, Tasmania had the highest proportion (62 per cent) and WA the ACT and the NT had the lowest (0 per cent). In the civil jurisdiction, 52 per cent of lodgments in magistrates' courts across Australia were minor. Across jurisdictions, the proportion ranged from 91 per cent (SA) to 6 per cent (NSW) (table 9.3).

Nationally, 24 per cent of lodgments in district/county courts were minor in 1999-2000. This proportion ranged from 66 per cent in WA to 0 per cent in NSW and Victoria. Minor matters accounted for 33 per cent of the national total of civil lodgments among supreme/federal courts. Across jurisdictions, the proportion ranged from 70 per cent in Queensland to 0 per cent in the Federal Court (table 9.3).

**Table 9.3 Proportion of court lodgments that were minor, 1999-2000 (per cent)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Cwlth</i>	<i>Total</i>
Criminal										
Magistrates' courts <sup>b</sup>	34.7	28.7	7.7	–	16.3	62.4	–	–	..	23.6
Civil										
Magistrates' courts	5.7	74.4	85.5	76.6	91.2	76.5	52.9	79.8	..	52.3
District/county courts	–	–	53.0	66.3	64.6	..	..	..	..	24.0
Supreme <sup>c</sup> /federal courts	28.3	58.4	70.3	31.4	13.0	18.0	38.3	30.9	–	32.8
Family courts	..	..	..	36.5	..	..	..	..	39.4	39.1

<sup>a</sup> Minor lodgments include minor traffic lodgments and other infringement notices (including appeals from electronic courts and fines enforcement registries), and undefended general civil lodgments and applications of an administrative nature (such as winding up applications, Criminal Injury Compensation applications, Australian Registered Judgments, intervention orders [excluding the prosecution of a breach of an order], residential tenancy disputes, joint applications for divorce and applications for debt recovery). <sup>b</sup> Excludes minor traffic lodgments and other infringement notices processed in electronic courts and fines enforcement registries. <sup>c</sup> Excludes probate. **na** Not available. **..** Not applicable.

Source: table 9A.1.

### Hearings

Approximately 1.1 million court hearings (684 400 criminal, 355 400 civil, 86 700 family court and 1100 coronial) were listed in 1999-2000, of which the majority occurred in the magistrates' courts in their criminal jurisdiction (659 300). District/county courts accounted for only 21 200 hearings in their criminal jurisdiction and supreme courts listed a further 3900 hearings. The largest number of civil hearings was also listed in magistrates' courts (289 300). Supreme courts accounted for 34 000 hearings, while district/county courts listed a further 32 200 hearings (table 9A.2).

### Finalisations

Approximately 1.6 million matters were reported finalised with courts in 1999-2000. Care needs to be taken when comparing finalisation and lodgment data as not all lodgments that were subsequently settled out of court were reported to court administrators. The largest numbers of finalisations were disposed of by

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magistrates' courts in their criminal jurisdictions, with 759 000 cases completed in these courts in 1999-2000. District/county courts accounted for 27 400 finalisations of criminal matters, and the supreme courts disposed of a further 4700 finalisations. The number of finalisations recorded for electronic courts (criminal matters) was 309 500, although this figure does not include NSW and Victoria (table 9A.3).

The civil jurisdiction had a total of 412 000 finalisations in 1999-2000. The largest number of civil cases were finalised in the Victorian Magistrates' Court (which finalised 151 500 civil matters), followed by the NSW Local Court (which finalised 82 200 civil matters). There were also 275 matters finalised in the Family Court of Australia (table 9A.3).

Finalisations data for criminal matters are also presented by method of finalisation from the Australian Bureau of Statistics Higher Criminal Courts collection (ABS 2000) for the reference period 1998-99 (table 9A.4). Differences in the data collection methods and reference periods should be considered when comparing these data with other finalisations data for criminal matters presented in the chapter.

The method of finalisation describes how a charge leaves a particular court level (ABS 2000). In the supreme courts, more defendants in criminal matters were finalised by adjudication (86 per cent). This was also the case in the district/county courts, where 85 per cent were finalised by adjudication. Nationally, a guilty plea was the most common method of finalising adjudications in the supreme courts (66 per cent). This ranged from 80 per cent in Queensland to 23 per cent in SA. Nationally, 'withdrawn' was the most common means of non-adjudicated finalisations in the supreme courts (10 per cent). Across jurisdictions, the 'withdrawn' proportion ranged from 14 per cent in the ACT Supreme Court to 1 per cent in the Victorian Supreme Court (table 9A.4).

## **9.2 Policy developments in court administration services**

### **Specialist courts**

A major policy issue for the court administration sector is to improve the courts' responsiveness to the special needs of some clients. A number of courts and tribunals have been established or operate under the auspices of general courts (magistrates' courts in most cases) to meet this need.

Specialist courts have been developed in the areas of land and environment, industrial relations, workers' compensation and youth. SA operates a Family

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Violence Court under the auspices of the Adelaide Magistrates' Court to deal with criminal matters arising from domestic violence incidents and all applications for domestic violence restraining orders. A similar court has been operating at Elizabeth (SA). The ACT also operates a Family Violence Court under the auspices of their Magistrates' Court. WA is currently piloting a Family Violence Court at the Joondalup court complex under the auspices of the WA Magistrates' Court to deal with criminal and restraining order matters.

New South Wales operates a specialist Drug Court at the Parramatta Court Complex. This court refers non-violent drug dependent offenders to a 12-month program, where they are closely supervised by the Drug Court and must comply with an individualised treatment plan. Victoria offers a Court Referral and Evaluation for Drug Intervention and Treatment Program in its Magistrates' Court. The program, initiated early in the arrest process, aims to reduce the likelihood of offenders reoffending and diverts offenders from prison. Similar trial drug court programs commenced at three Queensland magistrates' courts in June 2000. WA are conducting a two-year pilot for drug courts and diversionary programs within the Perth Children's Court, the Perth Court of Petty Sessions and the Perth District Court. SA also operates a Drug Court and a Mental Impairment Court under the auspices of their Magistrates' Court. The aim of the Mental Impairment Court is to provide a more appropriate court setting for mentally impaired people. Its continued funding is subject to review in 2000-01.

Most jurisdictions operate either separate electronic courts under the auspices of magistrates' courts to process traffic infringement notices and expiated offences — for example, Victoria operates the PERIN Court under the auspices of the Victorian Magistrates' Court, or lodge matters are lodged electronically in their magistrates' courts. These items have been reported as a subset of matters in the magistrates' courts in this Report (see section 9.1).

## **Indigenous access**

An important objective of the justice sector is to improve justice outcomes for Indigenous Australians. One area being addressed in the court administration sector is improved access to the court system for Indigenous people. A variety of existing programs help Indigenous people use the court system.

Queensland operates three remote community magistrates' courts constituted by Indigenous Australian Justices of the Peace. The courts hear remand applications and simple offences, and provide faster access to justice for remote communities between visits to remote communities by Circuit Magistrates. The project will be extended to other communities over the next year. The concept of communication

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facilitators is being developed in Queensland to help judges, magistrates and barristers communicate with defendants and witnesses who use Aboriginal English as a first language. This process has included the publication of a handbook on 'Aboriginal English in the Courts'. Further, the Family Court of Australia employs Indigenous family consultants based in Darwin, Alice Springs and Cairns.

The Aboriginal Court initiated last year at the Port Adelaide Magistrates' Court has continued to operate each fortnight throughout the year. The aim of this Court is to create a more culturally sensitive court setting for Aboriginal people. Operation of this Court will be extended to the Murray Bridge and Port Augusta Magistrates' Courts in 2001. The Aboriginal Court is supported by a small number of Aboriginal Justice Officers who provide a range of courts related services to Aboriginal people.

Western Australia provided five Aboriginal Fines Liaison Officers in Perth and selected regional areas in 1995 to assist Aboriginal customers who were unacquainted with, intimidated by or experienced difficulty with the court system. Officers are now provided at Warburton, Broome, Roeburne and Kununurra courts. The Officer's roles at Warburton and Broome include the authority to supervise offenders undertaking community based orders.

An Aboriginal justice plan is being developed in Victoria, and will outline a range of reforms to enhance and develop partnerships and links between justice agencies and the Aboriginal community. The aims are to address the ongoing issue of Indigenous over representation in the criminal justice system and to improve Aboriginal access to justice related services.

## **Technological access**

A common objective of the court administration sector is to improve accessibility to court services. South Australia operates a 'final notice of claim' pre lodgment system, which encourages litigants to resolve civil disputes without resorting to formal court processes. South Australia courts also provide information on court listings through Internet. Victoria operates an electronic document interchange in its Magistrates' Court for the lodgment of civil matters. This system accounts for approximately 34 per cent of all civil lodgments in the Victorian Magistrates' Court. Western Australia has also implemented an electronic lodgment system at the Perth Magistrates' Court.

Courts in a number of jurisdictions have adopted video conferencing systems. These have been used for functions such as the video remand of prisoners, the presentation of evidence by vulnerable witnesses and witnesses in remote areas, and to assist with the use of interpreters. Recent developments in video conferencing systems across jurisdictions include:

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- the involvement of the Perth District Court in the world's first co-mediation pilot with the Singapore Subordinate Courts using video conferencing. WA first installed video conferencing facilities in 1995, and recently extended the system to the Busselton, Rockingham and Fremantle courts. The network will be expanded to the Perth Children's Court and the WA Family Court in 2001;
  - the establishment of a fully integrated audiovisual system in all Melbourne courts and 11 regional courts in Victoria, incorporating recording, video conferencing, closed circuit television playback and witness amplification. This system also provides access for the Victorian Civil and Administrative Tribunal;
  - Queensland operates video conferencing facilities in three higher courts, in one magistrates' court in Brisbane and in the Caboolture Magistrates' Court, and closed circuit television facilities between courts and vulnerable witness rooms;
  - Tasmania has video conferencing facilities available linking all major courts to the State prison, the juvenile correctional facility and the remand centre;
  - a video conferencing link to the Belconnen Remand Centre in the ACT (with capabilities to link to any court in Australia or any other video facility) and the introduction of agreed model legislation to enable the ACT to participate in an Australia-wide network; and
  - a video conferencing system (Bushlink) has continued to link Adelaide courts with remote and regional areas in SA and a video conferencing system has been introduced in the Magistrates' Court in Elizabeth (SA) linking the court with remand institutions to avoid transporting detained defendants to court for relatively simple matters.

Western Australia introduced four digital courtrooms in 1999. Features of these courtrooms include: high resolution screens to display video and computer generated images; a local area network to provide access to the Internet, for the judiciary and counsel court databases and multimedia applications; and electronic transcripts, exhibits and evidence. The ACT is also developing a fully electronic courtroom with the assistance of the University of Canberra and the William and Mary University in Virginia, USA.

### **9.3 Framework of performance indicators**

The framework of performance indicators is based on a number of common objectives for court administration services across Australia (box 9.1). The emphasis placed on each objective varies across jurisdictions.

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**Box 9.1 Objectives for court administration**

Objectives for court administration are:

- to be open and accessible;
- to process matters in an expeditious and timely manner;
- to provide due process and equal protection before the law; and
- to be independent yet publicly accountable for performance (Commission on Trial Court Performance Standards, 1989).

In addition, all governments aim to provide court administration services in an efficient manner.

The performance indicators framework for court administration services is under review, and changes may be included in next year's Report (figure 9.6). Definitions and counting rules were further refined this year as part of an ongoing process to achieve jurisdictional comparability of data presented in this chapter. Consequently, only comparable time series data have been reported in this chapter where it has not been possible to re-calculate historical data. Other processes to improve the comparability of existing data and the completeness of the performance indicators framework are discussed in section 9.5.

## 9.4 Key performance indicator results

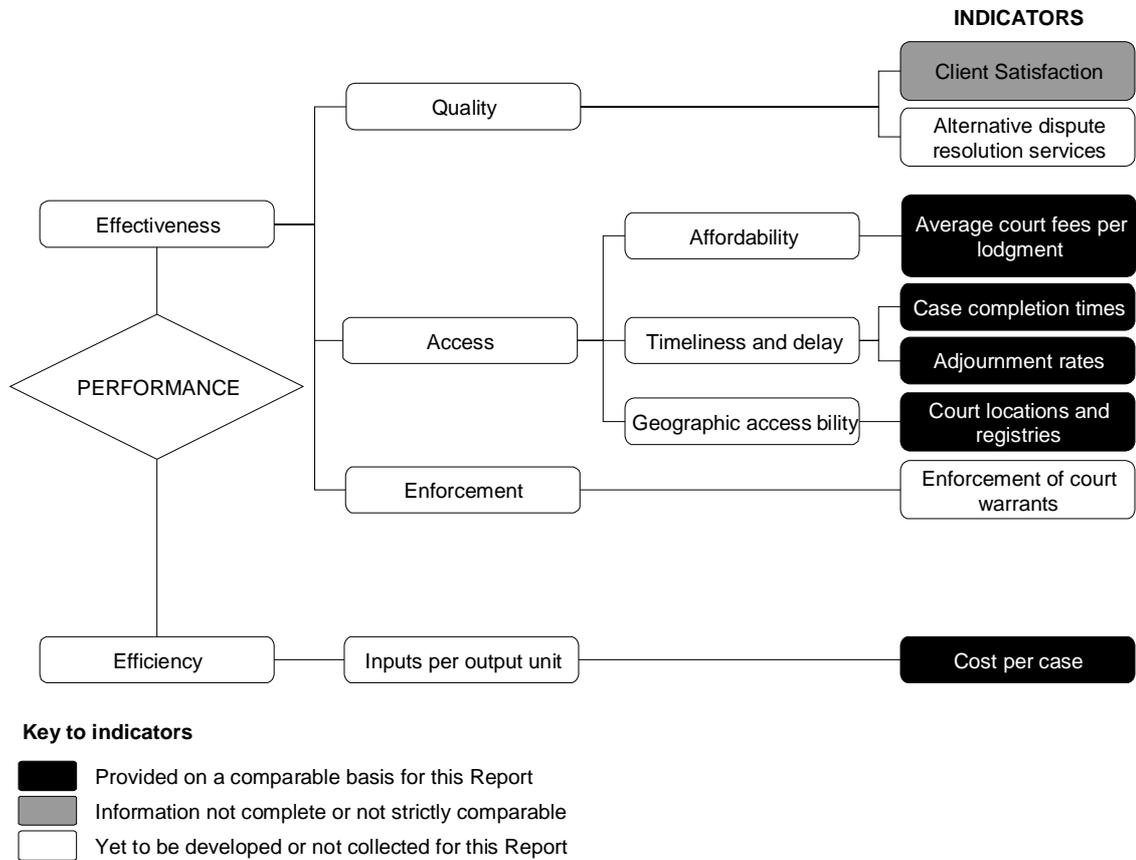
Different delivery contexts, locations and client types may affect the effectiveness and efficiency of court administration services. There are also differences in the allocation of cases to different courts within a jurisdiction (table 9A.21). These factors should be taken into account when comparing performance across States and Territories for specific court jurisdictions' indicators. Appendix A contains detailed statistics and short profiles on each State and Territory, which may help in interpreting the performance indicators presented in this chapter.

### Effectiveness indicators

#### *Quality*

This Report does not contain comparable data on the quality of court administration services. However, a survey of client satisfaction with court administration services is being refined and will be conducted in early 2001 (section 9.5). The survey will provide comparable information on client satisfaction with court administration staff, court facilities, availability of court information and court processes in the 2002 Report.

Figure 9.6 Performance indicators for court administration



Recently, data about the views of court users regarding court administration services (such as court staff, facilities and information) were generated by a number of surveys by different courts in individual jurisdictions. Although the results are not comparable, the surveys collected data on client views about similar aspects of court administration and provide an insight into client views of court administration services.

Results from recent surveys conducted in the Family Court of Australia, NSW lower courts and WA Magistrates', District and Supreme Courts are reported in table 9A.7.

### Affordability

Court filing fees largely relate to civil cases. They are only part of the costs faced by litigants — legal fees are more significant — but they can be considerable. Different States and Territories also provide additional support and services to clients which do not carry a cost to the parties. Comparisons should take into account that courts do not operate on a full cost recovery basis as additional services may be provided to the client where the cost is borne by the court.

In 1999-2000, average court fees collected per lodgment in higher courts were generally larger than in intermediate and lower courts. NSW had the highest level of average fees collected per lodgment (\$1459). NSW had the highest among the district/county courts (\$728). The NT had the highest level of average fees collected per lodgment among magistrates' courts (\$205). Average probate fees collected per lodgment were highest in NSW (\$519) (table 9.4).

**Table 9.4 Average court fees collected per lodgment, 1999-2000 (dollars)**

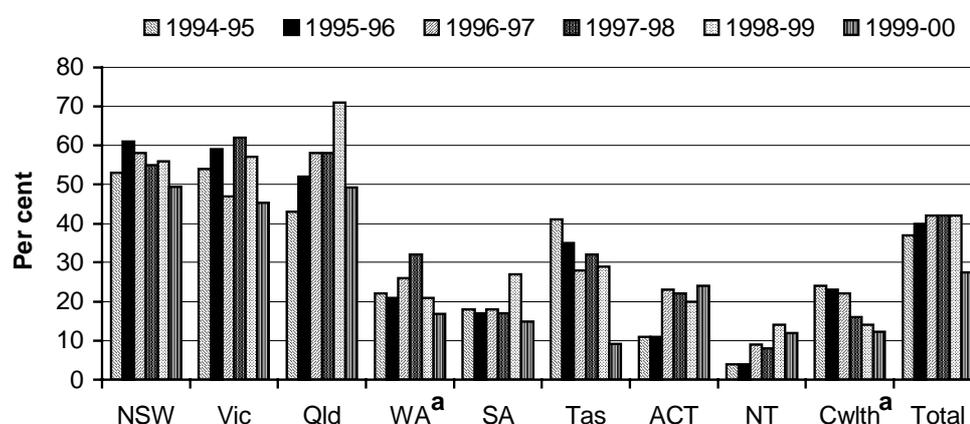
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Cwlth	Total
<b>Civil</b>										
Magistrates' courts	105	68	125	60	60	5	83	205	..	88
District/county courts	728	580	245	380	194	..	..	..	..	518
Supreme/federal courts	1459	1284	524	304	500	110	648	445	1123	953
<b>All courts</b>										
Family courts	..	..	..	123	..	..	..	..	125	125
<b>Probate</b>										
Supreme courts	519	213	-	151	475	110	432	305	..	342

na Not available. .. Not applicable.

Source: table 9A.9.

The level of cost recovery through court fees for the civil jurisdiction decreased on average between 1994-95 and 1999-2000, with civil court fees collected representing 27 per cent of total expenditure in 1999-2000 compared to 37 per cent in 1994-95. The proportion decreased from 1994-95 to 1999-2000 in all jurisdictions except Queensland, the ACT and the NT. The proportion decreased between 1997-98 and 1999-2000 in all jurisdictions except the ACT and the NT (figure 9.7).

**Figure 9.7 Civil court fees collected as a proportion of total civil expenditure, all courts**



<sup>a</sup> Includes family courts.

Source: table 9A.8.

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## *Timeliness*

Timeliness is currently measured by the time taken between the lodgment of a matter with the court and its finalisation. However, this measure is affected by delays caused by parties other than those related to the workload of the court. Generally, lower courts complete a greater proportion of their workload in a shorter period of time, because of the less complex nature of the matters heard. Matters heard in electronic courts are excluded from timeliness data.

The criminal jurisdiction of magistrates' courts in all States and Territories finalised 92 per cent of cases within six months in 1999-2000. This ranged from 95 per cent of cases finalised within six months in Tasmania to 77 per cent in the ACT. The civil jurisdiction of magistrates' courts in all States and Territories finalised 85 per cent of cases within six months in 1999-2000. This ranged from 95 per cent of cases finalised within six months in Victoria to 52 per cent in SA. Longer case completion times in the civil jurisdiction reflected different case flow management practices and the priority given to criminal matters (table 9.5).

District/county courts finalised 63 per cent of criminal cases within six months. This ranged from 75 per cent of cases finalised within six months in SA to 41 per cent in NSW. District/county courts finalised 23 per cent of civil cases within six months. This ranged from 36 per cent of cases finalised within six months in SA to 17 per cent in NSW (table 9.5).

Across Australia, 82 per cent of coronial cases were finalised within six months in 1999-2000. South Australia had the largest proportion of coronial matters finalised within six months (97 per cent) and the NT the lowest (43 per cent) (table 9.5).

On average, supreme courts in all States and Territories finalised 85 per cent of criminal cases within 12 months. This ranged from 97 per cent of cases finalised within twelve months in Tasmania to 29 per cent in NSW. Supreme/federal courts in the Commonwealth and all States and Territories finalised 67 per cent of civil cases within 12 months. This proportion ranged from 83 per cent in the Supreme Court of Victoria to 47 per cent in the NT (table 9.5).

Committals are the first stage of hearing indictable (serious) matters in the criminal court system. A magistrate in a committal hearing assesses the sufficiency of evidence presented against the defendant and decides whether to commit the matter for trial in a superior court. Defendants are often held in custody pending a committal hearing and trial if ordered. Therefore, the timely conduct of the committal hearing, on the court's receipt of the charge sheet is important for timely adjudication of the charges against the defendant.

**Table 9.5 Non-appeal matters finalised, 1999-2000 (per cent)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Cwlth</i>	<i>Total</i>
<i>Criminal</i>										
Supreme courts										
<6 months	7	27	66	83	68	80	39	61	..	64
6-12 months	22	46	21	12	11	17	32	24	..	21
12-18 months	22	12	7	3	10	2	20	9	..	8
>18 months	49	15	5	2	11	1	8	6	..	7
District/county courts										
<6 months	41	60	74	62	75	..	..	..	..	63
6-12 months	28	23	18	14	17	..	..	..	..	20
12-18 months	14	10	4	14	5	..	..	..	..	9
>18 months	18	8	3	10	2	..	..	..	..	8
Magistrates' courts										
<6 months	94	90	93	94	92	95	77	82	..	92
6-12 months	5	8	4	4	6	4	14	8	..	5
12-18 months	1	1	1	1	1	1	4	3	..	1
>18 months	-	1	2	1	1	1	6	7	..	1
<i>Coronial</i>										
Magistrates' courts										
<6 months	88	72	76	78	97	58	89	43	..	82
6-12 months	8	17	17	15	2	25	7	5	..	12
12-18 months	4	5	4	3	-	10	2	2	..	4
>18 months	-	5	2	4	-	7	2	51	..	3
<i>Civil</i>										
Supreme/federal courts										
<6 months	43	75	61	66	71	37	26	38	65	55
6-12 months	8	8	7	15	6	15	23	9	17	12
12-18 months	7	12	6	7	9	11	16	9	8	8
>18 months	41	5	26	12	15	38	35	44	9	25
District/county courts										
<6 months	17	23	30	25	36	..	..	..	..	23
6-12 months	39	19	13	18	22	..	..	..	..	25
12-18 months	25	41	16	12	16	..	..	..	..	24
>18 months	19	17	41	45	26	..	..	..	..	28
Magistrates' courts										
<6 months	86	95	83	88	52	90	62	72	..	85
6-12 months	9	4	12	7	41	10	27	13	..	12
12-18 months	2	1	3	3	3	1	5	5	..	2
>18 months	2	-	2	3	4	-	6	10	..	2

<sup>a</sup> Totals may not sum to 100 per cent as a result of rounding. **na** Not available. **..** Not applicable.

Source: table 9A.10.

Overall in 1999-2000, 49 per cent of committal hearings were finalised within three months of the receipt of charges by the court and a further 33 per cent were

finalised in the subsequent three months. Performance varied considerably across the States and Territories: for example, while Queensland and SA finalised 56 per cent of committals within three months, WA finalised 33 per cent. The NT had the largest proportion of cases finalised in more than 12 months (9 per cent) (table 9.6).

**Table 9.6 Committal (criminal) matters finalised, magistrates' courts, 1999-2000 (per cent)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Cwlth</i>	<i>Total</i>
<3 months	46.6	35.9	56.3	33.1	55.9	na	43.0	43.4	..	49.0
3–6 months	27.2	35.9	33.2	44.1	36.2	na	34.2	29.4	..	33.4
>6–12 months	18.1	24.3	9.1	16.3	7.7	na	17.5	18.3	..	13.8
>12 months	8.1	4.0	1.4	6.4	–	na	5.3	9.0	..	3.8

<sup>a</sup> Totals may not sum to 100 per cent as a result of rounding. **na** Not available. **..** Not applicable. **–** Zero or close to zero.

Source: 9A.13.

Appeals from lower courts are predominantly heard by the district courts and supreme courts of the States and Territories. The full bench of the Federal Court also hears appeals from a single Justice of the Federal Court. Criminal appeals are generally shorter than civil ones. Approximately 85 per cent of criminal appeals and 79 per cent of civil appeals were finalised within 12 months. The Queensland Supreme Court finalised 99 per cent of criminal appeals in less than 12 months while the NSW Supreme Court finalised 74 per cent. The SA and the ACT Supreme Courts finalised 97 per cent of civil appeals in less than 12 months while the NSW Supreme Court finalised 57 per cent (table 9.7).

**Table 9.7 Appeal matters finalised, supreme/federal courts, 1999-2000 (per cent)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Cwlth</i>	<i>Total</i>
<b>Criminal</b>										
<6 months	29.1	59.9	80.0	49.7	87.7	77.3	71.4	50.0	..	52.1
6–12 months	45.2	30.6	19.1	36.3	5.7	13.6	11.4	37.5	..	32.8
12–18 months	18.4	4.9	1.0	10.4	2.5	4.5	11.4	12.5	..	10.3
>18 months	7.3	4.6	–	3.6	4.1	4.5	5.7	–	..	4.8
<b>Civil</b>										
<6 months	22.6	50.0	54.0	53.0	94.1	56.0	69.4	79.9	55.9	56.2
6–12 months	34.2	19.1	32.1	28.4	2.8	32.0	27.8	14.4	27.6	23.2
12–18 months	18.4	14.1	11.9	10.9	1.2	8.0	2.8	3.4	7.1	9.9
>18 months	24.8	16.9	1.9	7.7	2.0	4.0	–	2.3	9.3	10.7

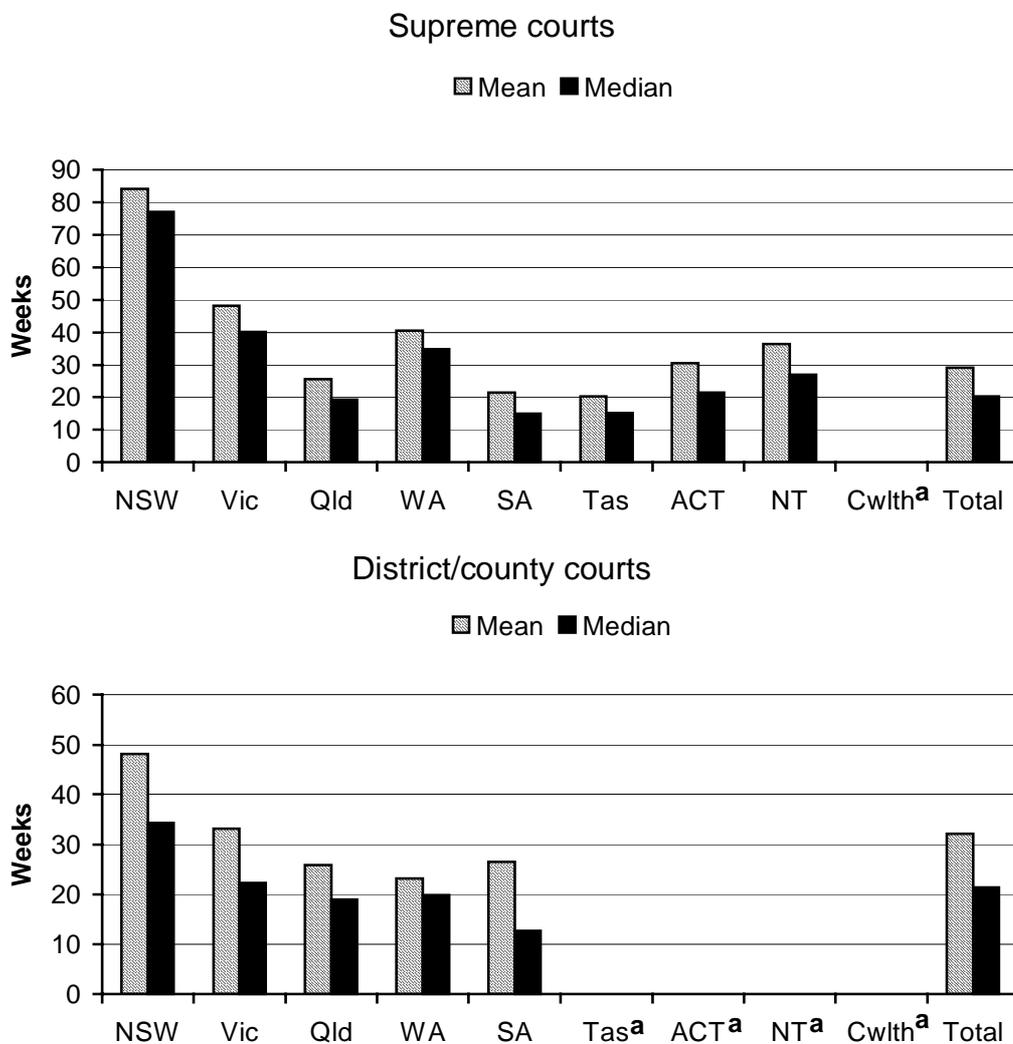
<sup>a</sup> Totals may not sum to 100 per cent as a result of rounding. **na** Not available. **..** Not applicable. **–** Zero or close to zero.

Source: 9A.12.

The mean period (average period) between lodgment and finalisation was 29 weeks in Australia in 1998-99 for supreme courts. This ranged from 84 weeks in NSW to 20 weeks in Tasmania. The mean period for district/county courts was 32 weeks. This ranged from 48 weeks in NSW to 23 weeks in WA (figure 9.9).

The median period (point at which half the cases had been finalised) between lodgment and finalisation was 20 weeks in Australia in 1998-99 for supreme courts. This proportion ranged from 77 weeks in NSW to 15 weeks in SA. The median period of cases was 21 weeks in Australia for district/county courts. This ranged from 34 weeks in NSW to 13 weeks in SA (figure 9.8).

Figure 9.8 Criminal matters duration, district/county and supreme courts, 1998-99

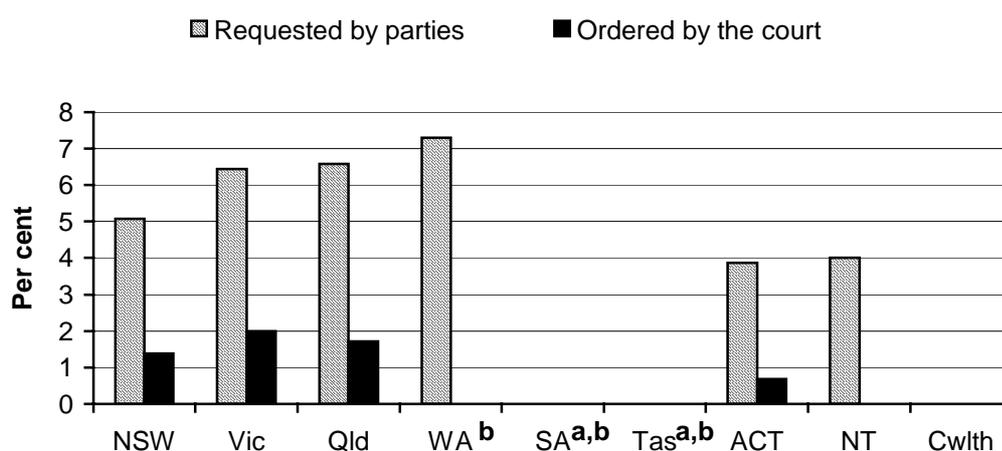


<sup>a</sup> Did not operate in this jurisdiction.

Source: table 9A.14.

The number of adjournments partly reflects the varying timeliness of courts. Adjournments at the request of the parties are generally considered to be outside the control of the court, and they may occur when the parties are not ready or a witness is not available. Adjournments may also be ordered by the court in instances such as overlisting (where court administrators expect a proportion of their case load not to proceed on any particular day and therefore list some standby matters so as to maximise the use of court proceedings). Court ordered adjournments can be used to approximate adjournments as a result of the unavailability of judicial time. In 1999-2000, court ordered adjournments as a proportion of total civil hearings initiated in the supreme/federal courts varied from around 2 per cent in Victoria and Queensland to 0 per cent in the Commonwealth and the NT. Adjournments requested by the parties as a proportion of total civil hearings initiated in the supreme/federal courts varied from around 7 per cent in Queensland and WA to 0 per cent in the Federal Court (figure 9.9).

Figure 9.9 **Adjournments on the first day of hearing as a proportion of total civil hearings, supreme/federal courts, 1999-2000**



<sup>a</sup> Data for party requested adjournments not available. <sup>b</sup> Data for court ordered adjournments not available.

Source: table 9A.15.

### *Geographic accessibility*

Providing rural communities with access to judicial services can involve significant costs for court administration agencies. The services provided to improve the accessibility of courts to rural and remote communities include:

- judicial circuits where magistrates and judges tour rural courthouses to hear cases;
- the location of magistrates' courts in police stations, whereby police officers and Justices of the Peace staff the courts (when magistrates are not available);

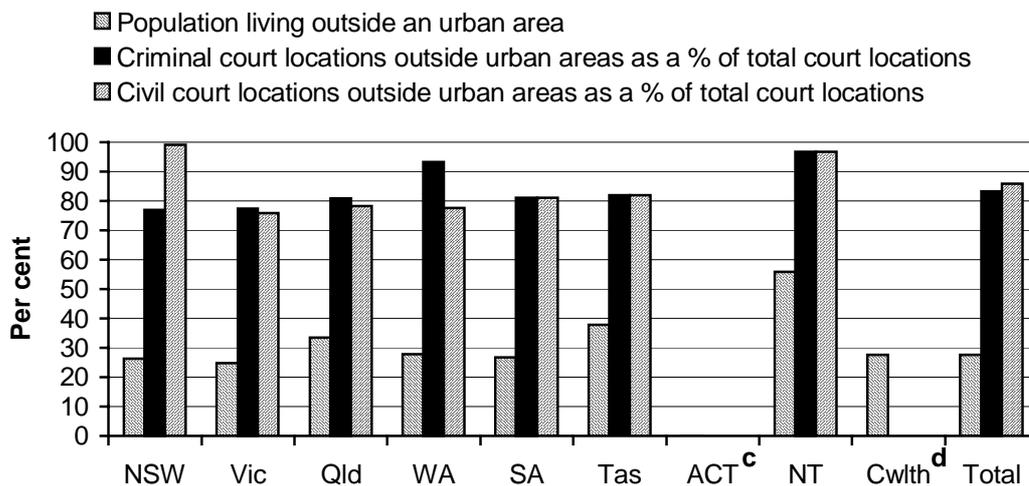
- occasional caravan courts by superior courts in remote areas; and
- video conferencing facilities to link capital city courthouses to witnesses in remote locations.

One indicator of the accessibility of court services is the relationship between the proportion of magistrates' court locations in either urban or non-urban areas and the proportion of the population residing in either urban or non-urban areas of the State or Territory. Except for the ACT, all States and Territories had a greater proportion of their court locations in both the criminal and civil jurisdictions in non-urban areas in 1999-2000 (figure 9.10).

Generally in 1999-2000, States and Territories with relatively high proportions of their population in non-urban areas also had a higher proportion of court locations in non-urban areas. In the criminal jurisdiction, the NT had 97 per cent of their court locations outside an urban area. The ACT had the smallest proportion of court locations in a non-urban area (0 per cent) (figure 9.10).

In the civil jurisdiction, the NT also had the highest proportion of court locations in non-urban areas (97 per cent), while the ACT had the lowest share of court locations in a non-urban area (0 per cent) (figure 9.10).

**Figure 9.10 Locations and populations in non-urban areas, magistrates' courts, 1999-2000<sup>a, b</sup>**



<sup>a</sup> Court locations include permanent locations, temporary locations and registries without hearings. <sup>b</sup> Urban areas include State and Territory capital city statistical divisions and other urban areas (with populations of 100 000 or more). Non-urban areas include remote areas (defined in terms of low population density and long distances to large population centres) and rural areas (includes the remainder of non-urban statistical local areas). <sup>c</sup> All courts and population lived within the defined urban region. <sup>d</sup> Did not operate in this jurisdiction.

Source: table 9A.16.

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## Efficiency indicators

Expenditure less in-house revenue per lodgment (including accommodation costs) for each court jurisdiction varied considerably among States and Territories and over time. Expenditure data excludes payroll tax for NSW, Victoria, Queensland, SA, Tasmania and the NT, except where otherwise stated, to improve comparability of efficiency indicators with the remaining jurisdictions that are exempt from payroll tax.

In 1999-2000, expenditure less in-house revenue per lodgment for magistrates' courts (total criminal, including electronic lodgments in NSW, Victoria, Queensland and SA) was \$138 nationally, and was highest in WA (\$386) and lowest in Victoria (\$54). Expenditure less in-house revenue per primary criminal lodgment (that is, excluding minor traffic matters) for magistrates' courts was highest in Victoria (\$452) and lowest in Tasmania (\$246). Expenditure less in-house revenue per lodgment in the civil jurisdiction of the magistrates' courts was highest in the NT (\$963) and lowest in Tasmania (\$79). The coroners' court expenditure per reported death and fire was highest in WA (\$2193) and lowest in Queensland (\$405) (figure 9.11), although the former also includes the cost of autopsy and forensic services.

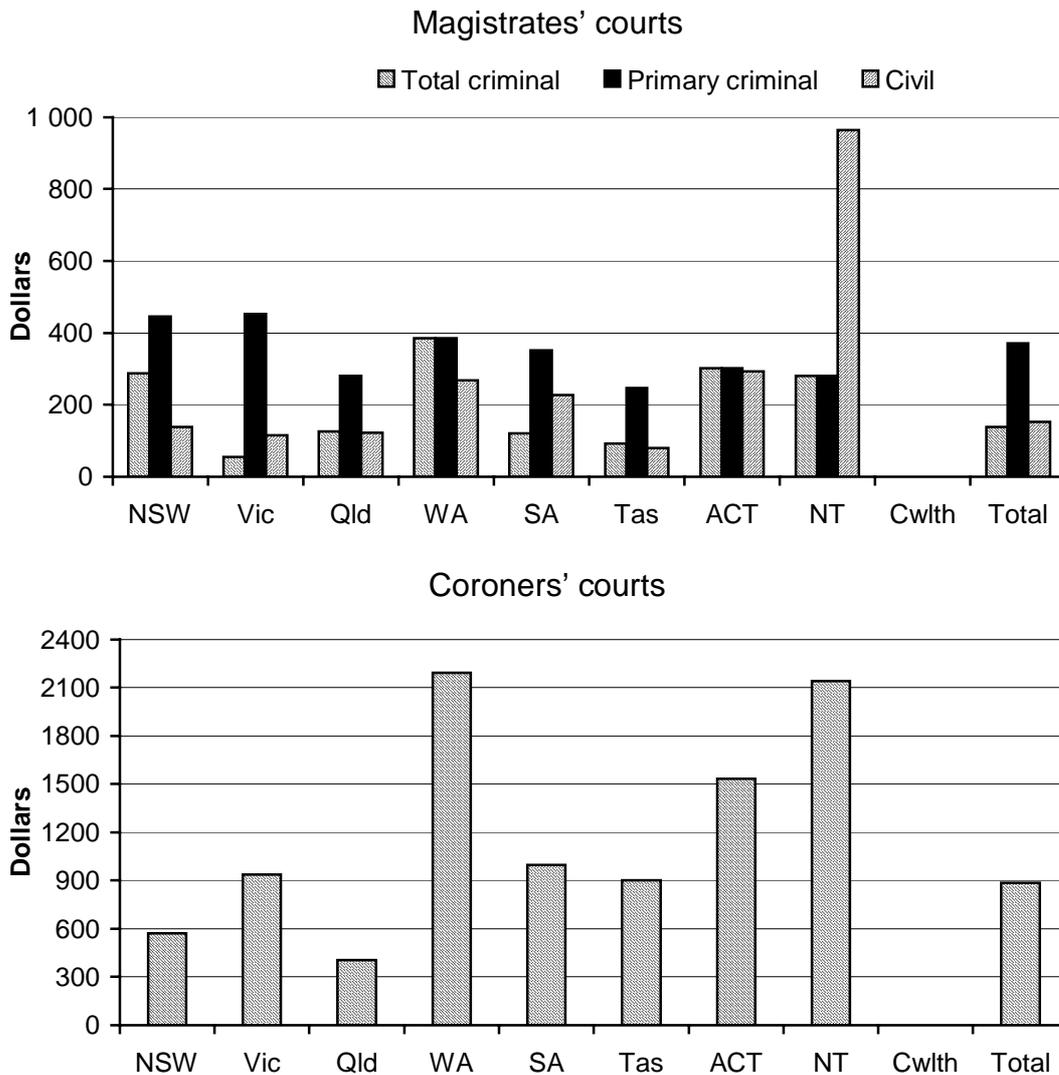
District/county court expenditure less in-house revenue per lodgment was highest in SA for the criminal jurisdiction (\$8149) and civil jurisdiction (\$2074). Queensland had the lowest expenditure less in-house revenue for criminal lodgments (\$2154) and civil lodgments (\$1440) in district/county courts. The NT had the highest criminal supreme court expenditure less in-house revenue per lodgment (\$16 314) while Tasmania had the lowest (\$4421). The NT also had the highest civil expenditure less in-house revenue per lodgment (\$11 110) while Tasmania had the lowest expenditure less in-house revenue per lodgment in its supreme court (\$990) (figure 9.12).

Expenditure less in-house revenue per lodgment was \$686 for the Family Court of WA and \$918 for the Family Court of Australia. Expenditure less in-house revenue per lodgment for the family courts compared favourably to that of the other superior courts (table 9A.17).

Nationally, average annual real expenditure less in-house revenue (accounting for differences in inflation) per lodgment increased in the criminal jurisdiction of magistrates', district/county and supreme courts (5, 10 and 10 per cent respectively) between 1997-98 and 1999-2000. Across all criminal courts, this rate ranged from an increase of 83 per cent in the WA Magistrates' Court to a decrease of 17 per cent in the Tasmanian Magistrates' Court. Large changes to the rate of growth of expenditure per lodgment also reflect changes to the application of counting rules

— for example, the increase in WA reflects the inclusion of electronic lodgments in the 1997-98 estimates of unit costs and their exclusion from the 1999-2000 estimates of unit costs.

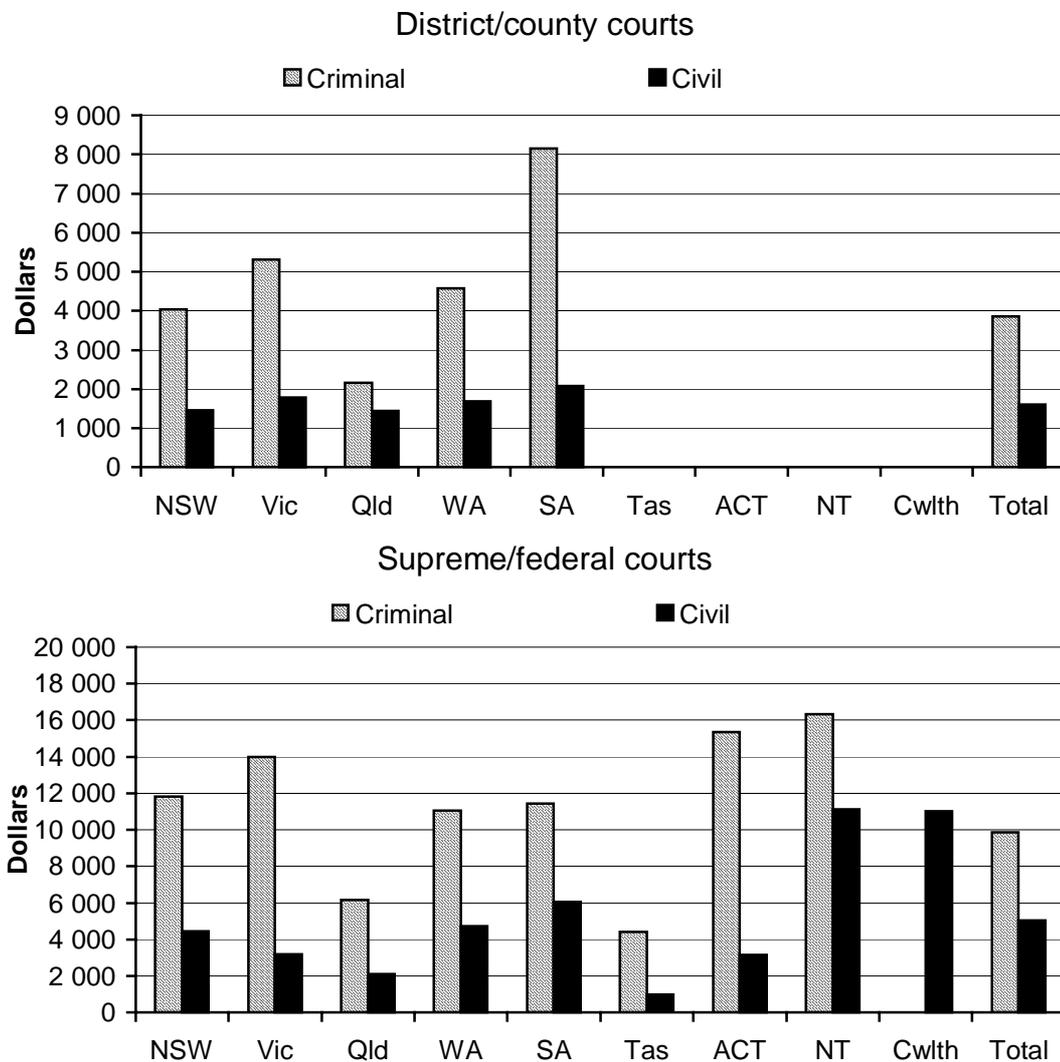
Figure 9.11 Expenditure less in-house revenue per lodgment, lower courts, 1999-2000<sup>a, b, c, d</sup>



<sup>a</sup> In-house revenue includes revenue earned by in-house providers of library court reporting and civil bailiff services to external purchasers. <sup>b</sup> Excludes payroll tax for NSW, Victoria, Queensland, SA, Tasmania and the NT. <sup>c</sup> Commonwealth did not operate in these jurisdictions. <sup>d</sup> Total criminal includes electronic lodgments in NSW, Victoria, Queensland and SA.

Sources: table 9A.17 and table 9A.18.

Figure 9.12 Expenditure less in-house revenue per lodgment, superior courts, 1999-2000<sup>a, b, c, d</sup>



<sup>a</sup> In-house revenue includes revenue earned by in-house providers of library court reporting and civil bailiff services to external purchasers. <sup>b</sup> Excludes payroll tax for NSW, Victoria, Queensland, SA, Tasmania and the NT. <sup>c</sup> District/county courts do not exist in Tasmania, the ACT, the NT or the Commonwealth. <sup>d</sup> Commonwealth's Federal Court did not operate in the criminal jurisdiction.

Source: table 9A.17.

Nationally, average annual expenditure (including payroll tax for taxable jurisdictions) less in-house revenue per civil lodgment also increased in magistrates', district/county and supreme/federal courts (13, 5 and 11 per cent respectively) between 1997-98 and 1999-2000. Across all courts, this increase was highest in the NT Supreme Court (70 per cent), while average annual expenditure less in-house revenue per civil lodgment decreased by 16 per cent in the SA District Court (table 9.8).

**Table 9.8 Average annual change in real expenditure less in-house revenue per lodgment, 1997-98 to 1999-2000 (per cent)<sup>a, b, c</sup>**

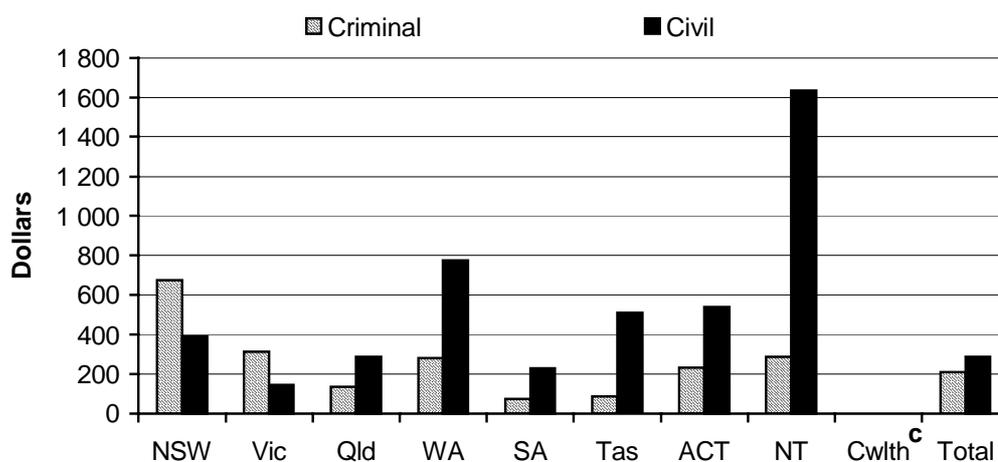
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Cwlth	Total
<b>Criminal</b>										
Magistrates' courts	19.6	-6.8	-8.6	82.5	21.5	-16.6	-9.3	5.5	..	4.9
District/county courts	12.0	8.7	2.2	26.2	19.9	..	..	..	..	10.3
Supreme courts	12.9	12.0	9.9	13.4	15.4	0.7	11.2	-0.2	..	9.5
<b>Civil</b>										
Magistrates' courts	15.7	3.1	6.9	32.4	19.2	-0.5	1.1	52.6	..	13.4
District/county courts	-3.1	20.1	1.8	33.5	-15.9	..	..	..	..	5.3
Supreme/federal courts	0.4	15.5	-1.4	-3.9	11.4	11.5	8.6	70.3	21.0	10.5
Family courts	..	..	..	2.5	..	..	..	..	2.7	2.6

<sup>a</sup> In-house revenue includes revenue earned by in-house providers of library court reporting and civil bailiff services to external purchasers. <sup>b</sup> Includes payroll tax payments for NSW, Victoria, Queensland, SA, Tasmania and the NT for all years to maintain comparability over time. <sup>c</sup> The formula for calculating average annual rates of growth is summarised in table 9.9. **na** Not available. **..** Not applicable.

Source: 9A.17.

Expenditure less in-house revenue per finalisation (including accommodation costs) for each court jurisdiction also varied considerably among States and Territories. In 1999-2000, expenditure less in-house revenue per finalisation for magistrates' courts (criminal) was highest in NSW (\$673) and lowest in SA (\$73). Expenditure less in-house revenue per finalisation in the civil jurisdiction of magistrates' courts was highest in the NT (\$1634) and lowest in Victoria (\$144) (figure 9.13).

**Figure 9.13 Expenditure less in-house revenue per finalisation, magistrates' courts, 1999-2000<sup>a, b</sup>**

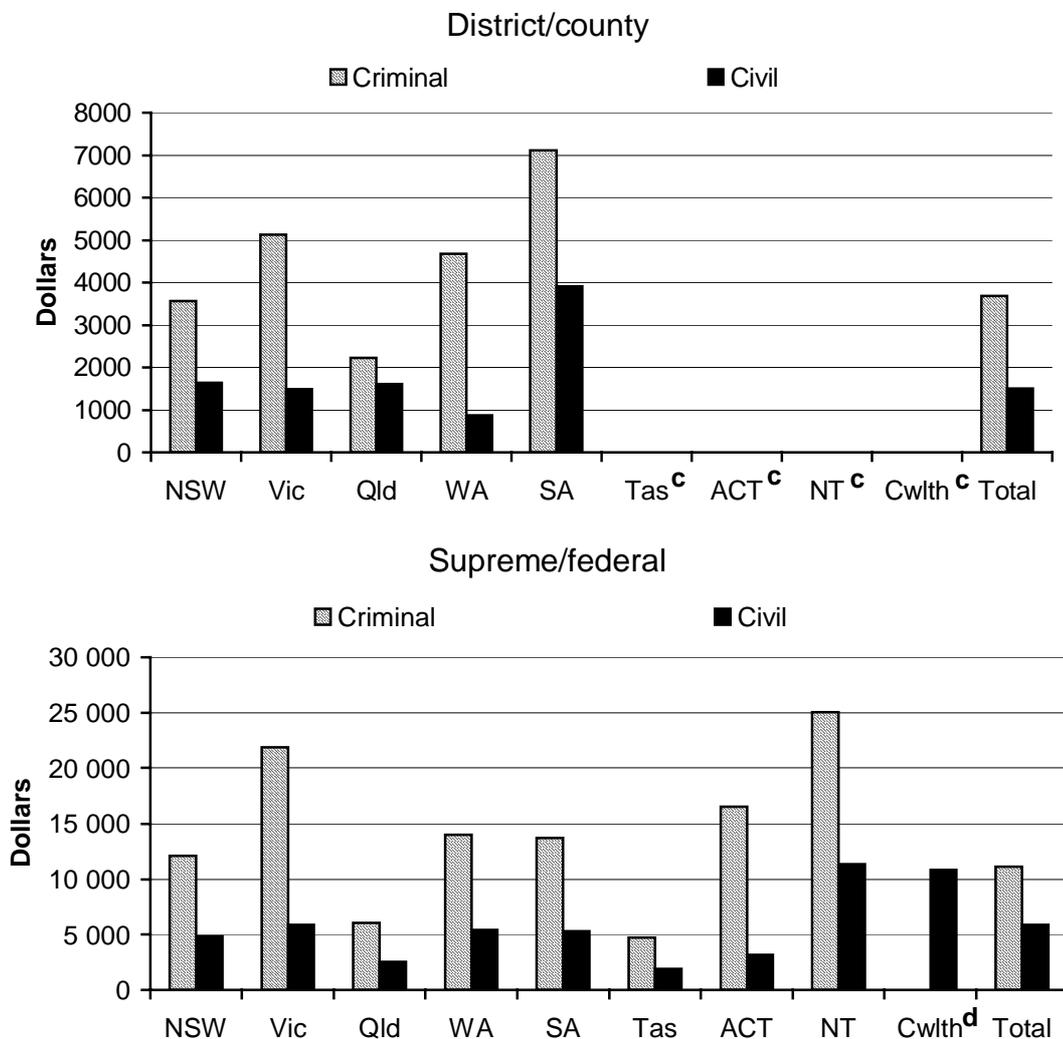


<sup>a</sup> In-house revenue includes revenue earned by in-house providers of library court reporting and civil bailiff services to external purchasers. <sup>b</sup> Excludes payroll tax for NSW, Victoria, Queensland, SA, Tasmania and the NT. <sup>c</sup> Did not operate in this jurisdiction.

Source: table 9A.19.

District/county court expenditure less in-house revenue per finalisation was highest in SA for the criminal and civil jurisdictions (\$7121 and \$3913 respectively). Queensland had the lowest expenditure less in-house revenue for criminal cases (\$2227) and WA had the lowest expenditure less in-house revenue for civil cases (\$871). The NT had the highest supreme court expenditure less in-house revenue per finalisation (\$25 064) for the criminal jurisdiction while Tasmania had the lowest (\$4738). The NT had the highest civil expenditure less in-house revenue per finalisation for supreme/federal courts (\$11 338) while Tasmania had the lowest (\$1910) (figure 9.14).

Figure 9.14 Expenditure less in-house revenue per finalisation, superior courts, 1999-2000<sup>a, b</sup>



<sup>a</sup> In-house revenue includes revenue earned by in-house providers of library court reporting and civil bailiff services to external purchasers. <sup>b</sup> Excludes payroll tax for NSW, Victoria, Queensland, SA, Tasmania and the NT. <sup>c</sup> District/county courts do not exist in Tasmania, the ACT, the NT or the Commonwealth. <sup>d</sup> Federal Court did not operate in the criminal jurisdiction.

Source: table 9A.19.

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## 9.5 Future directions in performance reporting

### Developing indicators and data

Differences in court jurisdictions and the allocation of cases between courts across States and Territories affect the comparability of efficiency and effectiveness data. The ABS and the Court Administration Working Group are developing a set of 'case weights' for criminal courts to improve the comparability of court administration data. The weights, estimated from the average length of criminal cases for a range of matters, are intended to reflect the seriousness of criminal matters faced by courts. Applying the weights to measures of efficiency and effectiveness can improve the comparability of court administration data. It is expected that results from this research will be available for criminal court administration data in the 2002 Report and will be extended to civil court administration data in future Reports.

Other opportunities to improve indicators for court administration, include:

- the use of finalisations as the primary court administration activity measure;
- reporting the number of adjournments per hearing;
- the efficiency and effectiveness of alternative dispute resolution strategies, such as mediation and conciliation for settling disputes; and
- the performance of the sheriff and bailiff offices in enforcing court orders and warrants.

The development of some of these indicators represent long term goals. The complexity of development, the availability of data, and the priorities of the court administration sector and the Steering Committee may affect progress with each indicator. Some indicators may take several years to develop.

Specialist courts covered by the existing scope of the Report include family courts, coroners' courts and electronic infringement processing courts. Other specialist courts included in the data collection but not separately reported include drug courts and children's courts.

Contextual data are reported separately for electronic courts to improve the comparability of court administration activities. Reporting could be expanded in future Reports to cover drug courts and children's courts.

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## **Measuring client satisfaction**

A survey of client satisfaction with court administration services will be piloted on a small sample of court clients across jurisdictions, excluding Queensland and WA, in early 2001. Western Australia will conduct its own survey in 2001. The surveys tested client responses to questions about satisfaction with court administration staff, court facilities, availability of court information and court processes.

Responses and information from the pilot surveys are being used to develop and improve the survey questionnaire and method. The survey will be conducted on a full sample of clients in mid-2001. The results from this survey will provide data on client satisfaction for the 2002 Report.

## **Widening the collection scope**

The federal magistrates' service operated for the first time in 2000. The service hears less complex federal family law and civil matters. Data for the federal magistrates' service will be included in the scope of the 2002 Report.

Specialist courts, tribunals and boards represent an important component of the justice system's dispute resolution service. The data collection already covers small claims, credit, and residential tenancies tribunals that operate as part of the magistrates' courts in some States and Territories.

Most States and Territories operate specialist courts, tribunals and boards in the following areas, and could be covered in future Reports. They include:

- guardianship;
- fines enforcement;
- industrial relations;
- administrative appeals;
- equal opportunity and discrimination;
- environment, resource and development; and
- building reviews.

This direction represents a longer term goal. The focus is on improving the quality of information about services within the existing scope.

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## **9.6 Jurisdictions' comments**

This section provides comments from each jurisdiction on the services covered in this chapter and attachment 9A on the CD-ROM. Appendix A contains short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter. In addition, detailed statistics covering various aspects such as age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (such as aboriginality and ethnicity) are found in Appendix A.

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## New South Wales Government comments

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Delivering the earliest, most effective and efficient resolution of criminal matters and civil disputes is an important goal of the NSW Government. The development of a number of projects has seen progress made on a number of fronts this year, such as:

- the development of time standards by the Supreme Court for completion of criminal trials, and civil and criminal appeals – time standards for civil matters will allow the court to enforce compliance to the timetable, and impose realistic cost sanctions to expedite hearings, shorten adjournment periods and deliver hearing date certainty;
- the success of the *Centralised Committal Project* in Sydney has led to its expansion to Sydney West and the number the new committals reduced by 21 per cent. New initiatives such as involving legal representation at an earlier stage have enabled the District Court to take a far more active approach to the management of trials; and
- the trialing and introduction of a model to assist the integration of Local and District Court registries and provide a single point of access for clients.

Some of the key initiatives for Courts next year include:

- further development of computerised management information systems to monitor and ensure compliance to time standards of civil cases within the Supreme Court;
- a review of criminal listing processes in order to reduce waiting time and improve hearing date certainty in the District Court; and
- implementation of quality management initiatives in response to feedback received in the District Court’s registry user survey.

The following comments are made in respect of this Report:

- the Supreme Court and its Registry continue to promote the use of court-annexed mediation, as well as providing external facilities for mediation and early neutral evaluation; and
- the transfer of civil matters from the Supreme Court to the newly extended jurisdiction of the District Court increased markedly the number and complexity of new actions being registered, with no real disparity in the disposal rate. Additional judicial resources were specifically allocated to manage this increase.

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## Victorian Government comments

“ The Victorian Courts aim to deliver quality and timely courts services within a best practice framework. During 1999-2000 Victoria has introduced a range of reforms and initiatives to enhance the delivery of court services. A number of the major achievements were:

- In June 2000 the Government approved the construction of a new County Court Complex. The new Complex which will have 46 courtrooms will be completed by May 2002. In addition, new court facilities have been approved for Mildura and Warrnambool.
  - The Supreme, County and Magistrates' Courts are undertaking a review of performance measures in order to provide a more comprehensive suite of measures that reflect the performance of the Court.
  - The CREDIT (*Court Referral and Evaluation for Drug Intervention and Treatment*) Program undertaken in the Magistrates Court is being extended to 8 Courts in Melbourne during 2000-01. This Program aims to provide early treatment plans, thereby reducing the recidivism rates and diverting offenders from the corrections system.
  - In July 1999 a number of reforms relating to criminal appeals, from the Magistrates' Court to the County Court, were introduced to provide a fairer and more efficient appeal system. These reforms have resulted in a 26% reduction in the number of appeals lodged with the County Court during 1999/2000.
  - The Supreme Court has installed a “Cyber Court Book” for assisting in the conduct of large trials. The “Cyber Court Book” provides an integrated electronic solution to the management of the court record, provision and viewing of transcript and the presentation of evidence by participants in a trial.
  - In September 1999, the County Court introduced judicially managed case conferences and direction hearings for the criminal trial process under the *Crimes (Criminal Trial) Act 1999*. The cases conferences are proving to be effective in bringing about a more timely resolution of cases. In addition, although a limited number of cases have been through the *Crimes (Criminal Trials) Act* process, indications are that in trials relating to sexual offences the procedures are assisting in the efficient disposition of trials. Finally, preliminary analysis of the cases has identified a significant reduction in the number of adjournments at trials.
  - The Supreme Court will be implementing a range of reforms that will significantly improve the administration of Probate. These reforms will simplify the procedures associated with processing an application for probate. The time for a grant of probate is expected to fall from 5 days to 2 days from the time of lodgment.
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## Queensland Government comments

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Queensland courts' performance in 1999-2000 was satisfactory with pressures on disposal rates in all courts. The cost-effectiveness of the courts remains a significant achievement.

Changes within the Queensland courts system in the year under review, include:

- increasing the number of female Supreme Court judges from four to six, and the number of female Magistrates from 10 to 12;
- piloting the operation of the computerised criminal case management and financial management system in the courts known as the Queensland Wide Interlinked Courts system (QWIC). The full Statewide deployment of the system will be completed by November 2000;
- commencement of a call centre as part of a central office for the collection and enforcement of State monetary penalties. The project (State Penalties Enforcement Registry – SPER) commences operations with a four months amnesty which starts on 27 November 2000;
- start of a drug diversion court operating in three Magistrates Courts in South East Queensland;
- planning for the redevelopment of the Brisbane Central Magistrates Courts complex;
- preparation for the construction or refurbishment of five suburban and regional courthouses. A further new courthouse will be built in a remote Aboriginal community, bringing to four the number constructed in remote areas in the past three years; and
- expansion of Magistrates Courts constituted by Aboriginal and Torres Strait Islander Justices of the Peace (Magistrates Court) in remote communities to three, with training being conducted in three other communities.

The implementation of the QWIC system in 2000-2001 is expected to further improve the efficiency and level of service delivery in Magistrates courts.

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## Western Australian Government comments

“ The Court Services Division of the Ministry of Justice in Western Australia has continued to refine its performance measures and data collection processes during the year. A key focus has been to develop collection methods that enables data to be used for several key measurement tools, including budgeting; salary increase justification; benchmarking, both nationally and at a local level and for strategic and business planning.

Other significant achievements during 1999-2000 include:

- achieved a national first and radically improved customer service by introducing an electronic lodgement facility for general summonses in the Local Court - the first phase of a new integrated courts management system deployed to all metropolitan local courts and tribunals;
- Western Australia's first specialised Family Violence Court began on a pilot basis and work on the introduction of a pilot Drug Court progressed. Both will operate in the Perth metropolitan region initially;
- two new justice complexes providing facilities for court, community corrections and related operations in an integrated centre commenced construction at Fremantle and Rockingham; and
- the use of technology to improve access and reduce costs by the extension of video-conferencing facilities to courts located at Bunbury, Geraldton and South Hedland.

An important part of future efforts will be to improve timeliness, particularly as the clearing of significant backlogs in most jurisdictions continues to be challenge in Western Australia.

The delay in the District Court criminal jurisdiction during the year was between 13 and 16 months and the challenge here is to reduce these to bring them under the standard of 12 months. To assist in this regard consideration has recently been given to the appointment of an additional judge.

The Supreme Court target for listing of civil cases was extended from 6 to 11 months after entry because of the number of long and complex matters that had recently been heard in the court. Further delays may be caused in the 2000-01 year due to a number of other complex cases already listed for hearing, with containment at the present level being the focus.

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## South Australian Government comments

“ The Courts Administration Authority implemented a number of initiatives during the year which improved the efficiency and effectiveness of services provided.

The new Fines Enforcement System became fully operational in March 2000. It provides for significant improvement in the management of fines within the State and includes a range of innovative payment options to assist clients. The implementation of the system was accompanied by a comprehensive public awareness campaign. The increase in expenditure in the Magistrates Court Criminal jurisdiction during 1999-2000 is associated with the establishment cost of the new system. The full year effect of the anticipated increase in recovery rate of fines will not be fully realised until 2000-2001.

Another successful initiative was the introduction of the on-line Pre Lodgement System for minor civil claims within the Magistrates Court. Thousands of final notices have been issued since its introduction and an early evaluation of the success of the scheme indicates that the majority of claims were resolved without further recourse to the Court.

Other initiatives include the establishment of a pilot Drug Court within the Adelaide Magistrates Court and the opening of the redeveloped Youth Court which now enables the Family Conference Team and the Care and the Care and Protection Team to be accommodated within the Youth Court precincts.

During 1999-2000 computing expenditure remained high, linked in part to amortisation costs for the development of the civil case management systems.

Changes in the number of lodgements continue to be a significant factor in any increase or decrease in cost per lodgement. Changes in performance indicators should be interpreted with care as results continue to vary due to statistical or reporting variations associated with the data collection exercise rather than as evidence of change in workload, activity or expenditure.

Planning for next year includes:

- implementation of on-line lodgements in the civil jurisdiction of the Magistrates Court;
- the expansion of the Aboriginal Court Day to a country area; and
- the *Courts Consulting the Community* initiative to obtain feedback from the South Australian community on its perception of the courts.

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## Tasmanian Government comments

“ In 1999-2000, the Tasmanian Courts continued to provide an accessible and efficient mechanism for the resolution and adjudication of disputes. The statistics for cost per lodgment, time from disposal to finalisation and number of lodgments present a picture of a well used, efficient court system.

The data collected this financial year is more extensive and accurate than in previous years. In the past some essential data items have been calculated using estimates, occasionally from relatively small sample sizes. This practice has been all but eliminated with only one estimate (based on a 50% sample) being used. Improved registry and case management systems will have a positive impact on the quality of the data collected during the next year.

A significant omission has been identified in respect of the 1998-1999 collection where approximately 35 000 minor criminal lodgments were omitted. Unfortunately, rectification was not possible prior to publication of last year's report. As a consequence, all data sets reliant on, or linked to, the number of lodgments should be treated with caution.

In relation to civil matters, it was anticipated that the 1998 increase in jurisdiction of the Magistrates Court Civil Division would be reflected in an increase in the number of smaller civil matters dealt with in that jurisdiction. This has occurred but only in relation to debt recovery matters. Overall, the number of civil matters lodged has increased with the largest single increase being just over 3 000 matters in the Magistrates Court. Timeliness of disposal is becoming an issue in the Supreme Court, with only 37% of all matters being finalised within six months of lodgment.

In relation to criminal matters, there has been a substantial increase in lodgments in both Courts. In the past five years the number of matters dealt with by the Supreme Court has risen from 390 matters to 717 matters. The Magistrates Court is now dealing with nearly 50 000 matters per annum. Timeliness of disposal remains excellent with 80% of Supreme Court and 95% of Magistrates Court criminal matters being finalised within six months of lodgment.

With low filing fees and amongst the lowest costs per lodgment in Australia the Tasmanian courts are both cost effective and accessible. Increased emphasis is now being placed on case management to further improve the time taken to dispose of matters.

Tasmania supports the development of new and refined performance indicators for court administration, particularly the use of a case weighting system. The differences in jurisdictions exercised by courts make comparisons difficult and occasionally misleading. The development of a case weighting system would be helpful in leveling the playing field. Tasmania also supports the development of indicators for the use of diversionary strategies for dispute resolution.

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## Australian Capital Territory Government comments

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The report again recognises that the structural differences between a two-tiered court system, such as exists in the ACT, the Northern Territory and Tasmania and those three-tiered court systems which exist in all other jurisdictions, must continue to be taken into account when comparing performance between various States and Territories. The ACT has a two-tiered court system and in many cases the most appropriate comparison for both the ACT Magistrates Court and the ACT Supreme Court will be with the intermediate courts of other three-tiered jurisdictions or with an average across jurisdictional figures.

A Court Administrator was appointed in September, 1999 to oversee the Administrative Operations of both the Supreme and Magistrates' Courts and ensure that available resources are maximised. Being responsible to the Chief Executive of the Department of Justice and Community Safety for administration and management matters and to the Chief Justice and Chief Magistrate for judicial and operational policy, the Court Administrator assume a pivotal nexus between the Judicial and Executive Arms of Government. The Court Administrator is moving methodically towards a Combined Court Administration which has been achieved with the exception of a combined Courts Budget which is targeted to be in place by 1 July 2001.

A revised Case Management System (CMH) for criminal matters has been introduced. Since its introduction, 53 per cent of matters were finalised at a CMH rather than being dealt with by a Magistrate. 581 hours of Court sitting time were saved resulting in 1,329 persons not being required to attend court as witnesses, with resulting flow-on savings to all stakeholders.

A Family Violence Practice Direction has been promulgated as part of a Family Violence Intervention Program. This is the forerunner of a separate Case Management Hearing system which will come into operation in respect of Family Violence Cases. This system is designed to expedite the process and eliminate unnecessary adjournments.

The Courts' website has been redesigned to cater for an expanded range of users.

The significant costs related to Coronial matters can be attributed to an exceptionally long running inquest which is now finalised.

The Supreme Court's jury function has been enhanced by a purpose-designed package featuring automated panel selection utilising an electronic version of the electoral roll.

A new fine default scheme was introduced in the ACT Magistrates Court to improve enforcement processes and reduce the incidence of non-payment of fines. This has resulted in a 20% increase in the number of people paying their fines either by the due date or after a letter of demand has been issued, without the need for further enforcement action.

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### **Northern Territory Government comments**

“ The NT has since October 1999 implemented data quality control measures and checks to ensure that the statistical information provided is accurate. The process included the creation of a Statistical Data Control Committee and the establishment of links with the Australian Bureau of Statistics and the NT Attorney-General's Department's Criminal Statistics Unit. The result of these measures is that the statistics provided to the commission accurately reflect what has happened in the NT Courts during the reporting period.

As the NT operates with a two tiered system, the figures clearly show that the Magistrates Courts jurisdictions deal with most lodgments and finalisations. This accords with the respective jurisdictions of the Magistrates Courts and Supreme Court.

The NT, because of its geographic size, the number of court locations and its multi-cultural population, cannot take advantage of economies of scale. Strategies are being implemented to increase access to Courts for all Territorians and, where possible, reduce costs.

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## 9.7 Definitions

Table 9.9 Descriptors

<i>Descriptors</i>	<i>Definition</i>
Accommodation expenditure	<p>Depreciation, actual rent or imputed rent on court owned or occupied land and buildings as well as expenditure on electricity, gas, water, telecommunications, cleaning, gardening and maintenance.</p> <p>Where used, imputed rent is calculated using the market lease value of the floor area of all properties occupied by the court. Imputed rent equals the square metres multiplied by the market price per square metre of similar grade office space in a similar location.</p>
Average annual rate of growth	<p>Calculated using the compound growth rate formula. For efficiency data, formula is applied to financial estimates that have been adjusted for inflation (ie. measured in 'real terms').</p> <p>Growth rate = <math>100 * \{ (\text{final year estimate}/\text{initial year estimate})^{(1/n)} - 1 \}</math>            where n is equal to the number of years elapsed between the initial and final year (eg. 1999-2000 – 1997-98 = 2)</p>
Court locations	<p>A single street address of a court. Where a location or facility provides services for both criminal and civil cases, or where superior courts sit in lower court facilities on circuit, these locations are counted separately for each jurisdiction. This category includes: locations that provide registry services on a permanent basis at which a court hearing is listed for determination before a judicial officer; locations where hearings are listed for determination before a judicial officer in a facility which does not provide full time or part time registry services; and all permanent court locations providing full time or part time registry services at which there are no matters listed before a judicial officer.</p>
Court reporting expenditure	<p>Salary expenditure on in-house court reporters, non-salary expenditure of in-house court reporting agencies, and contract fees paid to court reporting agencies less any revenue recovered from transcript fees by the in-house court reporting agency.</p>
Court requested adjournments	<p>Matters initiated but adjourned for more than one working day (such as those resulting from the unexpected unavailability of a judge, court room or other case related court resource). Includes matters adjourned as not reached; excludes matters adjourned as part heard.</p>
Electronic court	<p>Courts with the capacity to produce enforceable orders against defendants (such as fines, license cancellation and incarceration) and to process infringements, on-the-spot fines and summary offences.</p>
Excluded courts and tribunals	<p>Guardianship boards, environment resources and development courts, and administrative appeals tribunals.</p>
Finalisation	<p>The completion of a matter so that it ceases to be an item of work to be dealt with by the court.</p>
Hearings	<p>Any matter listed to be heard before a judicial or quasi-judicial officer, which either progresses towards finalisation or is finalised by determination or adjudication. Excludes hearings that constitute pre-trial conferences, arraignment, mention hearings, status conferences, mediation and counselling.</p>
In-house revenue	<p>Revenue or income received by the court administration branch or division for the provision of court reporting, library or civil bailiff services.</p>

(continued next page)

**Table 9.9 (continued)**

<i>Descriptor</i>	<i>Definition</i>
Information technology expenditure	Non-salary and salary expenditure on information technology. Excludes capital expenditure on information technology infrastructure; includes licensing costs, computer leasing costs, consumables (such as data lines, paper, disks), training, access fees (for example, catalogue search and Internet access) and maintenance charges for software and hardware.
Inquests and inquiries held	Court hearings to determine the cause and circumstances of deaths reported to the coroner. Includes all coronial inquests and inquiries in full court hearings.
Judicial and judicial support salaries	All salary expenditure and payments in the nature of salary paid to employees of court administration. Includes base salary, the employer-contributed component of superannuation, workers' compensation (full cost inclusive of any levies, bills and legal fees), higher duty allowances, overtime, actual and accruing terminal and long service leave, fringe benefits tax, and untaxed fringe benefits and payroll tax. (Judicial officers included judges, magistrates' masters, judicial registrars and other judicial officers where they primarily fulfil a judicial function. Judicial support staff includes judicial secretaries, tipstaff and associates).
Library expenditure	Non-salary and salary expenditure on court operated libraries. Non-salary expenditure includes book purchases, journal subscriptions, fees for interlibrary loans, copyright charges, news clippings service fees and photocopying. Expenditure also includes current information technology costs and courts administration contributions towards the running costs of non-government operated libraries. Any costs recovered through borrowing and photocopy fees by court operated libraries are subtracted from expenditure.
Lodgment	The initiation or commencement of a matter before the court. The date of commencement is counted as the date of registration of a court matter.
Matters	<i>Coronial:</i> Deaths and fires reported to the coroner in each jurisdiction including all reported deaths and fires regardless of whether the coroner held an inquest or inquiry. Coronial jurisdictions could extend to manners of death of a person who was killed; was found drowned; died a sudden death of which the cause is unknown; died under suspicious or unusual circumstances; died during or following the administration of an operation of a medical, surgical, dental, diagnostic or like nature; died in a prison remand centre or lockup; died under circumstances that (in the opinion of the Attorney-General) require that the cause of death be more clearly ascertained. <i>Criminal:</i> Matters brought to the court by a government prosecuting agency, which is generally the Director of Public Prosecutions but could also be the Attorney-General, the police, local councils and traffic camera branches. <i>Civil:</i> Matters brought before the court by individuals or organisations against another party, such as small claims and residential tenancies as well as matters dealt with by the appeal court jurisdiction. Also includes coronial matters.

(continued next page)

Table 9.9 (continued)

<i>Descriptor</i>	<i>Definition</i>
	<p><i>Excluded matters:</i> Extraordinary drivers licence applications; any application on a pending dispute; applications for bail directions or judgment; secondary processes (for example, applications for default judgments); interlocutory matters; investigation/examination summonses; firearms appeals; escort agents' licensing appeals; pastoral lands appeals; local government tribunals; police promotions appeals; applications appealing the decisions of workers' compensation review officers.</p> <p><i>Minor criminal:</i> Minor traffic matters and other infringement matters.</p> <p><i>Minor civil:</i> Undefended general civil matters and applications of an administrative nature such as winding up applications, criminal injury compensation applications, Australian registered judgements, residential tenancy disputes, joint applications for divorce, and applications for debt recovery.</p> <p><i>Primary civil:</i> Defended matters, appeals from tribunals, justices' appeals, full court appeals, magistrates' appeals, assessment of damages requiring interlocutory applications defended or not, injunctions and declarations.</p> <p><i>Primary criminal:</i> Those criminal matters that are not minor.</p> <p><i>Probate:</i> Matters such as applications for the appointment of an executor or administrator to the estate of a deceased person.</p>
Non-urban area	Remote areas (defined in terms of low population density and long distances to large population centres) and rural areas (which include the remainder of non-urban statistical local areas).
Other expenditure	Expenditure on consultants, expert witnesses, mediators, interpreters, motor vehicles, court registries, first line support staff, and overheads where incurred by the court administration agency.
Party requested adjournments	<p>Matters adjourned on first day of hearing for more than one day on application by either the prosecution/plaintiff or the defendant for reasons such as:</p> <ul style="list-style-type: none"> <li>• unavailability of witness;</li> <li>• failure of accused to appear;</li> <li>• granting of application for more time; or</li> <li>• pleading on the day.</li> </ul>
Probate registry expenditure	Salary expenditure of the probate registrar and probate clerks and non-salary expenditure directly attributable to probate registries.
Real expenditure	Actual expenditure adjusted for changes in prices using the GDP(E) price deflator and expressed in terms of final year prices.
Sheriff and bailiff expenditure	Expenditure on court orderlies, court security, jury management and witness payment administration. For the civil jurisdiction, includes expenditure (by or on behalf of the court) on bailiffs to enforce court orders. In the coronial jurisdiction, includes expenditure on police officers permanently attached to the coroner for the purpose of assisting in coronial investigations. Excludes witness payments, fines enforcement (criminal jurisdiction) and prisoner security.

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**Table 9.9 (continued)**

<i>Descriptor</i>	<i>Definition</i>
Umbrella department expenditure	Expenditure incurred by the umbrella department (the Ministry or Department of Justice or Attorney-General). Includes expenditure on accounting, human resources functions, training, media liaison, research, policy, property management and administration.
Urban area	State and Territory capital city statistical divisions and other urban areas (which were urban centres of 100 000 people or more).
Withdrawn	The formal withdrawal of criminal charges by the prosecution (for example, police, Director of Public Prosecutions, Attorney-General).

**Table 9.10 Indicators**

<i>Indicator</i>	<i>Definition</i>
Adjournment rate	The ratio between the number of court requested adjournments to court hearings or trials initiated. Hearings can be adjourned more than once, so adjournment rates can be greater than 100 per cent.
Adjudicated finalisation	Where a charge is considered complete and ceases to be active in any court, even though that charge has not been adjudicated. For example, a bench warrant was issued or withdrawn by prosecution.
Average expenditure per case — excluding in-house revenue	Average expenditure per criminal or civil case (see below) excluding revenue for jurisdictions from providing library court reporting and civil bailiff services.
Average expenditure per civil case	The total cost of the administrative services provided to civil matters divided by the total number of civil files handled. Total costs include salaries, sheriff expenses, juror costs, accommodation costs, library services, information technology, departmental overheads, and court operating expenses.
Average expenditure per primary criminal case	The total costs of the administrative services divided by the total number of primary criminal matters handled. Total costs include salaries, sheriff expenses, juror costs, net court reporting costs, accommodation costs, net cost of library services, information technology, departmental overheads and court operating expenses.
Cost recovery	The level of court fees divided by the level of court expenditure.
Court fees collected	Total court income from fees charged in the civil jurisdiction. Includes filing, sitting hearing and deposition fees; excludes transcript fees.
Geographic accessibility	The number of metropolitan locations divided by the total number of court locations expressed as a percentage.
Method of finalisation	The process that leads to the completion of a criminal charge within a higher court so it ceases to be an item of work in that court.
Method of initiation	Describes how a criminal charge was introduced to a court level.
Non-adjudicated finalisation	A judgement or decision by the court as to whether or not the defendant is guilty of the charge laid against him or her. For example, the defendant pleaded guilty or was found guilty by the court or was acquitted.

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Table 9.10 (continued)

<i>Indicator</i>	<i>Definition</i>
Timeliness	<p>The percentage of <i>total criminal cases</i> completed that are completed within six months; six to 12 months; 12 to 18 months; and greater than 18 months of lodgment. Cases are sorted according to the time taken to finalise after lodgment.</p> <p>The percentage of <i>total civil cases</i> completed that are completed within six months; six to 12 months; 12 to 18 months; and greater than 18 months of lodgment. Cases are sorted according to the time taken to finalise after lodgment.</p> <p>The percentage of <i>defended civil cases</i> completed that are completed within six months; six to 12 months; 12 to 18 months; and greater than 18 months of lodgment. Cases are sorted according to the time taken to finalise the defended cases after initial lodgment.</p> <p>The percentage of <i>civil trial cases</i> finalised through the initiation of a trial that are completed within six months; six to 12 months; 12 to 18 months; and greater than 18 months of lodgement. Cases are sorted according to the time taken to finalise the cases after initial lodgment.</p>



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## 10 Corrective services

Corrective services meet the overall objectives of the criminal justice system outlined in the 'Justice preface' by providing a safe, secure and humane adult correctional system that incorporates the elements of protection, rehabilitation and reparation to the community.

In this Report, corrective services comprise prison custody (including periodic detention) and a range of community correctional orders and programs for adult offenders. Both public and privately operated facilities and services are included.

A profile of the corrective services sector is discussed in section 10.1. Policy developments and how these may affect the collection and reporting of data are briefly discussed in section 10.2. The revised framework of performance indicators is outlined in section 10.3 and the data collected are discussed in section 10.4. Future developments in performance reporting are broadly discussed in section 10.5. The chapter concludes with jurisdictional comments in section 10.6 and definitions of terms in section 10.7.

Supporting tables for chapter 10 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as `\Publications\Reports\2001\Attach10A.xls` and in Adobe PDF format as `\Publications\Reports\2001\Attach10A.pdf`.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 10A.3 is table 3 in the electronic files). Supporting tables may be subject to revision. The most up-to-date versions of these files may be found on the Commission's Review web page ([www.pc.gov.au/service/gsp/2001/](http://www.pc.gov.au/service/gsp/2001/)). Users without Internet access can contact the Secretariat to obtain up-to-date versions of these tables (see the details inside the front cover of the Report).

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## 10.1 Profile of corrective services

### Service overview

Corrective services include both prison custody and a range of community based correctional orders. However, the scope of this chapter does not extend to:

- juvenile offenders (who are generally the responsibility of State and Territory community or human services departments);
- persons held in institutions to receive psychiatric care (who are generally the responsibility of health services);
- prisoners held in police facilities or custody (who are covered in the police services chapter); and
- persons held in facilities such as immigration and military detention centres.

As discussed in the 'Justice preface', the operation of corrective services is heavily influenced by, and in turn influences, the other two arms of the criminal justice system — police and courts. Corrective service functions in some jurisdictions include responsibilities that belong to different justice sector agencies in other jurisdictions — for example, prisoner escorts, the management of prisoners held in court cells, the management of prisoners in police cells, and the prosecution of community correction order breaches. As part of the review of the indicator framework, these functions are being identified and separately measured to ensure comparability across jurisdictions. However, many of the relevant measures are still under development in 1999-2000 and are not included in this Report.

### Roles and responsibilities

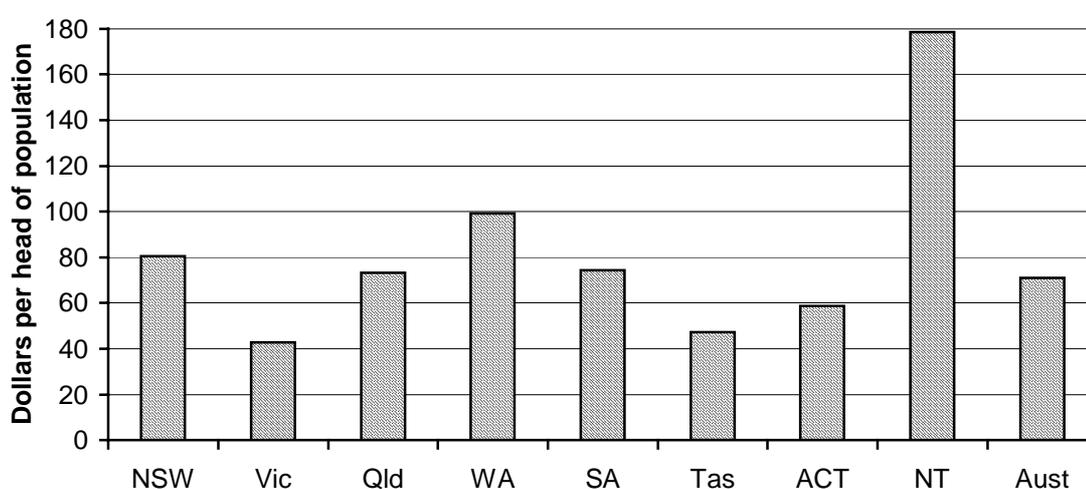
Corrective services are the responsibility of State and Territory governments which deliver services directly, purchase them through contractual arrangements, or operate a combination of both arrangements. Each jurisdiction maintained prison facilities during the reporting period comprising, except in the case of the ACT, both open and secure custody facilities. The ACT maintained one remand prison and one periodic detention facility, with prisoners sentenced in the ACT being held in NSW prisons under contractual arrangements between the two jurisdictions. Four jurisdictions (NSW, Victoria, Queensland and SA) operated private prisons in 1999-2000. NSW and the ACT provided for periodic detention of prisoners — for example, weekend detention in prison, whereby prisoners are able to return home and maintain work commitments during the week.

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## Funding

Nationally, systemwide recurrent expenditure on corrective services (net of revenue derived from own sources) totalled \$1345 million in 1999-2000 — \$1174 million (87 per cent) for prisons, \$137 million (10 per cent) for community corrections and \$35 million (3 per cent) for transport and escort services. Recurrent expenditure per capita ranged from \$43 in Victoria to \$179 in the NT. Nationally, recurrent expenditure was \$71 per person (figure 10.1).

Figure 10.1 Total recurrent expenditure per total population, 1999-2000<sup>a</sup>



<sup>a</sup> Total recurrent expenditure refers to the total expenditure for all corrections (prisons, transport and escort services, and community corrections) net of recurrent receipts (own source revenues) but including payroll, capital asset charges, and other associated expenses for jurisdictions reporting on these figures in 1999-2000. Per capita cost is calculated per person (that is, refers to persons of all ages, not just adult population), based on the estimated resident population at June 2000 (ABS 2000).

Source: table 10A.6.

## Size and scope of sector

In 1999-2000, there were 98 prisons (including 13 privately operated prisons) across Australia, 11 periodic detention centres (located in NSW and the ACT) and nine 24-hour court cell facilities under the responsibility of corrective services in NSW, totalling 118 facilities throughout Australia (table 10A.2).

On average, 20 753 people per day were held in Australian prisons during the year (excluding periodic detainees) — an increase of 4.5 per cent over average daily numbers in the previous year. Additionally, 1334 people on average were serving periodic detention orders in NSW and the ACT in 1999-2000 — a decline of 6 per cent from 1998-99. Thirty per cent of prisoners (excluding periodic detainees)

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were held in open prisons (facilities containing prisoners classified as low security) in 1999-2000 and 71 per cent were held in secure facilities. A daily average of 3188 prisoners (or 15 per cent of the total Australian prisoner population, excluding periodic detainees) were held in privately operated facilities during the year. The proportion of prisoners held in private prisons ranged from 8 per cent in NSW and SA to 46 per cent in Victoria in 1999-2000 (table 10A.1).

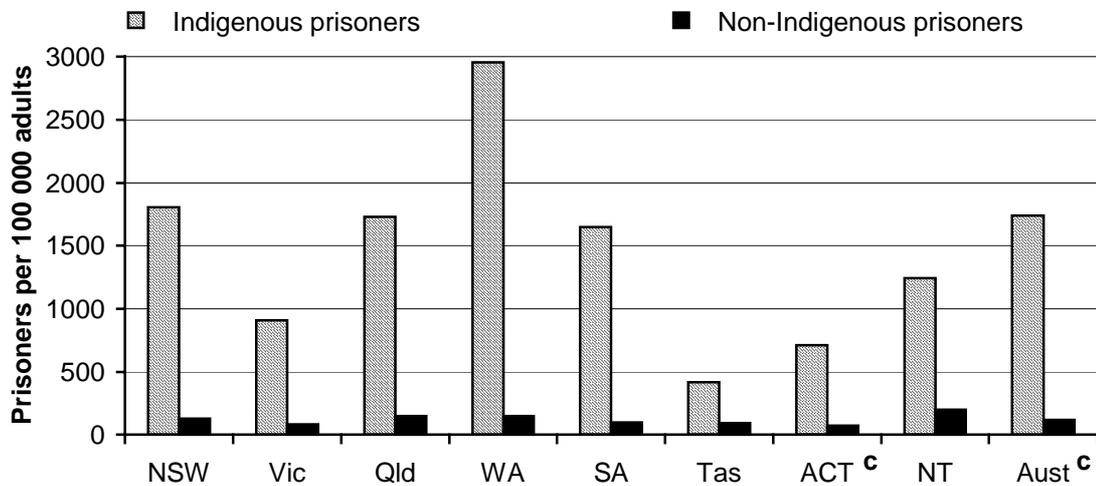
Nationally, the daily average number of prisoners in 1999-2000, comprised 19 442 males and 1310 females (94 per cent and 6 per cent of the prison population respectively) and the daily average number of Indigenous prisoners was 4041 (or 20 per cent of prisoners nationally) (table 10A.1).

The rate of imprisonment is the number of prisoners (excluding periodic detainees) per 100 000 of the general population aged 17 years and over in those jurisdictions where persons are remanded or sentenced to adult custody at 17 years of age (Victoria, Queensland and, for the majority of 1999-2000, Tasmania and the NT) or per 100 000 of the general population aged 18 and over in those jurisdictions where the age for adult custody is 18 years for the reporting period (NSW, WA, SA and the ACT). In Reports up to the 1997-98 reporting year, imprisonment rates were calculated against a general population aged 17 years and over for every jurisdiction. Thus, rates prior to 1998-99 are not directly comparable with data published in this Report.

The national rate of imprisonment for all prisoners was 143 per 100 000 Australian adults in 1999-2000. The national rate was 272 per 100 000 adults for male prisoners and 18 for female prisoners. The national imprisonment rate per 100 000 Indigenous adults was 1738 in 1999-2000 compared with a rate of 117 for non-Indigenous prisoners (table 10A.4). Tasmania reported the lowest rate of Indigenous imprisonment (417) and WA reported the highest (2954), while the ACT reported the lowest non-Indigenous prisoner rate (75) and NT reported the highest (196) (figure 10.2).

All jurisdictions operate community corrections programs. Community corrections comprise a variety of non-custodial programs (listed for each jurisdiction in table 10A.17). These programs vary in the extent and nature of supervision, the conditions of the order (such as a community work component or personal development program attendance) and the restrictions on the person's freedom of movement in the community (as with home detention). There is no single objective or set of characteristics common to all community corrections programs, other than that they generally provide either a non-custodial sentencing alternative or a post-custodial mechanism for re-integrating prisoners into the community under continued supervision.

Figure 10.2 **Indigenous and non-Indigenous imprisonment rates, 1999-2000<sup>a, b</sup>**



<sup>a</sup> Imprisonment rates for all prisoners are based on the daily average prisoner population supplied by States and Territories, calculated against adult Indigenous and Non-Indigenous population estimates (Australian Bureau of Statistics figures supplied by the National Centre for Crime and Justice Statistics). <sup>b</sup> Jurisdictional comparisons need to be interpreted with caution, especially against those States and Territories with low Indigenous populations, where small number effects can introduce statistical variation that does not accurately represent real trends over time or consistent differences to other jurisdictions. <sup>c</sup> ACT data include prisoners held on remand in the ACT and ACT prisoners held in NSW prisons. Australian rates are calculated to exclude any double counting of ACT prisoners held in NSW prisons.

Source: table 10A.4.

Community corrections include post-custodial programs under which prisoners released into the community continue to be subject to corrective supervision (as with parole, release on licence, pre-release orders and some forms of home detention). They also include orders imposed by the court as a sentencing sanction, such as suspended sentences, court-imposed home detention, community service orders, probation, intensive supervision orders and recognisance. In most jurisdictions, fine default orders fall under community corrections, as does bail in some jurisdictions. Each jurisdiction has reparation and supervision orders, and restricted movement orders are available in all jurisdictions except Victoria, Tasmania and the ACT.

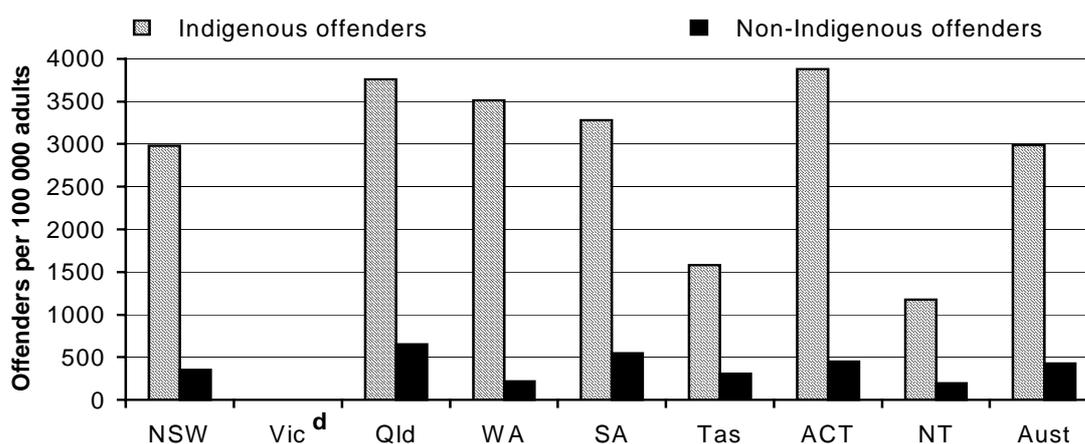
On average, 58 979 offenders per day were serving community corrections orders across Australia in 1999-2000 (table 10A.3). This daily average comprised 47 575 males (81 per cent) and 11 215 females (19 per cent), and 189 offenders whose gender was separately reported as not known. The daily average also comprised 6528 Indigenous offenders (11 per cent of the total community correction population) and 45 569 non-Indigenous offenders (77 per cent). The daily average number of Indigenous community correction offenders was not available in Victoria

in 1999-2000. In other jurisdictions, non-Indigenous offender data may also include some offenders whose Indigenous status was not known or not reported.

The community corrections rate is the daily average number of offenders serving community corrections orders per 100 000 of the general population aged either 17 or 18 years and over, depending on the relevant age of entry to the adult correctional system in each jurisdiction. Nationally, the rate was 407 per 100 000 adults in 1999-2000. The national rate for female community correction offenders was 153 per 100 000 adults, compared with 667 for males. For Indigenous offenders, the national rate was 2986 per 100 000 Indigenous adults compared with 430 for non-Indigenous offenders (excluding Victoria, where the daily average number of Indigenous offenders was not available) (table 10A.4).

NT reported both the lowest Indigenous and non-Indigenous offender rates in 1999-2000 (1176 and 194 per 100 000 adults respectively). The ACT reported the highest Indigenous offender rate (3876) and Queensland reported the highest non-Indigenous offender rate (658) (figure 10.3). However, these comparisons need to be interpreted with caution, especially for States and Territories with low Indigenous populations, where small number effects can introduce statistical variation that does not accurately represent real trends over time or consistent differences from other jurisdictions.

Figure 10.3 **Indigenous and non-Indigenous community corrections rate, 1999-2000<sup>a, b, c</sup>**



<sup>a</sup> Rates are based on the daily average offender population supplied by States and Territories, calculated against a general Indigenous/non-Indigenous population of either 17 or 18 years and over, depending on the age at which persons are received into adult custody. <sup>b</sup> Jurisdictional comparisons need to be interpreted with caution, especially for those States and Territories with low Indigenous populations, where small number effects can introduce statistical variation that does not accurately represent real trends over time or consistent differences from other jurisdictions. <sup>c</sup> Non-Indigenous offender rates may also include some offenders whose Indigenous status was not known or not reported. <sup>d</sup> Victoria does not have community corrections data disaggregated to Indigenous and non-Indigenous offenders.

Source: table 10A.4.

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## **10.2 Policy developments in corrective services**

### **Transition from custody to community**

A key policy issue for corrective services in 1999-2000 was the continuing focus on policies and programs that address the transition from custody to community, including the continuity of services between full-time custody and community corrections.

Maintaining and strengthening community links for persons in custody, particularly with partners and families, is an important aspect of effective rehabilitation. This is addressed, for example, through corrective services' commitment to prison visit programs and through the provision of facilities and services that enable female prisoners to continue to care for their babies and young children within the prison environment.

Rehabilitation is also supported by the provision of opportunities for prisoners to enhance education and employment skills and engage in preparation for release programs while in custody, as well as the facilitation of access to employment on release (via the support provided in community correction post-release programs). Greater attention is also being given to the evaluation of prisoner programs and the implementation of best practice models in program design.

The framework of performance indicators for corrective services is being continually refined to reflect the importance of community based programs and services that facilitate this transition from prison custody to living in the community, and that support correctional objectives relevant to rehabilitation and reparation. Specific indicators to assess these aspects are under development.

### **Whole-of-government approaches to the prevention of illicit drug use**

There is a continuing need to address drug abuse issues among prisoners and offenders. Existing and new programs and policies are being considered by corrective services in the context of a whole-of-government approach to dealing with drug abuse in many jurisdictions. This includes responding to legislative options (such as the Drug Courts available in some jurisdictions), or the range of innovative sentencing options available in many other jurisdictions (such as diversionary mechanisms, restorative justice, mediation and combinations of conditions of community correction orders that target specific offender needs and circumstances).

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These sentencing options require corrective services to develop a range of programs and facilities to appropriately address the conditions imposed. Criminal justice system initiatives to address drug related offences pose particular challenges, given the need to balance secure custody with treatment and rehabilitation objectives. Thus, individual case management and detailed risk assessment of prisoners and offenders are needed to ensure appropriate levels of supervision and custody consistent with meeting the requirements of the court order and addressing the individual needs of the prisoner or offender. The approach also requires greater cooperation on the part of government agencies responsible for the various aspects of prisoner and offender care (for example, health and welfare agencies), to ensure an integrated approach to the management of the prisoner or offender.

Indicators to address the effectiveness of programs in addressing the diverse needs of offenders and prisoners are an important component of the corrective services framework. Specific indicators relevant to the detection of drug use are also under development.

### **Reparation to the community**

One objective for corrective services (box 10.1) is reparation. That is, to ensure work undertaken by offenders benefits the community, either directly or indirectly (by reducing costs to the taxpayer). All jurisdictions have a strong commitment to community reparation through the performance of community work by offenders. For example, in 1999-2000, offenders on community correction orders worked over 3 million hours of community work. Some prisoners also undertake community work programs.

A continuing policy issue for corrective services, as for the wider criminal justice system, is the need to balance community expectations of compensation and reparation for crimes committed against other sentencing objectives (such as deterrence, punishment, rehabilitation, and containment), and to balance the manner in which these diverse sentencing goals are expressed in correctional objectives (such as requirements to maintain prisoner security and community safety as well as minimum standards of prisoner care). The indicator framework reflects the importance of community work as a key aspect of community reparation.

Various issues affect the opportunity to address these diverse expectations effectively, including: the growth in prisoner and offender numbers (which continued in 1999-2000); changes in the characteristics of the prisoner and community correction offender populations; the time and cost of increasing prison capacity by constructing new prisons and expanding existing facilities; and the resources available to develop and operate programs and facilities, both in custody and in the community.

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## 10.3 Framework of performance indicators

The National Corrections Advisory Group review of key indicators highlighted the diversity of correctional activities and the differences in service provision and data collection across jurisdictions. As a result, the corrections framework has been revised in this Report to more accurately represent the major functions and activities of correctional systems. All existing indicators have been incorporated into the revised framework, although some have been repositioned. The new framework has been approved by Corrective Services Administrators and endorsed by Corrective Services Ministers.

Performance is reported against six key result areas based on the common objectives for corrective services (box 10.1). As part of the review of the performance indicator framework, the five objectives presented in previous years have also been revised.

### Box 10.1 Objectives for corrective services

Corrective services' *effectiveness* indicators relate to the objectives of:

- containment — to protect the community by the sound management of prisoners commensurate with the risks they pose to the community, and to ensure the environment in which prisoners are managed enables them to achieve an acceptable quality of life consistent with community norms;
- community — to protect the community by the sound management of offenders commensurate with the risks they pose to the community, and to ensure the environment in which offenders are managed enables them to achieve an acceptable quality of life consistent with community norms through referral to social support agencies;
- reparation — to ensure work undertaken by prisoners or offenders benefits the community either directly or indirectly (by reducing costs to the taxpayer);
- offender programs — to provide programs and opportunities that address the causes of offending and maximise the chances of successful re-integration into the community; and
- advice to sentencing and releasing authorities — to provide sentencing and releasing authorities with advice to assist on the determination of the disposition of offenders, their release to parole, and necessary conditions for their supervision and post-release supervision.

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**Box 10.1 (continued)**

These objectives are to be met through the provision of services in an equitable and efficient manner.

Corrective services' *efficiency* indicators relate to the objective of:

- resource management — to manage resources so as to efficiently cost and effectively deliver correctional services.

Key changes to the framework are:

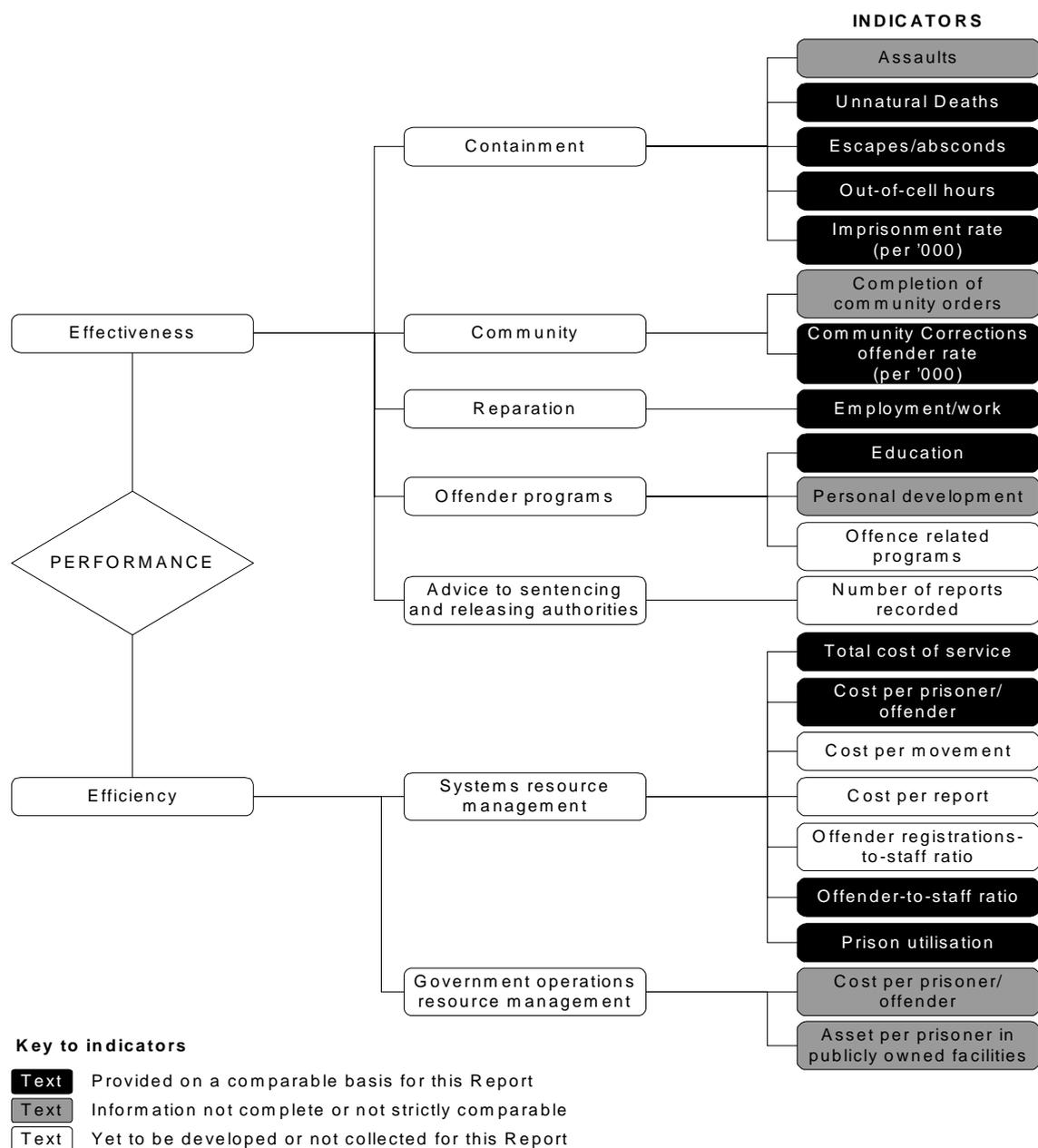
- the separation of containment and supervision aspects of prisoner and offender management to give appropriate recognition of the role of community corrections and the different responsibilities of custodial and non-custodial sanctions;
- the introduction of new separate measures to assess the efficiency and effectiveness of advice undertaken by community corrections staff to sentencing and releasing authorities; and
- the realignment of efficiency indicators to more appropriately reflect the different components relevant to measuring the efficiency of corrective services in a manner that addresses differences in corrective services activities and responsibilities across jurisdictions.

Community corrections orders have been reclassified into three categories. Restricted movement orders subject offenders to a system of restricted movement, including supervision or electronic monitoring. They replace the previous category of home detention. Reparation orders place offenders under a community service bond or order that requires them to undertake unpaid work or fine options. It replaces two previous categories — community service bonds/orders and fine option orders. Supervision (compliance) orders apply to all other offenders. The aim of refining these categories is to ensure they more closely align with the revised framework of indicators and to improve consistency between jurisdictions.

Definitions and counting rules were also refined during 1999-2000 as part of the continuing effort to ensure jurisdictional comparability on all indicators. Past years data have been updated where possible, in accordance with refined counting rules and definitions. This Report presents some historical data that may be different from data published in the previous Report for a number of jurisdictions (and tables have been footnoted accordingly). In other cases, it has not been possible to re-calculate historical data, so any conclusions about changes within individual jurisdictions need to be considered in this context.

Figure 10.4 provides performance indicators for each of the objectives identified in box 10.1. Jurisdictions continue to investigate comparability issues through the National Corrections Advisory Group each year and work to improve the counting rules for performance measures.

Figure 10.4 Performance indicators for corrective services



Relevant effectiveness indicators such as assaults and escapes are reported separately for periodic detainees. Relevant efficiency indicators such as unit cost per prisoner include periodic detainees with prisoners, calculated on a 2/7 basis to

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reflect that prisoners in periodic detention spend two days a week in prison. Given the ACT's unique circumstances of contracted service arrangements, the ACT indicators have been presented according to the most appropriate representation of effectiveness and cost, that is, either separately for remand prisoners and/or periodic detainees held in ACT centres, or as the total ACT prisoner population (whether held in NSW or ACT facilities).

Certain indicators are under development and, while not published in this Report, are expected to be included in future Reports. These indicators include: offence related programs; the number of reports recorded; the cost per movement; the cost per report; and offender registrations-to-staff ratio.

## **10.4 Key performance indicator results**

Differences in the settings for service delivery, geographic dispersal and prisoner/offender population profiles have an impact on the effectiveness and efficiency of correctional service systems. Appendix A contains detailed statistics and short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter.

### **Effectiveness**

#### *Containment*

Prison indicators of containment are particularly vulnerable to the effects of small numbers, especially when expressed as a rate of total prisoner populations in jurisdictions with relatively small average daily prisoner populations. Given small absolute numbers in many cases, care should be used when comparing effectiveness indicators across jurisdictions and over time within jurisdictions. A single death in the smallest jurisdiction, for example, can double the rate of deaths in custody, but six deaths in the largest jurisdiction may change the rate by only one percentage point.

#### *Assaults*

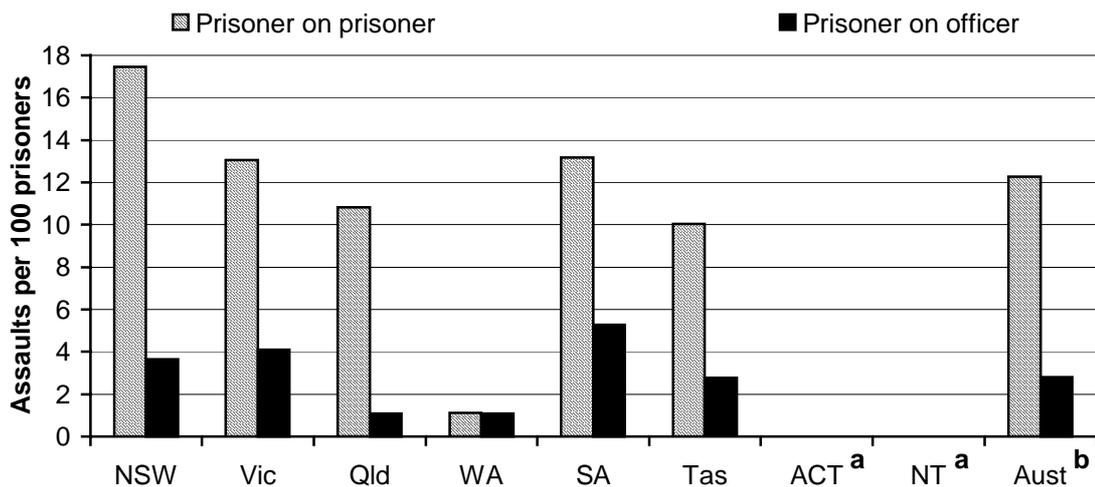
Assault incidents are counted differently by jurisdictions. The type of assault is not weighted for severity and may range from a relatively minor incident, to sexual assault or major injury. Assault indicator definitions are being refined to improve comparability across jurisdictions; in future years, jurisdictions will separately

report assaults in serious and minor categories. Results reported to date are indicative rather than strictly comparable.

In 1999-2000, WA reported the lowest rate of assault by prisoners on other prisoners, at 1.1 assaults per 100 prisoners (based on the average number of prisoners per year) and NSW recorded the highest (17.4). The reported rate of assaults by prisoners on officers ranged from 1.1 per 100 prisoners in both WA and Queensland to 5.3 in SA (figure 10.5). The ACT and the NT did not report on either indicator in 1999-2000.

In NSW, the rate of assaults on periodic detainees by other periodic detainees was 1.6 per 100 detainees, and the rate of assaults on officers was 0.2 (table 10A.22). The ACT did not report on this indicator in 1999-2000.

Figure 10.5 Prisoner assaults, 1999-2000



<sup>a</sup> The ACT and NT did not report on this indicator. ACT have concerns about data quality and NT data is not comparable. <sup>b</sup> Australian calculations exclude ACT and NT prisoners.

Source: table 10A.7.

### Unnatural Deaths

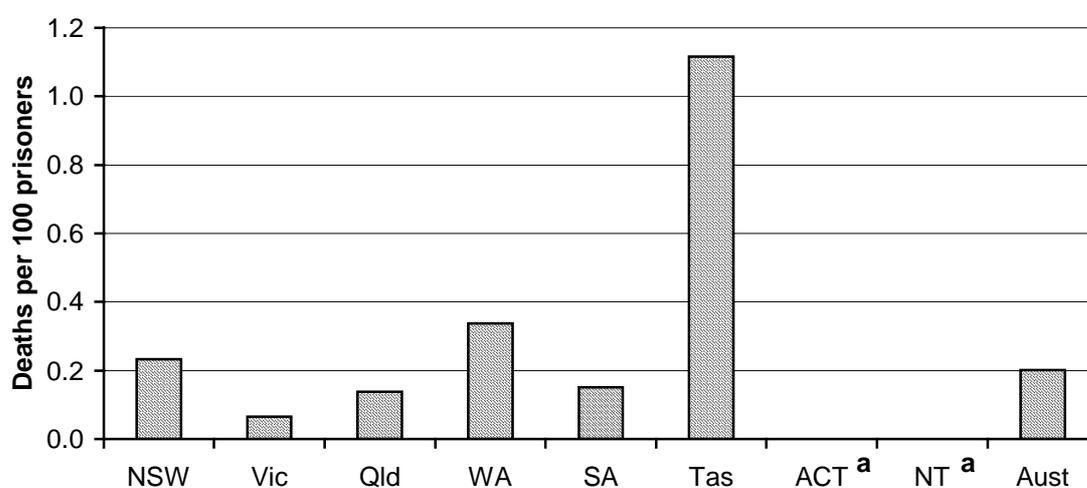
In line with the review of the correctional indicator framework in 1999, only the rate of deaths from apparent unnatural causes is considered to be a relevant measure of the objective of containment. Information on the number of deaths from all causes is available in individual jurisdictional tables on the CD-ROM.

Death rates for total prisoners from apparent unnatural causes ranged from zero in the ACT and the NT, to a rate of 1.12 per 100 prisoners in Tasmania (figure 10.6). The lowest Indigenous death rate (that is, the number of deaths of Indigenous

prisoners per 100 Indigenous prisoners) from apparent unnatural causes was reported at zero for six of the eight jurisdictions. NSW recorded the highest rate at 0.43 per 100 Indigenous prisoners. The equivalent rate for non-Indigenous prisoners ranged from zero in the ACT and the NT to 1.25 in Tasmania (table 10A.8).

Neither of the two jurisdictions operating periodic detention reported deaths of periodic detainees in 1999-2000 (tables 10A.22 and 10A.60).

**Figure 10.6 Total prisoner death rates from apparent unnatural causes, 1999-2000**



<sup>a</sup> The ACT and NT had zero deaths.

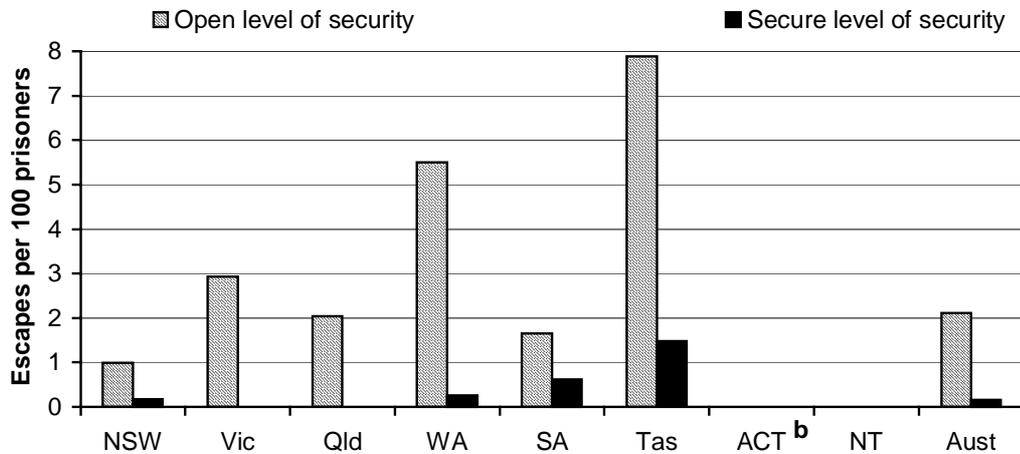
Source: table 10A.8.

### *Escapes/absconds*

The NT reported the lowest rate (zero) of escapes/absconds from open custody in 1999-2000, and Tasmania reported the highest (7.9 per 100 prisoners). The rate for secure custody ranged from zero in Victoria, Queensland and the NT to 1.5 per 100 prisoners in Tasmania (figure 10.7).

The absconding rate among prisoners serving periodic detention was 0.3 per 100 prisoners for NSW. The ACT did not report on this indicator in 1999-2000 (tables 10A.22 and 10A.60).

Figure 10.7 Prisoner escape/abscondment rate, 1999-2000<sup>a</sup>



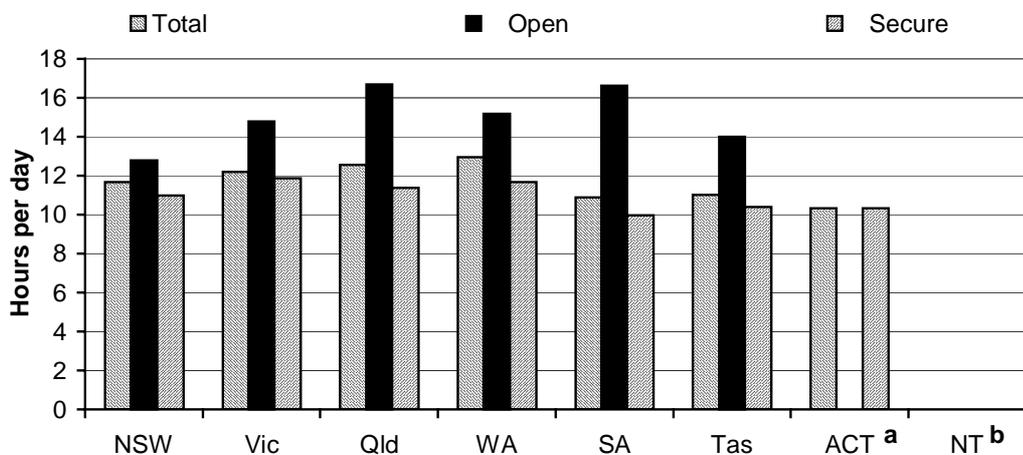
<sup>a</sup> Victoria, Queensland and the NT had zero escape rates for secure custody and the NT zero escapes/absconds from open custody. <sup>b</sup> The ACT did not report on escapes from secure custody, given concerns about data quality.

Source: table 10A.9.

### Out-of-cell hours

SA reported the lowest average daily out-of-cell hours for all prisons combined in 1999-2000 (10.9 hours per day) and WA reported the highest (12.9 hours per day). Out-of-cell hours for open custody ranged from 12.8 per day in NSW to 16.7 per day in Queensland. The ACT is excluded from both comparisons because ACT prisons do not accommodate open custody prisoners. Out-of-cell hours for secure custody ranged from 10.0 hours per day in SA to 11.9 in Victoria (figure 10.8).

Figure 10.8 Average out-of-cell hours, by type of prisoner, 1999-2000



<sup>a</sup> The ACT had no open custody facilities. The secure rate is for the remand centre. The ACT total rate is equal to the rate for secure facilities. <sup>b</sup> NT data is not comparable.

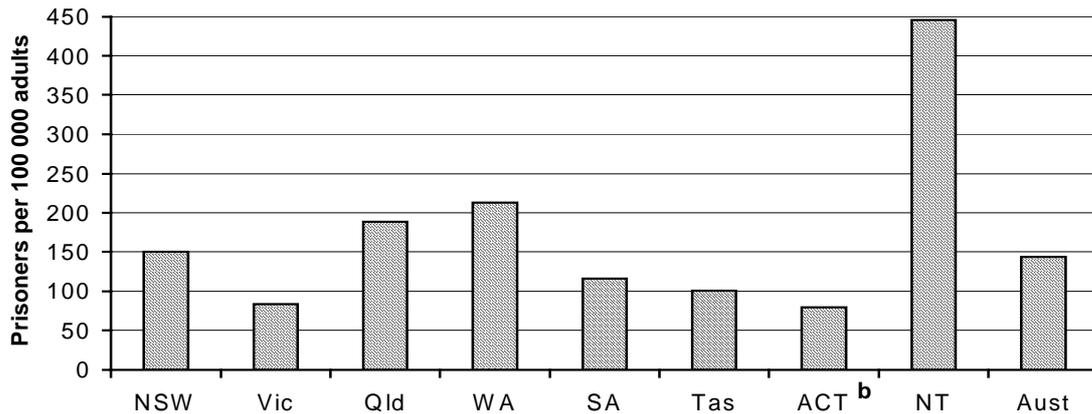
Source: table 10A.10.

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## Imprisonment rate

The rate of imprisonment per 100 000 adults (excluding periodic detainees) ranged from 80 in the ACT to 446 in the NT in 1999-2000 (figure 10.9). The imprisonment rate per 100 000 adults for periodic detention was 26 in NSW and 29 in the ACT.

Figure 10.9 Imprisonment rates, 1999-2000<sup>a</sup>



<sup>a</sup> Imprisonment rates for all prisoners are based on the daily average prisoner population supplied by States and Territories, calculated against a general population as at December 1999, aged 17 years or over in Victoria, Queensland, Tasmania and the NT, and 18 years or over in NSW, WA, SA and the ACT. <sup>b</sup> The ACT data include prisoners held on remand in the ACT and ACT prisoners held in NSW prisons, and NSW rates include ACT prisoners held in NSW facilities. Australian rates are calculated to exclude any double counting of ACT prisoners held in NSW prisons.

Source: table 10A.4.

## Community

### Completion of community orders

A key effectiveness indicator relevant to the management of offenders in the community is the successful completion of orders. Unsuccessful completion occurs when the offender breaches an order (failing to comply with the conditions of the order) or commits a further offence. Data needs to be interpreted with caution because, for example, a 100 per cent order completion figure could mean either exceptionally high compliance or a failure to detect or act on breaches of compliance. Data are also affected by differences in the risk levels of offender populations and policy decisions that drive the determination of risk. High risk offenders experiencing a higher level of surveillance have a greater likelihood of being detected and breached. High breach rates, therefore, may be seen in some jurisdictions as a positive outcome reflecting tougher management of community based orders.

Completion rates for total orders ranged from 60 per cent in Queensland to 90 per cent in Tasmania in 1999-2000. Successful completion of restricted movement orders (for those five jurisdictions in which this program operated) ranged from 66 per cent in SA to 96 per cent in the NT. Completion rates for reparation orders ranged from 59 per cent in Queensland to 92 per cent in the ACT. Completion rates for supervision orders ranged from 58 per cent in Victoria to 95 per cent in Tasmania (figure 10.10).

Figure 10.10 **Successful completion of community corrections orders, 1999-2000**



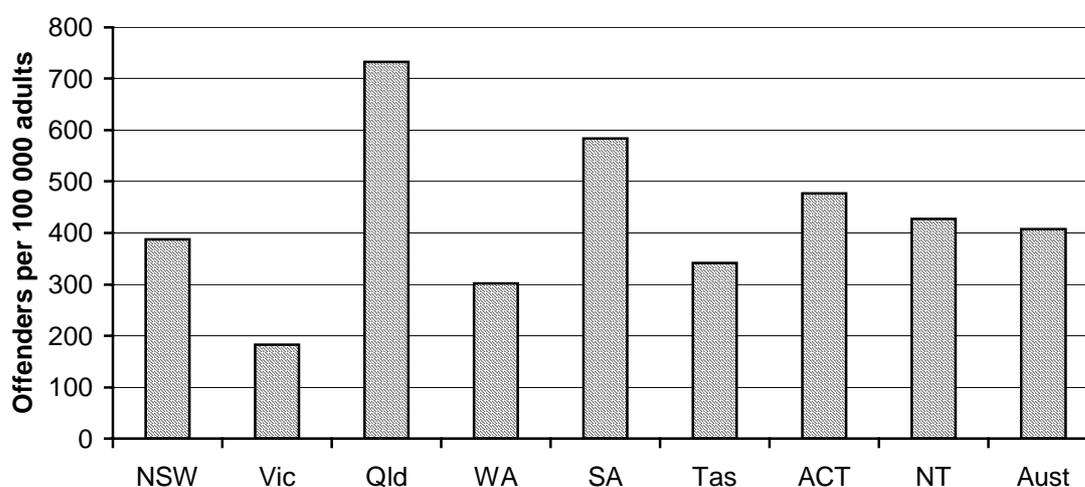
<sup>a</sup> Victoria, Tasmania and the ACT did not have restricted movement orders in 1999-2000.

Source: table 10A.11.

### *Community correction offender rate*

Victoria reported the lowest community corrections rate for all offenders in 1999-2000 (183 per 100 000 adults) and Queensland reported the highest (732 per 100 000 adults) (figure 10.11). Rates for Indigenous offenders ranged from 1176 per 100 000 Indigenous adults in the NT to 3876 in the ACT (table 10A.4). However, jurisdictional comparisons need to be interpreted with caution, especially for those States and Territories with low Indigenous populations where small number effects can introduce statistical variation that does not accurately represent real trends over time or consistent differences from other jurisdictions. This is particularly relevant for the ACT Indigenous offender rates reported here.

Figure 10.11 Community corrections rate, 1999-2000<sup>a</sup>



<sup>a</sup> Rates are based on the daily average offender population supplied by States and Territories, calculated against a general population of either 17 or 18 years and over, depending on the age at which persons are received into adult custody.

Source: table 10A.4.

### *Reparation*

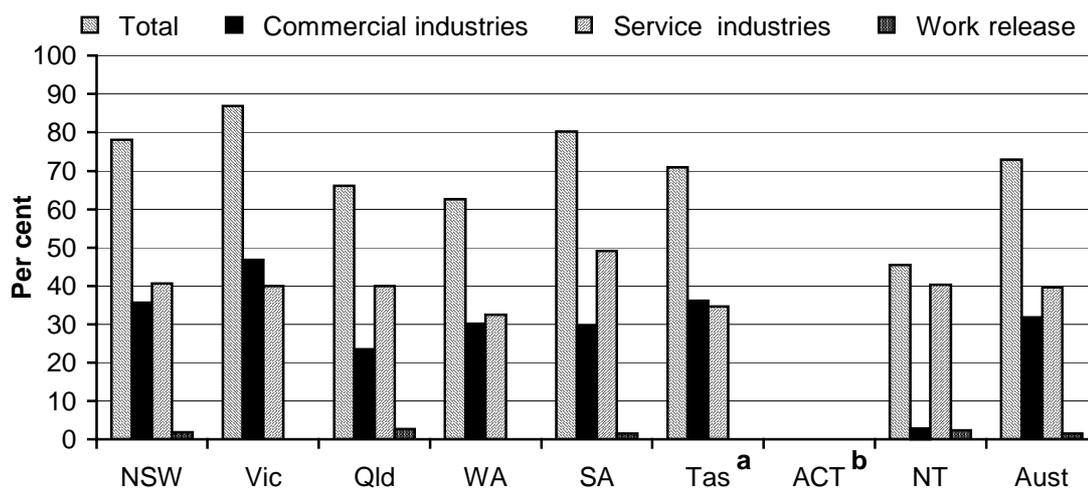
#### *Prisoner employment*

Prisoner work provides reparation by generating income from prison industries (industries that are run on a commercial basis and aimed at an external clientele) and by offsetting expenditure through work in prison services (work undertaken to service the prison or unpaid community work by prisoners). All jurisdictions showed a significant number of prisoners employed in prison industries or services or, in a smaller number of cases, working in the community as part of a pre-release scheme whereby they are employed under industrial award conditions. The ACT was not included in this analysis because that jurisdiction holds only remand prisoners.

Victoria reported the highest percentage employed in 1999-2000 (87 per cent of prisoners eligible to work) and the NT reported the smallest percentage (46 per cent) (figure 10.12). These comparisons need to be interpreted with caution, because factors outside the control of corrective services (such as local economic conditions) affect their capacity to attract commercially viable prison industries, particularly where the prisons are remote from population centres.

The employment rate among periodic detainees in 1999-2000 in the two jurisdictions operating periodic detention was 64 per cent in NSW and 34 per cent in the ACT (tables 10A.22 and 10A.60). This figure was calculated against the total population of persons serving periodic detention orders. In the ACT, all detainees attending the residential component were employed in 1999-2000.

**Figure 10.12 Proportion of eligible prisoners employed, 1999-2000**



<sup>a</sup> Based on number of prisoners employed as at 30 June. <sup>b</sup> The ACT held only remand prisoners.

Source: table 10A.12.

### *Community work by community corrections offenders*

These indicators reflect corrective services' responses to court orders. Hours ordered to be worked depend on jurisdictional legislation, court sentencing practices and, in particular, government policy on dealing with fine defaulters.

The ACT reported the highest average number of hours ordered to be worked per offender (105 hours) and Tasmania reported the lowest (53 hours). However, Tasmania and Queensland community work data include only hours to be worked on orders commenced during the year; they are not directly comparable with data from other jurisdictions, which include hours remaining to be worked on existing orders as well as new orders. NSW and Victoria did not report on this measure in 1999-2000 (table 10A.12).

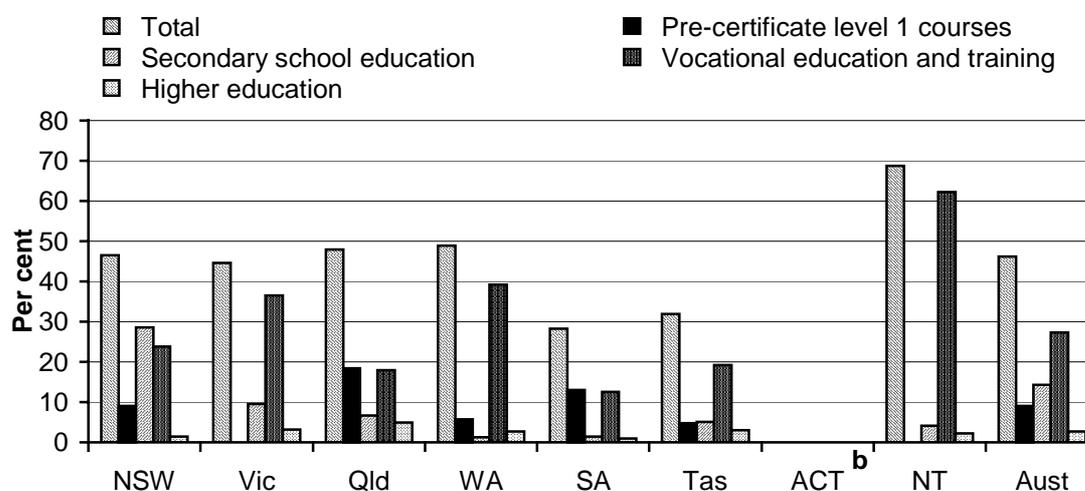
The ACT also reported the highest number of hours actually worked per offender (66 hours) while SA reported the lowest (30 hours). NSW did not report on this indicator in 1999-2000. SA reported the highest ratio of hours ordered to hours worked in 1999-2000 (2.4) and Tasmania reported the lowest (1.1) (table 10A.12).

## Offender programs

### Education

Enhancing employment opportunities through education and training is important for successfully re-integrating prisoners into the community and reducing the risk of re-offending. The percentage of eligible prisoners undertaking education or training courses in 1999-2000 ranged from 28 per cent in SA to 69 per cent in the NT. The proportion of prisoners undertaking different types of education and training courses varied across jurisdictions, with the NT reporting the highest percentages in vocational education and training (62 per cent), NSW reporting the highest in secondary school sector courses (29 per cent), and Queensland reporting the highest in both higher education sector and pre-certificate level 1 courses (5 per cent and 18 per cent respectively). Education indicators were not applicable to the ACT, given that only remand prisoners are accommodated in the ACT (figure 10.13).

Figure 10.13 **Proportion of prisoners enrolled in education and training, 1999-2000<sup>a</sup>**



<sup>a</sup> Prisoners eligible to participate in education are defined differently in different jurisdictions. See single jurisdiction tables for details. Classification of education types in 1999-2000 is based on the Australian Qualification Framework, under which the vocational education and training category includes advanced diplomas, diplomas and certificates I – IV; the secondary schools education category includes senior secondary and certificate of education; and the higher education category includes doctoral and masters degrees, graduate diplomas, bachelor degrees, diplomas and advanced diplomas. <sup>b</sup> The ACT held only remand prisoners.

Source: table 10A.13.

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### *Personal development*

The relevant indicator for community corrections is the number of offenders undertaking personal development courses provided by, or on referral from, corrective services. This indicator was introduced for the first time in the 1998 Report and only two jurisdictions were able to report on this indicator for 1999-2000 — WA (48 per cent) and the NT (60 per cent) (table 10A.13).

### *Offence related programs*

This indicator is still under development, although some progress has been made in defining the indicator and developing counting rules. Appropriate information collection systems need to be developed and implemented before the indicator can be reported on a consistent basis in future reports.

## **Efficiency**

### *System resource management*

System resource management is the management of resources and the provision of services by:

- government owned and managed facilities; and
- government or privately owned facilities managed under contract by a private sector organisation.

If corrective facilities are owned and managed by government only, then system resource management indicators are also government operations resource management indicators.

There has been substantial work to improve the comparability of resource management indicators during the year. Under the revised framework presented in this chapter, two new indicators have been introduced to present the unit costs of different components of corrective service activities that previously were not addressed as discrete functions. These indicators are still under development.

Existing indicators, particularly unit costs, have been refined to provide more accurate and appropriate comparisons across jurisdictions; in particular, superannuation costs, payroll tax, depreciation and the user cost of capital are treated more consistently across jurisdictions in 1999-2000 so unit cost figures are more comparable across States and Territories. Not all jurisdictions have been able to amend previous years' data in accordance with the refined definitions and

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counting rules, so 1999-2000 cost data are not directly comparable with data from previous years.

Even when based on comparable information, cost indicators are affected by factors other than differences in performance efficiency. These include the composition of the prisoner population (such as security classification, the number of female or special need prisoners, and the number of periodic detainees), the size and dispersion of the area serviced, and the scale of operations.

### *Total cost of service*

This measure is an aggregate of all corrective service system costs (prisons, community corrections, and transport and escort services). For comparability with other sectors of the criminal justice system discussed in the 'Justice preface', it is calculated per capita of the total population, while other unit costs in the corrective services framework are calculated per head of the adult population (that is 17 or 18 years and over, depending on the relevant age at which persons are remanded or sentenced to adult custody in each jurisdiction). Results have been presented in section 10.1 (figure 10.1).

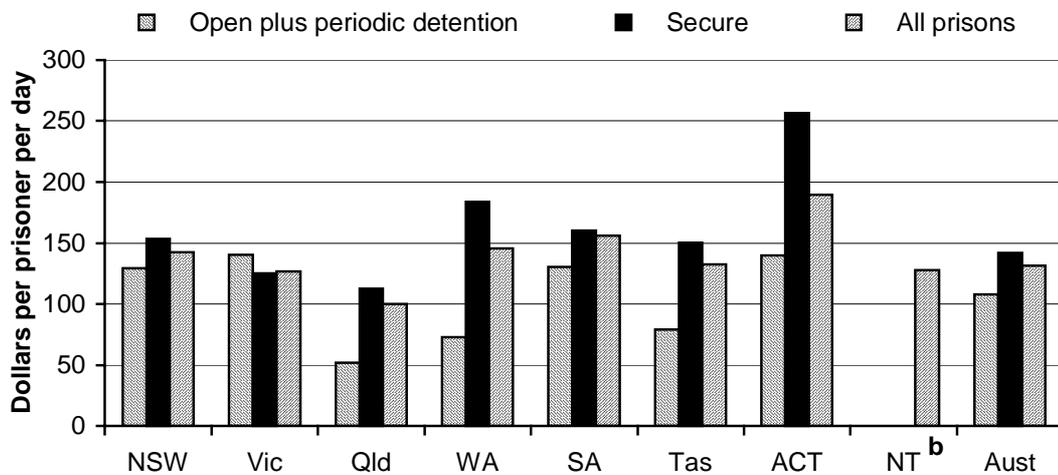
### *Cost per prisoner (all prisons)*

A measure of the efficiency in systemwide resource management is the total cost of prison services divided by the number of prisoners per day (unit costs). Average recurrent cost per prisoner per day (for open and secure prisons combined) ranged from \$100 in Queensland to \$190 in the ACT in 1999-2000. Calculating costs for open and secure custody separately, Queensland maintained the lowest unit cost for secure prisons at \$113 and the ACT reported the highest unit cost at \$256. Queensland also showed the lowest unit costs for prisoners in open custody (\$52) and Victoria reported the highest (\$141) (figure 10.14).

### *Prison utilisation*

The system's prison utilisation rate is considered to be an indicator of the efficiency with which private and publicly owned assets are employed. The optimum rate of prison utilisation is not 100 per cent, because facilities need to accommodate the transfer of prisoners, provide special purpose accommodation such as hospital and protection units, provide separate facilities for males and females and for different security levels, and deal with short term fluctuations in prisoner numbers. The internationally accepted rate is 85-95 per cent (recommended by the Australian Institute of Criminology, the Council of Europe and the American Correctional Association).

Figure 10.14 Cost of prisons, 1999-2000<sup>a</sup>

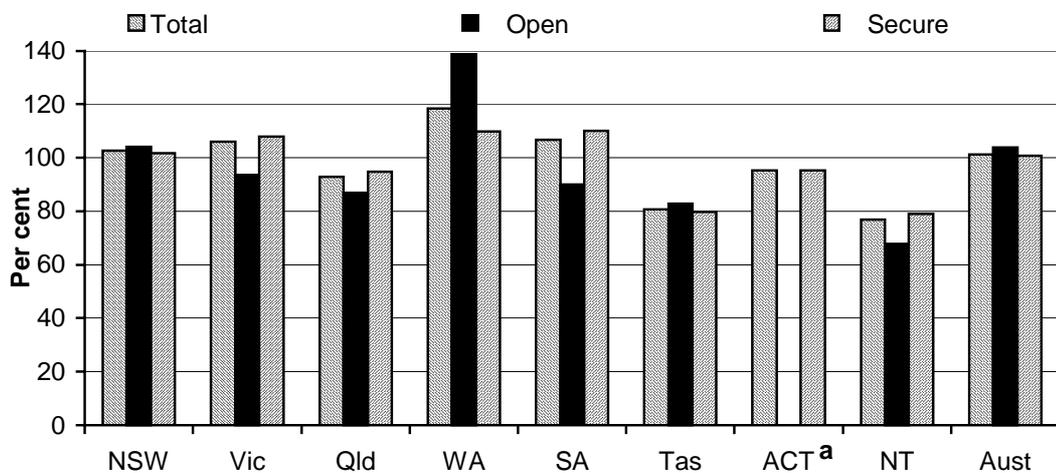


<sup>a</sup> Unit cost is calculated against total recurrent expenditure less (where applicable to the jurisdiction) consolidated funds and receipts, payroll tax, capital asset charges and other associated expenses such as debt servicing fees, depreciation or accommodation fees. <sup>b</sup> The NT did not report on open and secure custody costs in 1999-2000.

Source: table 10A.6.

Prison utilisation for all prisons (open plus secure) ranged from 77 per cent in the NT to 118 per cent in WA in 1999-2000. Rates in NSW, Victoria, WA and SA exceeded 100 per cent of current design capacity. (Rates exceed 100 per cent when more prisoners are housed in a facility than allowed for in its design). The NT maintained the lowest secure (79 per cent) and open (68 per cent) prison utilisation rates. WA and SA had the highest secure custody utilisation rate (110 per cent) and WA had the highest open custody utilisation rate (139 per cent) (figure 10.15).

Figure 10.15 Prison capacity utilisation rates, 1999-2000



<sup>a</sup> The ACT does not operate open prisons.

Source: table 10A.15.

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### *Cost per offender (community corrections)*

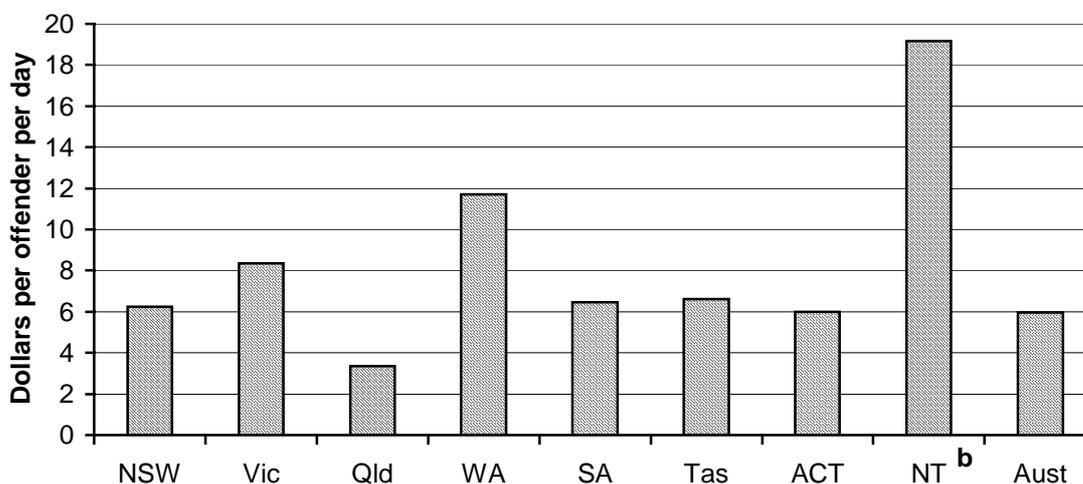
A measure of the efficiency in the system resource management is the total cost divided by the number of offenders per day (unit costs). The reported unit costs are also government-only unit costs for all jurisdictions except Queensland, where there are some privately operated community corrections facilities.

Cost per offender per day in community corrections ranged from \$3 in Queensland to \$19 in the NT in 1999-2000. This indicator, as with prisoner costs, is particularly vulnerable to the effects of the different offender populations (and associated supervision requirements), dispersion and size factors among jurisdictions (figure 10.16).

### *Offender-to-staff ratio*

Offender-to-staff ratios for community corrections ranged from 11 offenders per staff member in the NT to 39 in Queensland in 1999-2000. The ratio of offenders to 'operational staff' ranged from 16 in the NT to 57 in SA, and the ratio for 'other staff' ranged from 39 in the NT to 157 in Queensland (figure 10.17).

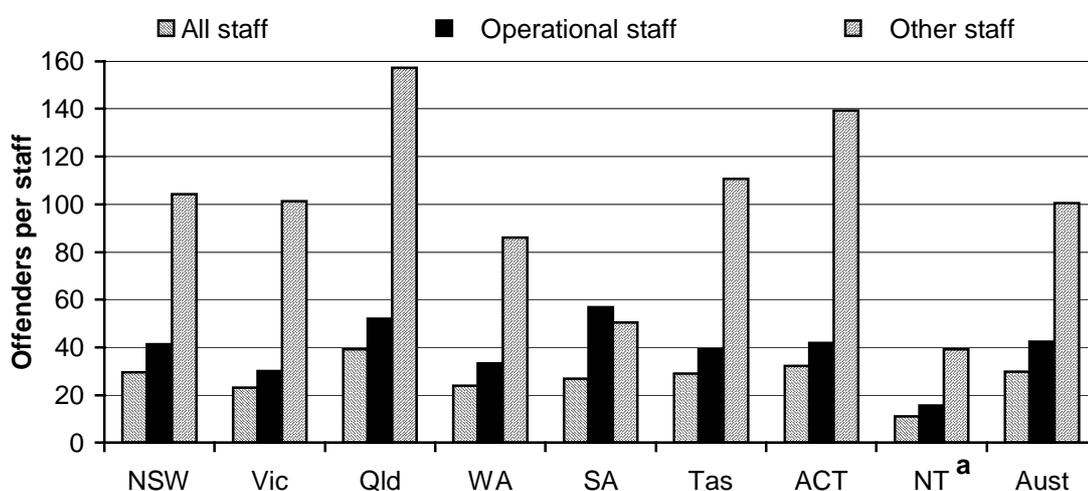
Figure 10.16 **Cost of community corrections, 1999-2000<sup>a</sup>**



<sup>a</sup> Unit cost is calculated against total recurrent expenditure less (where applicable to the jurisdiction), consolidated funds and receipts, payroll tax, capital asset charges and other associated expenses such as debt servicing fees, depreciation or accommodation fees. <sup>b</sup> The NT unit costs do not take into account the impact of juvenile detainees supervised by community correction officers, because these young offenders do not fall within the scope of the daily average offender population.

Source: table 10A.6.

Figure 10.17 Community corrections offender-to-staff ratio, 1999-2000



<sup>a</sup> The NT ratios do not take into account the impact of juvenile detainees supervised by community corrections officers, because these young offenders do not fall within the scope of the daily average offender population.

Source: table 10A.14.

### *Government operations resource management*

#### *Cost per prisoner*

The framework of indicators also identifies the unit cost per prisoner day for government operated prisons as a preferred indicator of efficiency. However, none of the four jurisdictions that have private prisons (NSW, Victoria, Queensland and SA) provided data on the unit cost of government operations. These jurisdictions expressed concerns about the comparability of the data as well as emphasising commercial-in-confidence considerations. Each jurisdiction, however, is committed to improving the reporting of this information for future years.

#### *Assets per prisoner in publicly owned facilities*

Value of assets per prisoner is an indicator of the capital inputs to corrective services. As an indicator of the use of government owned assets, it covers both government owned and operated prisons and government owned assets in privately operated prisons, calculated against the relevant prisoner population.

No jurisdiction provided data on this indicator because of concerns over the comparability of asset values. Each jurisdiction has stated that it will await the outcome of the Steering Committee's study into the comparability of asset values before considering releasing any data. The asset study is due to be completed early

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in 2001, and it is expected that following this study, jurisdictions will be in a better position to provide an appropriate efficiency indicator.

### *User cost of capital*

The user cost of capital for government services is the cost of the funds tied up in the capital used to deliver services (for example, the land and buildings used to house prisoners). The user cost of capital makes explicit the opportunity cost of this capital (the return forgone by using the funds to deliver services rather than investing them elsewhere or using them to retire debt). Failing to account for a user cost of capital can lead to significant underestimating of costs for those services for which government capital is a major input.

As with the previous discussion, no jurisdiction has provided data on asset values which means that the user cost of capital cannot be calculated. The concerns of jurisdictions will be incorporated into the asset study, and it is anticipated that data in future Reports will be included for this indicator.

### *Cost per offender*

Cost per offender for each jurisdiction is shown in figure 10.16. Except for Queensland, this cost per offender represents a systemwide and government-only measure of efficiency, because there are no non-government operated community corrections facilities.

## **10.5 Future directions in performance reporting**

Jurisdictions will continue to refine definitions and counting rules to maximise comparability across States and Territories. It is anticipated that some of the indicators identified within this chapter as currently under development will be reported next year. The indicators where new performance reporting may be feasible include:

- Offence-related programs;
- Number of reports recorded;
- Cost per movement;
- Cost per report; and
- Offender registrations-to-staff ratio.

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As identified previously, jurisdictions will also be awaiting the outcome of the Steering Committee's examination into the comparability of asset values. It is anticipated that the results of this study may assist jurisdictions in providing more comparable asset values, as well as developing an appropriate efficiency indicator.

NSW, Victoria, Queensland and SA will also continue to work on improving the 'unit cost per prisoner' data for government operated prisons to overcome problems associated with comparability of data. As well, all jurisdictions will continue to refine and improve their unit cost data for systemwide operations.

It is anticipated that from next year the chapter will also look at gradually introducing a time-series. At least initially, the time-series will be based around the two most recent years of data and (subject to further development) may incorporate:

- Total recurrent expenditure per head of population by jurisdiction;
- Recurrent expenditure on all prisons by jurisdiction;
- Recurrent expenditure on community corrections by jurisdiction;
- Death rates from apparent unnatural causes by jurisdiction;
- Imprisonment rates by jurisdiction; and
- Community corrections rates by jurisdiction.

## **10.6 Jurisdictions' comments**

This section provides comments from each jurisdiction on the services covered in this chapter and attachment 10A in the CD-ROM. Appendix A contains short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter. In addition, detailed statistics covering various aspects such as age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (such as Indigenous status and ethnicity) are included in the appendix.

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## **New South Wales Government comments**

“ In line with the Corrective Services Administrators, NSW remains committed to the development, refinement and collection of pertinent performance indicators with a view to common reporting protocols and promoting unambiguous interpretation. The work undertaken by the National Corrections Advisory Group in 1999-2000 has assisted in continuing to improve upon the comparability of performance measures across jurisdictions, particularly as they relate to community corrections.

In 1999-2000 the number of individuals within the NSW correctional system continued to grow thereby placing additional pressure upon accommodation, staffing and resources.

The imprisonment rate in NSW has grown from 133.0 in 1997-98 to 150.3 in 1999-2000. The average prison population grew by 6 per cent in 1999-2000 preceded by an 8 per cent increase in 1998-99. In community corrections offender registrations increased by 13 per cent per year in both 1999-2000 and 1998-99.

Strategies designed to address these trends have been implemented, namely the opening of centres at Ivanhoe and Brewarrina as well as the decision to build a correctional facility at Kempsey. The Drug Court program and the Home Detention Program are two examples of strategies designed to manage offenders in the community thereby diverting them from a custodial sentence. Monitoring and evaluation of both of these programs is ongoing and to date the results have been encouraging.

The NSW Department of Corrective Services is also engaged in implementing recommendations arising out of the NSW Drug Summit, some in collaboration with other NSW justice sector agencies. Examples of these strategies include:

- the development of therapeutic units within the NSW correctional system to address substance abuse,
- the provision of 24-hour service, in collaboration with the Corrections Health Service, to assist in the detoxification and stabilisation of prisoners at a number of correctional centres, and
- the expansion of the Drug Dog Detector Unit to stem the flow of drugs entering the correctional system.

Notwithstanding the pressures currently impinging upon the NSW correctional system, performance in 1999-2000 compared favourably with previous year's outcomes for this state. In particular, the NSW rate of deaths by apparent unnatural causes at 0.23 per hundred prisoner years is the lowest for four years and the open perimeter escape rate at 0.99 per hundred prisoners is the lowest recorded in this data collection. Once again, the completion rate for offenders with community orders was maintained with eight in ten offenders (80 per cent) registering a successful completion. Those offenders with Supervision Orders showed the highest success rate at 84 per cent.”

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## Victorian Government comments

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The adult imprisonment rate in Victoria has increased by almost 20 percent over the last 4 years but nevertheless remains very low in comparison to other jurisdictions. The daily average prison population in Victoria increased by between 6 to 8 percent per year over the last 4 years but, until 1999-2000, the prison utilisation rate remained below 100 percent of design capacity. The continued rate of increase in the prison population in the last year has since resulted in a utilisation rate of well over 100 percent. The shortfall in permanent beds has had to be bridged by the installation of a significant amount of temporary accommodation, eg. double-bunking, in the secure facilities.

The Victorian Government is committed to both effectively managing the demand for accommodation in the prison system as well as introducing a range of innovative programs designed to help prisoners and offenders break the cycle of reoffending. A major Prison Expansion Capacity Program will provide 357 extra beds within the next 3 years, with the first beds being fully operational in July 2001. In addition, a Building Design Project has been established, partly in response to recommendations by the State Coroner after investigations into prison deaths in Victoria. The project will develop guidelines for all new accommodation regarding cell design, prisoner safety and fire safety issues.

A range of new programs will be developed as part of a whole-of-government strategy to reduce offending through diversion and rehabilitation. The broad long-term goals of the programs will be to divert low risk offenders from entering the prison system, improve prisoners' preparation for release and post-release supervision and support, provide rehabilitation and treatment programs aimed at reducing reoffending, reduce illicit drug use within the prison system and improve crime prevention programs within correctional facilities.

Victoria has the second lowest cost per prisoner per day and by far the lowest cost of corrective services per head of adult population, indicating that service delivery in Victoria continues to be relatively cost efficient. The Government has indicated its intention to review the effectiveness of service delivery in corrections with regard to costs and other relevant issues.

Victoria improved its performance on effectiveness measures such as escapes, deaths and out-of-cell hours for prisoners and, under the revised rules for calculating the prisoner employment rate, Victoria compared well with other jurisdictions. While some of Victoria's outcomes - prison utilisation, education, assaults – declined, the State's overall performance continues to compare favourably with national outcomes.

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## Queensland Government comments

“ Corrective Services in Queensland has had a year of consolidation following the 1999 Commission of Inquiry into corrective services. Queensland continues to experience low levels of growth in overall daily population figures with less than 1 per cent increase over 1998-99 as compared to a 10 per cent increase the previous year.

The Department has continued to expand and modernise correctional centres throughout the state. The expansion of facilities is designed to reduce overcrowding and provide for future growth in prisoner numbers. Utilisation rates should continue to improve. The total utilisation rate has reduced from 101.4 per cent (Secure Custody 105.8 per cent) to 92.96 per cent, (Secure Custody 94.74 per cent). The total cost per day of securing prisoners has also reduced from \$105.65 to \$99.93.

Escapes from secure custody have also remained consistent with no escapes recorded for 1999/00. There was an increase in other escapes however overall the rate of escape has remained at 2.03 per cent. Natural and unnatural deaths in custody decreased with no unnatural deaths within the indigenous population. Queensland performed better than the national average in the number of unnatural deaths (suicides/murder). The rate of prisoner on prisoner assaults increased only slightly compared to the increase from 97/98 to 98/99. Queensland performed better than the national average.

Prisoners employed in service industries decreased while participation in commercial industries increased to 23.4 per cent. Employment rates overall have improved. Queensland was slightly below the national average in this indicator.

Queensland continues to provide effective low cost community corrections with consistent performance across all order types. There was a small decrease in successful completions in each order type. Overall Queensland is just below the national average. New approaches to fine default management in Queensland have started to impact in this area and performance is improving overall with a decline in the rate of negative growth.

Other initiatives for the year included:

- First mobile drug-testing vehicle acquired by community corrections
  - New draft legislation for Queensland released for consultation
  - Maryborough (500 beds) and Woodford (400 bed expansion) Correctional Centre projects begun
  - New *Code of Conduct* for employees released
  - Full-time community presence at Thursday Island and Yarrabah
  - Pilot Drug Court program commenced.
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## South Australian Government comments

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This year, once again, SA has actively contributed to the work of the National Corrections Advisory Group in advancing the suite of nationally comparable performance indicators, which will ultimately assist in the identification of benchmarks or best practice in the corrections environment.

The SA daily average prison population has declined for the third consecutive year, contrary to the national trend. The daily average in 1999-2000 was 1329 compared with 1475 in 1996-97, a decrease of almost 10%. The imprisonment rate in SA has fallen to 116.4, the third lowest rate behind the ACT and Victoria. The reasons for the decline are in part due to the introduction of fines enforcement and changes to sentencing legislation, and to a lesser extent, the introduction of specialist courts. Lower prisoner numbers has meant a higher average “cost per prisoner” because costs do not fall in direct proportion to prisoner numbers. Most prison costs are effectively fixed for small fluctuations in prisoner numbers. Costs can only be significantly influenced by the full closure of a cellblock or prison. Additionally, the daily average community corrections population decreased for the second consecutive year. In 1997-98 the population was 8366 compared with 6658 in 1999-2000, a decrease of 20%.

SA’s performance in 1999-2000 compared favourably with previous years:

- Apparent unnatural death rates for indigenous prisoners remained at zero for the second consecutive year and non indigenous prisoner unnatural death rates remained significantly lower than the national average.
- There was a substantial drop in secure and open perimeter escape rates.
- Slight improvements in average daily time out of cells for both security levels compared with last year.
- 80 per cent of all prisoners eligible to work were employed an increase from previous years.
- The overall rate of orders successfully completed continued to improve, with particular gains in both restricted movement and reparation orders this year.

Major developments during 1999-2000 in SA corrections were:

- The commencement of a major security upgrade at four of the State’s major prisons, and significant facility upgrades at a number of prison and community correctional centre sites.
- An Intelligence and Investigations Unit was established to collect information used to initiate joint police/prison investigations and operations.
- An expanded prisoner methadone program was implemented.
- Involvement in the management of offenders as the result of the establishment of a number of specialist courts aimed at providing drug, Indigenous and domestic violence offenders with specialised programs and diversion from custody.

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## Tasmanian Government comments

“ The Tasmanian prison population (remand and sentenced) has continued to increase, resulting in further pressure being placed on facilities and staff. Despite the opening of the Hobart Remand Centre in 1999, additional remand accommodation is consistently required within the maximum security prison at Risdon. The cost per prisoner per day continues to decrease and efforts are being made to recruit and train new officers to overcome staffing shortages.

The increased population, changes in the prisoner profile and the inflexibility of prison facilities within Tasmania have contributed to a continuation of the types of incidents experienced in recent years. Rates of assault, death and escape all remained high in 1999-2000. The findings from a Coronial Inquest into five deaths have yet to be handed down.

The Tasmanian government acknowledges the need for change in the physical prison environment. The Prison Infrastructure Redevelopment Program was recently announced, with large-scale planning for new facilities and services currently underway. It is envisaged that, with the prison population continuing to increase, it will become necessary to incorporate additional accommodation into existing facilities to deal with short-term overcrowding.

A new information system implemented in Community Corrections has enabled data to be collected in a more coordinated fashion. A similar information system is planned for implementation within Prison Services, commencing in 2001. As a result, Tasmania will be in a strong position to continue to provide data for the *Report on Government Services*, both for existing indicators and those under development.

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## Australian Capital Territory Government comments

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The 1999 – 2000 statistics for the Australian Capital Territory reveal a continued increase in the imprisonment rate and the community correction rate. The increased remand population has highlighted a consistent demand on the existing remand facilities in the ACT. All sentenced prisoners are held in NSW facilities under an agreement between the two governments.

The ACT Government is considering the establishment of a prison in the ACT to house remandees and ACT sentenced prisoners. The prison would be privately operated and would cater for all classifications of prisoner, and men and women. A Prison Project Office has been established within ACT Corrective Services and an ACT Prison Community Panel has been formed comprising representatives from a wide range of community based organisations. A preferred site for the prison has been identified. A feature of the project will be extensive consultation with the ACT community.

Use of additional short term facilities for detainees, including Court cells in the ACT Magistrate’s Court and the holding of remanded prisoners in NSW facilities. has seen a decline in the *Prison Design Capacity Use Rates* from 100.8% in the previous year to 95.2% for the 1999 – 2000 year. This rate should be seen, however, in the context of the accepted standard of 85% occupancy.

While low by Australian standards, the rate of imprisonment rose 11.3% on the previous year’s rate to 80 prisoners per 100 000 of the population. The average daily prisoner population rose from 165 in 1998 – 1999 to 186 in 1999 – 2000. The increase in the offender rate, which refers to offenders managed by Community Corrections rose by a similar amount, 10.3% as compared to the previous period.

The ACT Government is keen to support best practice offender program intervention. The Community Corrections area benefitted from a number of collaborative trials during the year. Significant developments included a Commonwealth funded psycho-educational program for perpetrators of domestic violence and a cognitive skills program for medium to high risk offenders, teaching more effective strategies and problem solving techniques in order to reduce recidivism.

High prisoner per day costs in the ACT are attributed to the small numbers of detainees that can be accommodated in the Remand Centre and Periodic Detention Centre. The opening of a prison in the ACT will provide an economy of scale because the majority of the ACT’s prisoners will then be held in the Territory. The Community Correction cost per offender per day reflects a much larger client group, and is equal to the Australian average for this measure.

Data for smaller jurisdictions can fluctuate dramatically from year to year due to a wide range of factors including small samples and populations. The ACT Government is keen to participate in the collection of data, and in the continued development of measures that constitute these national statistics.

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## Northern Territory Government comments

“ The Northern Territory Government is happy to continue in its support of the Report on Government Services. The data collection has proved beneficial to the business of Correctional Services, and is important in performance analysis and self improvement in the Territory where few valid comparisons can be made with other service providers.

The NT has two multi-classification prisons, each with its own open security facility, and located 1,500 kilometres apart. Prisons, Community Corrections and Juvenile Justice are all administered by the one Agency in the Territory, which poses significant management issues due to the jurisdictions' large geographical size (over 1.3M<sup>2</sup> kilometres), significant population dispersion with a relatively small mass (194,200 people), and a relatively high Indigenous population of approximately 28.5% (or 55,300 people).

The NT's daily average prisoner population for 1999-2000 was 614, a decrease of 10 over the previous year. This shows fairly static prisoner numbers for the past three years, and has given the NT the lowest prison utilisation in Australia for secure and open custody.

While their offender-to-staff ratios are low, Community Corrections' staff in the NT are unique in Australia, in that they all prepare statutory reports and manage caseloads (including home detention, supervision and reparation orders) with adult and juvenile clients, in the community and under custody or detention. With a total staff of around 60, Community Corrections had an average daily caseload of 589 community clients in 99/00. This group actually represents about 76% of their total caseload, and does not adequately reflect management of day to day remote area operations in the Top End, Katherine, Tennant Creek and Alice Springs regions.

The NT's contribution to community safety has been extremely effective in terms of adult deaths in custody and prisoner absconds/escapes, with no losses for the past two years in either category. This reflects well on current prisoner management and handling practices.

One of the single biggest rehabilitation and reintegration measures available to inmates is participation in education, and the NT continues to lead the country in this area with a strong emphasis on numeracy, literacy and vocational training. The continued success of the home detention (restricted movement) program is a feature of our successful management of community corrections' orders.

The NT's relatively high imprisonment rate is a product of its predominantly young, transient and male population, coupled with a large number of Indigenous people in remote areas.

This year saw our remand/imprisonment rates for foreign prisoners expand significantly with 127 (19.87%) people smugglers (predominantly Indonesian nationals) detained in custody as at 30 June 2000 up from 3 persons as at the 30 June 1999. This has presented a unique and challenging prisoner management task for Correctional Services, and the NT Government.”

## 10.7 Definitions

Table 10.1 Terms

<i>Term</i>	<i>Definition</i>
24-hour court cells	24-hour court cells are a place of detention located in court and/or police complexes which are managed by correctional officers and which accommodate sentenced/unsentenced prisoners/offenders for short periods of time (not including holding cells).
Community corrections	Community based management of court-ordered sanctions, post-prison administrative arrangements and fine conversions for offenders, which principally involve the provision of one or more of the following activities: supervision, programs, or community work.
Home detention	A corrective services program requiring offenders to be subject to supervision and monitoring by an authorised corrective services officer, while confined to their place of residence or place other than a prison.
Indigenous	A person was regarded as Indigenous if they identified themselves as either an Aboriginal or Torres Strait Islander person and if they were accepted as such by an Aboriginal or Torres Strait Islander community. Counting was by self-disclosure for the purposes of this data collection.
Offender	An adult person with a current community based corrections order (including bail supervision unless otherwise specified).
Open custody	A custodial facility where the regime for managing prisoners did not require them to be confined by a secure perimeter physical barrier irrespective of whether a physical barrier existed.
Periodic detainee	A person in respect of whom an order for periodic detention was in force.
Periodic detention	Periodic Detention was an order of confinement, imposed by a court of law, requiring that a person be held in a legally proclaimed prison or periodic detention facility for two consecutive days within a one-week period.
Prison	A legally proclaimed prison or remand centre which held adult offenders, excluding police prisons or juvenile detention facilities.
Prisoner	A person with a court-issued authority held in full time custody under the jurisdiction of an adult corrective service agency.
Private prison	A government or privately owned prison (see definition of prison) managed under contract by a private sector organisation.
Reparation (i)	Reparation is a sub-category of community-based corrections which refers to all offenders with a community service bond/order or fine option that requires them to undertake unpaid work.
Reparation (ii)	Reparation, in the broader context of this data collection, refers to work undertaken by prisoners or offenders that benefits the community either directly or indirectly by reduction in cost to the taxpayer.
Restricted movement	Restricted movement is a sub-category of community-based corrections which refers to offenders who are subject to a system of restricted movement including supervision and/or electronic monitoring.
Secure custody	A custodial facility where the regime for managing prisoners required them to be confined by a secure perimeter physical barrier.
Supervision (compliance)	Sub-category of community-based corrections which refers to all offenders (other than those categorised as restricted movement or reparation (i)).
Work order	A work order was defined as a community service order or bond which imposed work upon an offender. (Note: in some jurisdictions, fine options and expiations also require an undertaking by the offender to pay off the fine through community work).

Source: National Corrections Advisory Group (1999-2000 Data Collection Manual).

**Table 10.2 Descriptors<sup>a</sup>**

<i>Descriptor</i>	<i>Definition</i>
Community corrections rate	The annual average number of offenders per 100 000 population aged 17 or over in those jurisdictions where persons are remanded or sentenced to adult custody at 17 years of age or 18 and over in those jurisdictions where the age for adult custody is 18.
Daily average prisoner/periodic detention/offender population	The average number of prisoners, periodic detainees and/or offenders during the counting period.
Imprisonment rate	The annual average number of prisoners per 100 000 population aged 17 or over in those jurisdictions where persons are remanded or sentenced to adult custody at 17 years of age or 18 and over in those jurisdictions where the age for adult custody is 18.
Number of prisons/periodic detention centres	A facility gazetted as a prison, remand centre or periodic detention centre for adult offenders, operated or administered by State/Territory correctional agencies.
Recurrent expenditure	Expenditure of an ongoing nature incurred in provision of government services or programs, including salaries, payroll tax, maintenance and working expenses, grants and subsidies, other services, expenditure incurred by other departments on behalf of corrective services, contracted management services, capital asset charges and associated expenses, other recurrent costs, and relevant expenditure by umbrella and other departments.

<sup>a</sup> In some instances there is a variation with the NCAG data manual classification of 'descriptors' and 'indicators'.

Source: National Corrections Advisory Group (1999-2000 Data Collection Manual).

**Table 10.3 Indicators<sup>a</sup>**

<i>Indicator</i>	<i>Definition</i>
Assault	An assault was defined as an act of physical violence committed by a prisoner which is liable to cause an injury. Such acts may range in severity from a minor injury to a sexual assault and major injury. The rate is expressed per 100 prisoner years, calculated by dividing the total number of assaults by the daily average prisoner population, multiplied by 100.
Assets per prisoner/offender	The value of government owned and operated assets as a function of the daily average number of prisoners (or daily average number of offenders) held in publicly owned facilities.
Average number of hours to be worked per offender	The balance of community work hours to be worked per offender with active work orders containing community hours on the first day of the counting period and/or imposed new community work hours ordered during the counting period.
Average number of hours actually worked per offender	The number of actual hours worked per offender with a work order.
Completion rate of community orders	The proportion of community orders successfully completed (by order type) within the counting period.

(continued next page)

**Table 10.4 (continued)**

<i>Indicator</i>	<i>Definition</i>
Cost per prisoner/offender	The daily cost of managing a prisoner/offender, calculated against recurrent expenditure net of consolidated funds and receipts (ie own source revenue), payroll tax, capital asset charges and other associated expenses such as debt servicing fees, depreciation or accommodation fees.
Unnatural death rate	<p>The death wherever occurring (including hospital) of a person:</p> <ul style="list-style-type: none"> <li>• who is in prison custody;</li> <li>• whose death is caused or contributed to by traumatic injuries sustained, or by lack of proper care, while in such custody;</li> <li>• who dies or is fatally injured in the process of prison officers attempting to detain that person; or</li> <li>• who dies or is fatally injured in the process of that person escaping or attempting to escape from prison custody.</li> </ul> <p>And there is sufficient evidence to suggest, subject to a Coroner's finding, that the most likely cause of death is homicide, suicide, an accidental cause, or a drug overdose. The rate is expressed per 100 prisoner years, calculated by dividing the number of deaths by the daily average prisoner population, multiplied by 100.</p>
Education rate	<p>The number of prisoners actively participating in education as a proportion of those who are eligible for educational opportunities. Those excluded from the count include:</p> <ul style="list-style-type: none"> <li>• remandees who choose not to participate,</li> <li>• hospital patients or aged prisoners who are unable to participate,</li> <li>• prisoners whose protection status prohibits access to participation,</li> <li>• fine defaulters (who are only incarcerated for a few days at a time),</li> <li>• sub-groups of the above categories.</li> </ul>
Employment (prisoners and periodic detainees)	<p>The average number of prisoners or periodic detainees employed on the first day of each month as a proportion of those eligible to participate in employment. Prisoners excluded as ineligible for employment include prisoners undertaking full-time education, and prisoners whose situation may exclude their participation in work programs, for example:</p> <ul style="list-style-type: none"> <li>• remandees who choose not to work,</li> <li>• hospital patients or aged prisoners who are unable to work,</li> <li>• prisoners whose protection status prohibits access to work,</li> <li>• fine defaulters (who are only incarcerated for a few days at a time),</li> <li>• sub-groups of the above categories.</li> </ul>
Employment (community corrections)	The number of community work hours worked per offender during the counting period.
Escape/abscond	A person who escaped from Corrective Services' custody (including under contract). The rate is expressed per 100 prisoner years, calculated by dividing the number of escapes/absconds by the daily average prison population, multiplied by 100.

(continued next page)

**Table 10.3 (continued)**

<i>Indicator</i>	<i>Definition</i>
Offender-to-staff ratio	The level of staff supervision based on the number of staff employed and the average number of offenders.
Out-of-cell hours	The time during which prisoners were not confined to cells, averaged over all days of the year.
Periodic detention utilisation rate	The extent to which periodic detention capacity is meeting demand for periodic detention accommodation, calculated as the total daily average periodic detention population attending a residential component of the order, divided by average usable periodic detention design capacity.
Personal development	The percentage of offenders taking personal development courses provided by, or on referral from, corrective services.
Prison design capacity utilisation rate	The extent to which prison design capacity was meeting demand for prison accommodation, calculated as the total daily average prisoner population divided by average useable prison design capacity.
Ratio of number of hours ordered to actual hours worked per offender	The ratio of number of hours ordered to be worked to number of hours actually worked during the counting period per offender with a work order.
Recidivism: return to corrections	<p><i>Prisoners</i></p> <p>The proportion of sentenced prisoners not subject to further supervision/contact with Corrective Services upon release who return to Corrective Services with a new correctional sanction within two years of completing a prison sentence.</p> <p><i>Community Corrections</i></p> <p>The proportion of offenders not subject to further supervision/contact with Corrective Services upon completion of an order who return to Corrective Services with a new correctional sanction, within two years of the last community order completion date.</p>
Recidivism: return to prison	The proportion of sentenced prisoners not subject to further supervision/contact with Corrective Services upon release who returned to prison with a new correctional sanction within two years of completing a prison sentence.
Recidivism: return to community corrections	The proportion of offenders completing a community order, not subject to further supervision/contact with Corrective Services upon completion, who returned to community corrections with a new correctional sanction, within two years of the last community order completion date.

<sup>a</sup> In some instances there is a variation with the NCAG data manual classification of 'descriptors' and 'indicators'.

Source: National Corrections Advisory Group (1999-2000 Data Collection Manual).

---

# Volume 1 References

## **The approach to performance measurement**

- DPIE (Department of Primary Industries and Energy) and DSHS (Department of Human Services and Health) 1994, *Rural, Remote and Metropolitan Areas Classification, 1991 Census Edition*, AGPS, Canberra.
- Commonwealth Department of Finance 1994, *Doing Evaluations: A Practical Guide*, AGPS, Canberra.
- Gain, L. and Young, L. 1998, *Outcome Measurement in Child Protection: International Literature Review and Critical Analysis of Child Protection and Alternative Placement Outcome Measures*, Consultancy report for the Steering Committee for the Review of Commonwealth/State Service Provision, Melbourne.
- Griffith, D. A. 1998, The Griffith service access frame: a practical model for quantifying access to services, developing education profiles and measuring government policy outcomes in Australia's service access disadvantaged areas, Paper presented at the Northern Territory Institute of Educational Research Symposium, Darwin, 22–23 May.
- Harding, A. 1995, 'The impact of health, education and housing outlays upon income distribution in Australia in the 1990s', *Australian Economic Review*, 3rd quarter, pp. 71–86.
- IC (Industry Commission) 1997, *Assessing Australia's Productivity Performance*, AGPS, Canberra.
- MAB/MIAC (Management Advisory Board and its Management Improvement Advisory Committee) 1996, *Raising the Standard: Benchmarking for Better Government*, Report no. 21, AGPS, Canberra.
- Messick, R. E. 1999, 'Judicial reform and economic development: a survey of the issues', *World Bank Research Observer*, vol. 14, no. 1, pp. 117–36.
- Renwick, M. and Sadkowsky, K. 1991, *Variations in Surgery Rates*, Australian Institute of Health, Health Services Series no. 2, AGPS, Canberra.
- SRCSSP (Secretariat for the Review of Commonwealth/State Service Provision) 1998, *Feedback on the Report on Government Services*, AusInfo, Canberra.

---

SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 1997, *Reforms in Government Service Provision 1997*, AGPS, Canberra.

— 1998, *Implementing Reforms in Government Services 1998*, AusInfo, Canberra.

— 2000, *Report on Government Services 2000*, AusInfo, Canberra.

## Recent developments in the Review

AADWA (Aboriginal Affairs Department of Western Australia) 1999, *Achieving Better Outcomes for Indigenous Australians through the Review of Commonwealth/State Service Provision: A Proposed Framework for Continuous Improvement*, Discussion paper for the Ministerial Council for Aboriginal and Torres Strait Islander Affairs Standing Committee of Officials, Perth.

Equal and Donovan Research 2000, *National Satisfaction Survey of Clients of Disability Services*, Report prepared for the Steering Committee for the Review of Commonwealth/State Service Provision and the National Disability Administrators, AusInfo, Canberra.

SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 1995, *Report on Government Service Provision 1995*, AGPS, Canberra.

— 1997a, *Reforms in Government Service Provision 1997*, AGPS, Canberra.

— 1997b, *Report on Government Service Provision 1997*, AGPS, Canberra.

— 1998a, *Implementing Reforms in Government Services 1998*, AusInfo, Canberra.

— 1998b, *Report on Government Services 1998*, AGPS, Canberra.

— 1998c, *Superannuation in the Costing of Government Services*, AusInfo, Canberra.

— 1999a, *Linking Inputs and Outputs: Activity Measurement by Police Services*, AusInfo, Canberra.

— 1999b, *Payroll Tax in the Costing of Government Services*, AusInfo, Canberra.

— 1999c, *Report on Government Services 1999*, AusInfo, Canberra.

— 2000, *Report on Government Services 2000*, AGPS, Canberra.

---

## Education preface

ABS (Australian Bureau of Statistics) 1996, *Aspects of Literacy: Assessed Skill Levels, Australia 1996*, cat. no. 4228.0, Canberra.

— 1999a, *Transition from Education to Work: Australia*, cat. no. 6227.0, Canberra.

— 1999b, *Expenditure on Education, 1997-98*, cat. no. 5510.0, Canberra.

— 1999c, *Australian Social Trends*, cat. no. 4102.0, Canberra.

— 1999d, *Education and Training in Australia, 1998*, cat. no. 4224.0, Canberra.

— 2000a, *Government Finance Statistics, Education, 1998-99*. cat. no. 5518.048.001, Canberra.

— 2000b, *Schools Australia, 1999*, cat. no. 4221.0 (and previous editions), Canberra.

ANTA (Australian National Training Authority) 1999, *Annual National Report 1998: Vocational Education and Training Performance, Volume 3*, Brisbane.

— 2000, *Annual National Report 1999: Vocational Education and Training Performance, Volume 3*, Brisbane.

Australian Qualification Framework Advisory Board 1998, *Australian Qualifications Framework: Implementation Handbook*, Melbourne.

MCEETYA (Ministerial Council on Education, Employment, Training and Youth Affairs) 2000 *National Report on Schooling in Australia, 1998*, Melbourne.

NCVER (National Centre for Vocational Education Research) 2000, *Australian Vocational Education and Training Statistics 1999: in Detail*, Adelaide.

## School education

Ainley, J., Battern, M., Collins, C. and Withers, G. 1998, *Schools and Social Development of Young Australians*, ACER Press, Victoria.

ABS (Australian Bureau of Statistics) 1996, *Census of Population and Housing: Community Profiles, Australia*, cat no. 2020.0, AGPS, Canberra.

— 1999, *National Schools Statistics Collection (Government Schools Sector): Notes, Instructions and Tabulations, 1998*, Canberra.

— 2000, *Schools Australia, 1999*, cat. no. 4221.0 (and previous editions), Canberra.

---

MCEETYA (Ministerial Council on Education, Employment, Training and Youth Affairs) 1999a, *National Schools Statistics Collection, 1998*, Melbourne, unpublished.

— 1999b, *The Adelaide Declaration National Goals for Schooling in the Twenty-First Century*, Melbourne.

— 2000a, *National Report on Schooling in Australia, 1998*, Melbourne.

— 2000b, *National Report on Schooling in Australia, 1999*, (Preliminary Paper) Melbourne.

SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 1999, *Report on Government Services 1999*, AusInfo, Canberra.

## **Vocational education and training**

ABS (Australian Bureau of Statistics) 1998, *Transition from Education to Work*, cat. no. 6227.0, AGPS, Canberra.

— 1999, *The Labour Force, Preliminary*, cat. no. 6202.0, AusInfo, Canberra.

AC Nielsen 1999, '1999 Student Outcomes Survey: Evaluation Report for TAFE Graduates and Module Completers', Canberra, unpublished.

ANTA (Australian National Training Authority) 1997, *Annual National Report 1996: Benchmarking Vocational Education and Training*, Brisbane.

— 1998a, *Annual National Report 1997: Vocational Education and Training Performance*, Volume 3, Brisbane.

— 1998b, *A Bridge to the Future — Australia's National Strategy for Vocational Education and Training 1998–2003*, Brisbane.

— 1999a, *Annual National Report 1998: Vocational Education and Training Performance*, Volume 3, Brisbane.

— 1999b, *Directions and Resource Allocations for 1999*, Brisbane.

— 1999c, *Directions and Resource Allocations for 2000*, Brisbane.

— 1999d, *Key Performance Measures for Vocational Education and Training*, May, 1999, Brisbane.

— 2000, *Annual National Report 1999: Vocational Education and Training Performance*, Volume 3, Brisbane.

DEWRSB (Department of Employment, Workplace Relations and Small Business) 1999, *Skill Shortage Lists — National Skill Shortage (NSS) List*,

---

[http://www.dewrsb.gov.au/group\\_imp/files/skillshort/nss.pdf](http://www.dewrsb.gov.au/group_imp/files/skillshort/nss.pdf), accessed 16 September 1999.

HRSCEET (House of Representatives Standing Committee on Employment, Education and Training) 1998, *Today's Training, Tomorrows Skills*, AGPS, Canberra.

NCVER (National Centre for Vocational Education Research) 1998, *Australian Vocational Education and Training — Employer Satisfaction with Vocational Education and Training 1997: National Report*, Adelaide.

— 1999a, *Australian Vocational Education and Training Statistics 1999 Student Outcomes Survey: In Summary*, Adelaide.

— 1999b, *Australian Vocational Education and Training Statistics 1999 Survey of Employer Views on Vocational Education and Training: At a Glance*, Adelaide.

— 2000a, *Australian Vocational Education and Training Statistics 1999: At a Glance*, Adelaide.

— 2000b, *Australian Vocational Education and Training Statistics 1999: Financial Data*, Adelaide.

— 2000c, *Australian Vocational Education and Training Statistics 1999: In Detail*, Adelaide.

SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 1998, *Superannuation in the Costing of Government Services*, AusInfo, Canberra.

— 1999, *Payroll Tax in the Costing of Government Services*, AusInfo, Canberra.

## Health preface

AIHW (Australian Institute of Health and Welfare) 2000a, *National Health Data Dictionary, Version 9*, AIHW cat. no. HWI 24, AIHW, Canberra.

— 2000b, *Health Expenditure Bulletin No. 16: Australia's Health Services Expenditure to 1998-99*, AIHW, Canberra.

— 1999a, *Australian Hospital Statistics 1997-98*, cat. no. HSE 6, AIHW, Canberra.

— 1999b, *Health Expenditure Bulletin No. 15: Australia's Health Services Expenditure to 1997-98*, Canberra.

ABS (Australian Bureau of Statistics) 2000a, *Australia Social Trends 2000*, cat. no. 4102.0, AusInfo, Canberra.

- 
- 2000b, *Mortality of Aboriginal and Torres Strait Islander Australians, 1997*, Occasional Paper, cat. no. 3315.0, AusInfo, Canberra.
- 1999, *Deaths, Australia 1998*, cat. no. 3302.0, AusInfo, Canberra.
- 1997a, *National Health Survey: Summary of Results*, cat. no. 4364.0, AGPS, Canberra.
- 1997b, *Deaths, Australia 1996*, cat. no. 3302.0, AusInfo, Canberra.
- Deeble, J., Mathers, C., Smith, L., Goss, J., Webb, R. and Smith, V. 1998, *Expenditure on Health Services for Aboriginal and Torres Strait Islander People*, cat. no. HWE 6, Australian Institute of Health and Welfare and National Centre for Epidemiology and Population Health, Canberra.
- DHAC (Commonwealth Department of Health and Aged Care) 1999, *Annual Report 1998-99*, AusInfo, Canberra.
- Mathers C., Vos, T. and Stevenson, C. 1999, *The Burden of Disease and Injury in Australia: Summary Report*, cat. no. PHE, Australian Institute of Health and Welfare, Canberra.
- NHIMG (National Health Information Management Group) 2000, *National Summary of the 1998 Jurisdictional Reports against the Aboriginal and Torres Strait Islander Health Performance Indicators*, Australian Institute of Health and Welfare, Canberra.
- World Bank 1993, *The World Development Report 1993: Investing in Health*, Oxford University Press, New York.
- WHO (World Health Organisation) 2000, *The World Health Report 2000: Health Systems: Improving Performance*, Geneva.

## Public hospitals

- ABS (Australian Bureau of Statistics) 1998, *Causes of Death, Australia 1997*, cat. no. 3303.0, AGPS, Canberra.
- 1999, *Causes of Death, Australia 1998*, cat. no. 3303.0, AGPS, Canberra.
- 2000, *Hospital statistics: Aboriginal and Torres Strait Islander Australians, 1997-98*, Occasional Paper, cat. no. 4711.0, AusInfo, Canberra.
- (various years), *Government Finance Statistics*, cat. no. 5512.0, Canberra, (unpublished).
- ACHS (Australian Council for Healthcare Standards) 2000a, *ACHS Clinical Indicators Report: 1998 and 1999 data: Hospital wide medical indicators and Obstetrics and gynaecological medical indicators*, (unpublished).

- 
- 2000b, *Clinical Indicators — A User's Manual: Obstetrics and Gynaecology, Version 3*, Ultimo, NSW.
- AIHW (Australian Institute of Health and Welfare) 1995, *Waiting Times to Elective Surgery in Australian Public Hospitals*, Canberra.
- 1998, *Australian Hospital Statistics, 1996-97*, cat. no. HSE 5, AIHW, Canberra
- 1999a, *National Health Data Dictionary, Version 8*, National Health Data Committee, AIHW cat. no. HWI 18, Canberra.
- 1999b, *Australian Hospital Statistics 1997-98*, cat. no. HSE 6, AIHW, Canberra.
- 2000a, *Australian Hospital Statistics, 1998-99*, cat. no. HSE 11, Health Services Series no 15, AIHW, Canberra.
- 2000b, *Health Expenditure Bulletin No. 16: Australia's Health Services Expenditure to 1998-99*, AIHW, Canberra
- 2000c, *National Health Data Dictionary, Version 9*, National Health Data Committee, AIHW cat. no. HWI 24, Canberra.
- 2000d, *Australia's Health 2000: the seventh biennial health report of the Australian Institute of Health and Welfare*, Canberra: AIHW.
- 2000e, *Waiting times for elective surgery in Australia 1997-98*, AIHW cat. no. HSE 9, AIHW, Canberra.
- Boyce, N., McNeil, J., Graves, D. and Dunt, D. 1997, *Quality and Outcome Indicators for Acute Health Care Services*, Department of Health and Family Services, Canberra.
- Caplan G. A., Ward J. A., Brennan N. J., Coconis J., Board N. 1999, "Hospital in the home: a randomised controlled trial", *Medical Journal of Australia*, 170:156-160
- Clover, K., Dobbins, T., Smyth, T. and Sanson-Fisher, R. 1998 'Factors associated with waiting time for surgery', *Medical Journal of Australia*, vol. 169, pp. 464-468.
- Condon, J., Williams, D., Pearce, M., and Moss, E. 1998 *Northern Territory Hospital Morbidity Dataset: Validation of Demographic Data 1997*, Territory Health Services, Darwin.
- Day, P., Sullivan, E A., Ford, J. and Lancaster, P., 1999 *Australia's Mothers and Babies 1997*, AIHW cat. no. PER 12, National Perinatal Statistics Unit, Australian Institute of Health and Welfare, Sydney.

- 
- DHAC (Commonwealth Department of Health and Aged Care) 1999, *Annual Report 1998-99*, Department of Health and Aged Care, AusInfo, Canberra.
- Hall, B. M. 1999, 'A matter of life and death out in Sydney's west', *Sydney Morning Herald*, 8 January, p. 13.
- Health Department of WA, 1998, *Annual Report 1997-98*, Perth.
- Ibrahim, J., Majoor, J., Boyce, N. and McNeil, J. 1998, *Pilot Hospital Wide Clinical Indicators Project, Final Report, A Study of the Reliability, Validity, and Risk Adjustment of the National Hospital Quality Management Program Pilot Set of Hospital-wide Clinical Indicators*, Health Service Outcomes Branch, Commonwealth Department of Health and Family Services, Canberra.
- Kohn L T., Corrigan J M. and Donaldson M S. (eds) 1999, *To Err is Human: Building a Safer Health System*, Committee on Quality of Health Care in America, Institute of Medicine, National Academy Press, Washington DC.
- Lee, A., Don, B. and Goldacre, M. 1987, 'Waiting list statistics II: an estimate of inflation of waiting list length', *British Medical Journal*, vol. 295, pp. 1197-8.
- Lohr, K. N. and Shroeder, S. A. 1990, 'A strategy for quality assurance in Medicare', *New England Journal of Medicine*, vol. 322, pp. 707-12.
- NSW Health 1999, *NSW Hospital Comparison Data Book*, NSW Health.
- SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 1995, *Report on Government Service Provision 1995*, AusInfo, Canberra.
- 1998, *Superannuation in the Costing of Government Services*, AusInfo, Canberra.
- 1999a, *Report on Government Services 1999*, AusInfo, Canberra.
- 1999b, *Payroll Tax in the Costing of Government Services*, AusInfo, Canberra.
- 2000, *Report on Government Services 2000*, AusInfo, Canberra.
- Tasmanian Department of Community and Health Services 1998, *1997-98 Annual Report*, Hobart.
- Thomas, E. J., Studdert, D. M., Runciman, W. B. *et al.* 1999, A comparison of iatrogenic injury studies in Australia and the United States, Abstract from a paper presented at the 16th International Conference of the International Society for Quality in Health Care, Melbourne, October.
- 2000, "A comparison of iatrogenic injury studies in Australia and the United States", *International Journal for Quality in Health Care* 2000, 15, p. 371.

---

Whitby, S., Ierchai, S., Johnson, D. and Mohsin, M. 1997, *The Use and Outcome of the National Triage Scale*, Commonwealth Department of Health and Family Services, Canberra.

Wilson, R. M., Runciman W. B., Gibberd R. W., *et al.* 1995, 'The quality in Australian health care study', *Medical Journal of Australia*, vol. 163, pp. 458–71.

## General Practice

ABS (Australian Bureau of Statistics) 1998, *Mental Health and Wellbeing: Profile of Adults, Australia, 1997*, cat. no. 4326.0, AGPS, Canberra.

— *Estimated Resident Population, by Age*, cat. no. 3201.0, AGPS, Canberra.

— *Australian National Accounts*, cat. no. 5206.0, AGPS, Canberra.

— 1997, *National Health Survey: Summary of Results*, cat. no. 4364.0, AGPS, Canberra.

AIHW (Australian Institute of Health and Welfare) 2000, *Australian Hospital Statistics, 1998-99*, cat. no. HSE 11, Canberra.

— 2000 Cervical Screening in Australia 1997-98, cat .no. CAN 9, Canberra Cancer Series no. 14.

— 2000 Health Expenditure Database

AGPAL (Australian General Practice Accreditation Limited) 2000 <http://www.agpal.com.au/divisionlisting.asp> (11 August 2000)

Bhasale, A., Miller, G., Reid., S., Britt, H., 1998, Analysing potential harm in Australian general practice: an incident monitoring study, *Medical Journal of Australia*, V 169, 20 July, p.73.

Britt, H., Sayer, GP., Miller, GC., Charles, J., Scahill, S., Horn, F., Bhasale, A., McGeechan, K., 1999, *General Practice activity in Australia 1998-99*, AIHW cat. no. GEP 2. Canberra: Australian Institute of Health and Welfare (General Practice Series no. 2)

— 2000, *General Practice activity in Australia 1999-2000*, AIHW cat. no. GEP 5. Canberra: Australian Institute of Health and Welfare (General Practice Series no. 5)

Communicable Diseases Network (Australia New Zealand) National Notifiable Diseases Surveillance System.

Deeble, J., Mathers, C., Smith, L., Goss, J., Webb, R. and Smith, V. 1998, *Expenditure on Health Services for Aboriginal and Torres Strait Islander*

---

*People*, cat. no. HWE 6, Australian Institute of Health and Welfare and National Centre for Epidemiology and Population Health, Canberra.

DHFS (Commonwealth Department of Health and Family Services) 1996, *General Practice in Australia: 1996*, General Practice Branch, Canberra.

DHAC (Commonwealth Department of Health and Aged Care) 2000a, *General Practice in Australia: 2000*, General Practice Branch, Canberra.

—— 2000b, <http://www.health.gov.au/haf/medstats/tablec2b.xls> (8 November 2000).

—— 2000c, <http://www.health.gov.au/haf/medstats/tablec1b.xls>, (October 2000).

—— 2000d, <http://www.health.gov.au/haf/medstats/tablec3.xls>, (8 November 2000).

—— 2000e Practice Incentives Program Information Booklet.

—— 1999a, *Tabulated Workforce Data 1998-99*, General Practice Branch, Canberra.

—— 1999b, General practice workforce tables 1–14, Canberra.

Health Insurance Commission 2000, <http://www1.hic.gov.au/general/acircirgtb03> and 04, (7 September 2000).

Hill, S. and Draper, M., 1995, *The Role of Patient Satisfaction Surveys in a National Approach to Hospital Quality Management*, Commonwealth Department of Human Services and Health, AGPS, Canberra.

National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS) (2000) Vaccine preventable diseases and vaccination coverage in Australia, 1993-1998, University of Sydney and Royal Alexandra Hospital for Children, Westmead, June, Surveillance and Management Section, Department of Health and Aged Care, Canberra, [www.health.gov.au/pubhlth/publicat/document/cdi/vpd93\\_98.pdf](http://www.health.gov.au/pubhlth/publicat/document/cdi/vpd93_98.pdf)

RACGP (Royal Australian College of General Practitioners) 1999, *Primary Care Psychiatry – The Last Frontier: A Report of the Joint Consultative Committee in Psychiatry*, 1998, Canberra

SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 2000, *Report on Government Services*, AusInfo, Canberra

## Health management issues

ABS (Australian Bureau of Statistics) 1997, *National Health Survey, Diabetes, Australia*, cat. no. 4371.0, AusInfo, Canberra.

- 
- 1998, *Mental Health and Wellbeing: Profile of Adults, Australia, 1997*, cat. no. 4326.0, AGPS, Canberra.
- 1999, *Causes of Death, Australia, 1998*, cat. no. 3303.0, AGPS, Canberra (and previous issues).
- (various issues), *Australian Demographic Statistics*, cat. no. 3101.0, AusInfo, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2000a, *Australia's Health 2000: The Seventh Biennial Health Report of the Australian Institute of Health and Welfare*, Canberra: AIHW.
- 2000b, *BreastScreen Australia Achievement Report 1997-1998*, AIHW cat. no. CAN 8, Canberra (Cancer Series number 13).
- 2000c, *Australian Hospital Statistics, 1998-99*, cat. no. HSE 11, Canberra: AIHW (Health Services Series No. 15).
- 2000d, *Institutional Mental Health Services in Australia 1997-98: First Report on the National Minimum Data Set – Institutional Mental Health Care*, AIHW (Mental Health Series no. 1), Canberra.
- 2000e, Health Expenditure Bulletin No. 16: Australia's Health Expenditure to 1998-99, AIHW, Canberra.
- 1998a, *Australia's Health 1998*, cat. no. AUS 10, AGPS, Canberra.
- *et al.* (Australian Institute of Health and Welfare, BreastScreen Australia and the National Cervical Screening Program) 1998, *Breast and Cervical Cancer Screening in Australia 1996 and 1997*, cat. no. CAN 3, AIHW, Canberra.
- *et al.* (Australian Institute of Health and Welfare, Australasian Association of Cancer Registries and NHMRC National Breast Cancer Centre) 1999, *Breast Cancer in Australian Women, 1982-1996*, cat. no. CAN 6, AIHW (Cancer Series), Canberra.
- Colagiuri, S., Colagiuri, R., Ward, J., 1998, *National diabetes strategy and implementation plan*, Diabetes Australia, Canberra.
- DHAC (Commonwealth Department of Health and Aged Care) 2000, *National Mental Health Report Sixth Annual Report. Changes in Australia's Mental Health Services under the First National mental Health Plan of the National mental Health Strategy 1993-98*, AusInfo, Canberra.
- 1999a, *National Mental Health Report 1997: Fifth Annual Report*, Canberra.
- *et al.* (Commonwealth Department of Health and Aged Care and Australian Institute of Health and Welfare) 1999, *National Health Priority Areas Report: Mental Health 1998*, AIHW cat. no. PHE 13, AIHW, Canberra.

- 
- Fry, D. 1994, *Strengthening Primary Health Care in Australia*, Issues Paper no. 10, Australian Community Health Association, Sydney.
- Mathers C., Vos, T. and Stevenson, C. 1999, *The Burden of Disease and Injury in Australia: Summary Report*, cat. no. PHE, Australian Institute of Health and Welfare, Canberra.
- NBCC (National Breast Cancer Centre) 1999, <http://www/nbcc.org.au/pages/info/early.htm>, accessed 30 July 1999.
- NPHP (National Public Health Partnership) 1997, *Public Health in Australia: The Public Health Landscape*, Melbourne.
- SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 2000, *Report on Government Services 2000*, AusInfo, Canberra.
- Taylor, A., Wilson, D., Ben-Tovim, D., Elzinga, R., Goldney, R., MacFarlane, A., Cheok, F., and Kirke, K. 1999, 'Mental Health Status of the South Australian Population', *Australian New Zealand Journal of Public Health*, 24, pp. 29-34.

## Justice preface

- ABS (Australian Bureau of Statistics) 1999, *Australian Demographic Statistics, June Quarter 1998*, cat. no. 3101.0, Canberra.
- 2000, *Estimated Residential Population of Australia – States and Territories*, cat no. 3201.0, AGPS, Canberra.
- Criminal Justice Commission 1991, *Crime and justice in Queensland*, Criminal Justice Commission, July.

## Police services

- ABS (Australian Bureau of Statistics) 1996, *Census of Population and Housing: Community Profiles, Australia*, cat no. 2020.0, AGPS, Canberra.
- 1998, *Population Survey Monitor*, cat. no. 4103.0, unpublished data, Adelaide.
- 1999, *Australian Demographic Statistics*, cat. no. 3101.0, AusInfo, Canberra.
- 1999a, *Crime and Safety, Australia*, cat no. 4509.0, AusInfo, Canberra.
- 1999b, *Population Survey Monitor*, cat. no. 4103.0, unpublished data, Adelaide.
- 2000, *Crime and Safety, NSW*, cat no. 4509.1, AusInfo, Canberra.
- 2000a, *Crime and Safety, WA*, cat no. 4509.5, AusInfo, Canberra.

- 
- 2000b, *Estimated Resident Population of Australia – States and Territories*, cat no. 3201.0, AusInfo, Canberra.
- 2000c, *Motor Vehicle Census, Australia*, cat. no. 9309.0, AusInfo, Canberra.
- 2000d, *Population Survey Monitor*, cat. no. 4103.0, unpublished data, Adelaide.
- 2000e, *Recorded Crime, Australia*, cat no. 4510.0, AusInfo, Canberra.
- AIC (Australian Institute of Criminology) 2000, *Australian Deaths in Custody and Custody-related Police Operations, 1999*, (and previous issues), Canberra.
- ATSB (Australian Transport Safety Bureau) 2000, *Road Fatalities Australia, June 2000*, Canberra (and previous issues).
- Criminal Justice Commission 1996, *The Nature of General Police Work*, Research Paper Series, vol. 3, no. 2, Brisbane.
- SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 1999, *Payroll Tax in the Costing of Government Services*, AusInfo, Canberra.

## **Court administration**

- ABS (Australian Bureau of Statistics) 2000, *Australian Higher Criminal Courts 1998-99*, cat. no. 4513.0, AusInfo, Canberra.
- various years, *Australian Demographic Statistics*, cat. no. 3101.0, AusInfo, Canberra.
- various years, *Statistical Geography*, cat. no. 1216.0, Canberra, (unpublished).
- Commission on Trial Court Performance Standards 1989, *Tentative Trial Court Performance Standards with Commentary*, National Centre for State Courts and Bureau of Justice Assistance, US Department of Justice, United States.
- DPIE (Department of Primary Industries and Energy) and DSHS (Department of Human Services and Health) 1994, *Rural, Remote and Metropolitan Classification 1991 Census Edition*, AGPS, Canberra.
- Family Court of Australia 1999, *Summary of March 1999 Client Satisfaction Survey*, unpublished.
- NSW Attorney General's Department 1999, *Local Courts Client Survey 1999*, unpublished.

---

SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 1999, *Payroll Tax in the Costing of Government Services*, AusInfo, Canberra.

WA Ministry of Justice 1999, *1999 Customer Satisfaction Survey Executive Summary*, unpublished.

## **Corrective services**

ABS (Australian Bureau of Statistics) 1998, *Corrective Services Australia*, cat. no. 4512.0, AusInfo, Melbourne.

—— 1998a, *Experimental Projection of the Aboriginal and Torres Strait Islander Population*, cat no. 3231.0.

—— 2000, *Estimated Residential Population of Australia – States and Territories*, cat no. 3201.0, AusInfo, Canberra.

—— 2000a, *Australian Demographic Statistics*, cat. no. 3101.0, AusInfo, Canberra.