

PART A

INTRODUCTION

1 The approach to performance measurement

1.1 Aims of the Review

Heads of government established the Review of Government Service Provision (the Review) to provide information on the effectiveness and efficiency of government services in Australia (see terms of reference, p. xxv). The name of the Review has changed since last year's Report (see box 1.1).

Box 1.1 The 'Australian Government'

In mid-2003, the Commonwealth Government changed its title to 'Australian Government'. Consequently, the name of the Review has been changed from 'the Review of Commonwealth/State Service Provision' to 'the Review of Government Service Provision'. References to the 'Commonwealth Government' or the 'Federal Government' in the Report on Government Services have been altered to reflect the new title.

Proper titles and historic references to the 'Commonwealth' (for example, the Commonwealth State Housing Agreement and the Commonwealth Department of Health and Family Services) have not been changed. In addition, the Commonwealth Parliament and Commonwealth laws are not affected by the change.

A Steering Committee, comprising senior representatives from the central agencies of all governments, manages the Review with the assistance of a Secretariat provided by the Productivity Commission. The Review was established under the auspices of the Council of Australian Governments (COAG) in 1993 to:

- provide ongoing comparisons of the performance of government services
- report on service provision reforms that governments have implemented or that are under consideration.

Its role has since expanded, at the request of Heads of Governments, to also report on Indigenous Australians. This task has involved expanding reporting on the provision of services to Indigenous Australians in the annual Report on Government

Services and, more recently, releasing a report on outcomes for Indigenous Australians in the publication *Overcoming Indigenous Disadvantage: Key Indicators 2003* (SCRGSP 2003).

The Council of Australian Governments commissioned the latter publication in 2002 and the Steering Committee released the first edition in November 2003. This report focuses on outcomes for Indigenous Australians in a range of 'strategic' areas, and complements the Report on Government Services which will continue to include indicators on the delivery of services to Indigenous Australians. *Overcoming Indigenous Disadvantage: Key Indicators 2003* is included on the CD-ROM that accompanies the Report on Government Services, and can be found on the Review web page (www.pc.gov.au/gsp).

The Report on Government Services is a tool for government. It has been used for strategic budget and policy planning, and for policy evaluation. Information in the Report has been used in assessing the resource needs and resource performance of departments. It has also been used to identify jurisdictions with whom to share information on services.

The data in this Report can also provide an incentive to improve the performance of government services, by:

- enhancing measurement approaches and techniques in relation to aspects of performance, such as unit costs and service quality
- helping jurisdictions identify where there is scope for improvement
- promoting greater transparency and informed debate about comparative performance.

1.2 The role of government in delivering services

All services included in this Report affect the community in significant ways. Some services form an important part of the nation's social welfare system (for example, public housing), some are provided to people with specific needs (for example, aged care and disability services), while others are typically used by each person in the community at some stage during their life (for example, school education, police services and emergency services).

More generally, the services that governments deliver are largely concerned with:

- providing ‘public goods’,¹ including:
 - 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) — a framework that encompasses the work of the courts, police and corrective service agencies in maintaining law and order
 - managing adverse events, including the work of emergency services (such as fire and flood control) and some aspects of the health system
- enabling higher or more equitable availability and consumption of those services that governments consider to have particular merits or to generate beneficial spillover effects² for the community. Examples include education, health services, ambulance services, community services and housing.

How governments deliver services

Governments use a mix of methods to deliver services to the community, including:

- providing the services themselves (a ‘provider’ role)
- managing and funding external providers 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’).

1.3 Reasons for measuring comparative performance

Government services, including the services covered in this Report, are vital to the community’s wellbeing. Improving them can result in major social and economic

¹ Public goods are those where one person’s consumption does not reduce consumption by others, and where it is not possible to exclude individuals from access (for example, national defence). These goods tend not to be produced in private markets because people can consume the good without paying for them.

² In private markets, the production of services that result in spillover effects tends to be lower than is desirable for society as a whole because individuals cannot appropriate the wider benefits to society.

benefits. Governments are continually re-evaluating whether the community is receiving the appropriate service mix and whether the services are reaching those most in need. Moreover, governments need to know whether their policies are effective, whether those policies are being implemented efficiently and whether they are reaching those people for whom they are intended.

Traditionally, much of the effort to improve the effectiveness of government services has focused on increasing the level of resources devoted to them. This approach overlooks another important means of enhancing services — that is, finding better and more cost-effective ways in which to use existing resources. Productivity growth has had an important influence on living standards in Australia. During the 1990s, for example, productivity growth more than doubled, underpinning historically strong growth in average incomes (Parham 2002). Innovation (the introduction of new products or processes) can be important to productivity growth in all sectors, including government services.

Performance measurement provides one means of shifting the focus from resources (or inputs) to the use of resources to deliver desired outcomes of government services. Performance measurement can:

- provide governments with indicators of their performance over time
- make performance more transparent, allowing assessment of whether program objectives are being met
- help clarify government objectives and responsibilities
- inform the wider community about government service performance
- encourage ongoing performance improvement
- promote analysis of the relationships between agencies and between programs, allowing governments to coordinate policy within and across agencies.

The two main reasons for reporting *comparative* performance information across jurisdictions are:

- to allow agencies to identify peer agencies that are delivering better or more cost effective services from which they can learn
- to generate additional incentives for agencies to address substandard performance.

Comparative data are particularly important for government services, given that limited information is available to those deciding what services to supply and to whom. Each jurisdiction has, for example, only one police service and one protection and support service. As a result, choices are always constrained for consumers of these services, and those responsible for delivering the services do not

have access to the same level of information that is available to providers in markets with more providers.

Reporting comparative performance measures facilitates interjurisdictional learning, particularly where governments have adopted different policy approaches. While no analysis of cost-effectiveness is carried out in the Report, the information contained in the Report provides governments with the wherewithal to assess the cost-effectiveness of their service delivery.

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, the 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 deliver services by government service providers (for example, devolving decision making in Victorian government schools to local school communities)
- examining alternative delivery mechanisms (for example, deinstitutionalising community services and offering direct consumer funding and choice in disability services in WA)
- examining interactions among services
- implementing user charging (for example, pricing court reporting services for Australian courts).³

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 work best.

1.4 Scope

This ninth Report on Government Services contains performance information on 14 service areas (box 1.2). These government services have two important features:

- their key objectives are common or similar across jurisdictions

³ The implementation issues associated with these types of reform are examined in SCRCSSP (1997b) and SCRCSSP (1998).

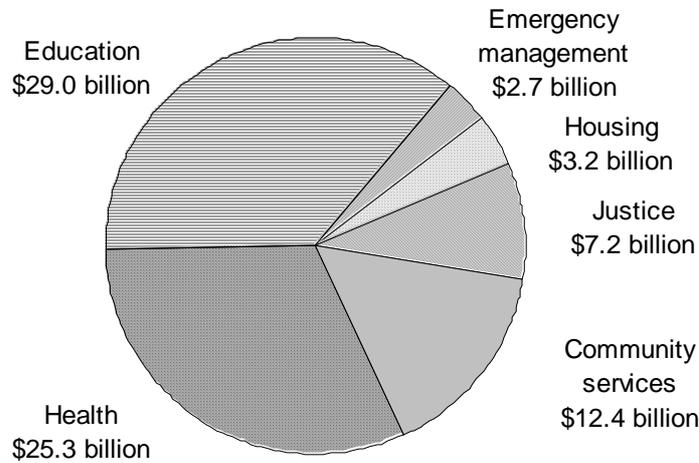
- they make an important contribution to the community and/or economy.

Box 1.2 Services covered in the 2004 Report	
Education	— School education (chapter 3) — Vocational education and training (chapter 4)
Justice	— Police (chapter 5) — Court administration (chapter 6) — Corrective services (chapter 7)
Emergency management	— Fire and ambulance services (chapter 8)
Health	— Public hospitals (chapter 9) — Primary and community health (chapter 10) — Breast cancer detection and management, and specialised mental health services (chapter 11)
Community services	— Aged care services (chapter 12) — Services for people with a disability (chapter 13) — Children's services (chapter 14) — Protection and support services (chapter 15)
Housing	— Public and community housing, State and Territory owned and managed Indigenous housing and Commonwealth Rent Assistance (chapter 16)

The services in the Report absorb a significant level of government expenditure. While not all data here relate to the same time period, the services in this year's Report accounted for approximately \$79.8 billion in 2002-03 (figure 1.1), representing around 59.4 per cent of government recurrent expenditure in that year. (This is equivalent to about 10.6 per cent of gross domestic product.)

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. The scope of the Report, however, is confined to the cost to government, for reasons explained in box 1.3.

Figure 1.1 **Estimated government recurrent expenditure on services covered by the 2004 Report^{a, b, c}**



^a Data for 2002-03 were not available for all services. See table 2.1 in chapter 2. ^b The estimate for health expenditure relates to only the health services discussed in the health chapters of the Report: public hospitals, primary and community health services, breast cancer screening and specialised mental health services. ^c Community services expenditure excludes juvenile justice.

Source: relevant chapters.

This Report examines the performance of the service elements for which government is responsible and accountable. The focus is on reporting 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. The Report thus covers aged care but not the aged pension, disability services but not disability pensions, and children's services but not family payments (although descriptive information on income support is provided in some cases). An exception is the reporting of performance information on Commonwealth Rent Assistance (chapter 16).

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

The Report provides information about the cost of services to government. Some argue that the Report should also account for the costs where non-government groups such as charities, not-for-profit organisations, private providers and users contribute resources for the services covered by the Report.

Governments aim to maximise the benefit to the community from the use of government funds. The purpose of the Report is to provide information to assist government decision making. The information required depends on the type of assessment needed to support a decision. When government provides the service directly it may wish to assess the internal management of the service. On other occasions it may wish to assess whether to provide the service directly or to purchase, part fund or subsidise the service. Alternatively, it may wish to assess from which organisation to purchase the service.

If a government provides services directly, then it is accountable for all resources used. Thus the Report aims to include the full costs of providing the service. When focusing on government decision making in the role of direct service provider, the Report aims to compare the full cost to government of service delivery, including the cost of capital (where possible) in each State and Territory. This approach allows governments to compare the internal management of their services with that of their counterparts in other jurisdictions.

The Report also includes information on the cost to government of services delivered in other ways, including through funding to government and non-government service providers. This information can assist governments in assessing their purchase decisions. This Report has not sought to facilitate comparisons between the internal management of government providers and that of non-government providers, and there would be difficulties in collecting data to make such comparisons. As a result, there is no attempt 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.

Sometimes, a private organisation will offer to deliver a service at a lower price to government than that offered by an equivalent government provider, even though it may use at least as many resources as the government provider. This situation can typically arise for not-for-profit organisations such as charities, which may be able to charge less because they operate the service as an adjunct to another activity or because they have access to resources that are not costed at market rates (such as donations, church buildings and volunteers).

1.5 Approach

The Report includes performance comparisons, based on a common method, across jurisdictions for a range of services. This approach has the following benefits:

- The use of a common method across services leads to a data set that is a convenient and useful resource for people interested in more than one service area.
- There are opportunities to share insights into approaches to performance assessment across services.
- 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 efficiently address 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).
- There is an opportunity to assess the full breadth of consequences to service areas of issues that have an impact on (or are affected by) multiple service areas. An example is recidivism and the various elements of justice services: a reduction in recidivism may be achieved by increased allocation of resources in one service area — say, corrective services — but with a potentially greater saving achieved in other service areas — say, police and the courts.

A number of the services covered by the Report are also subject to other comparative performance measurement across jurisdictions. Advantages of the approach taken in the Report are:

- focus on non-technical information, making it accessible to non-specialists
- the regular publication of the Report, allowing monitoring of performance over time.

Guiding principles

The aim of the Report is to provide objective government performance information to facilitate informed policy judgments and sound outcomes. The following guiding principles apply:

- *A focus on outcomes* — performance indicators should focus on outcomes from the provision of government services, reflecting whether service objectives have been met.

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- *Comprehensiveness* — the performance indicator framework should be as comprehensive as possible, assessing performance against all important objectives.
 - *Comparability* — data should be comparable across jurisdictions wherever possible. Reporting comparable information is a high priority of the Review and is related to progressive data availability (below). Where data are not yet comparable across jurisdictions, time series analysis is particularly important. Time series comparisons have been made where possible to add another dimension to performance reporting.
 - *Progressive data availability* — while the ultimate aim is comparable data for all jurisdictions, progress may differ across jurisdictions, so data are generally presented for those jurisdictions that can currently report (rather than waiting until the data are available for all jurisdictions).
 - *Timeliness* — data published in the Report need to be as recent as possible to retain their relevance for decision makers. In some cases, there may be a tradeoff between the accuracy of data and their timely availability, because recent data may have had fewer opportunities to undergo validation.

Where possible, the approach taken in the Report is to use acceptable (albeit imperfect) indicators that are already in use or available in Australia or internationally. Adopting these indicators can lower the costs of, and reduce delays in, reporting performance. However, although the Steering Committee values time series data as a means of evaluating developments in service delivery, performance indicators may change from one Report to the next when better or more appropriate performance indicators are developed.

While the Report does not establish best practice benchmarks, the information in the Report could be used to help jurisdictions identify appropriate benchmarks (box 1.4).

Box 1.4 **Benchmarking**

Benchmarking service delivery is a systematic process of searching for and encouraging 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 performance within and between organisations using performance indicators of effectiveness and efficiency); process benchmarking (analysing systems, activities and tasks that turn resource inputs and outputs into outcomes); and setting 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
- assessing improvements and re-benchmarking (MAB/MIAC 1996).

The performance information in the Report 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.

The new performance indicator framework

The Steering Committee developed a new general framework for performance indicators in 2002 and this framework has been implemented in most chapters for the first time in this Report. The new approach reflects governments' adoption of accrual accounting and depicts the Review's focus on outcomes, consistent with demand by governments for outcome oriented performance information. The new framework also accentuates the importance of equity and draws out the distinction between equity and access (figure 1.3).

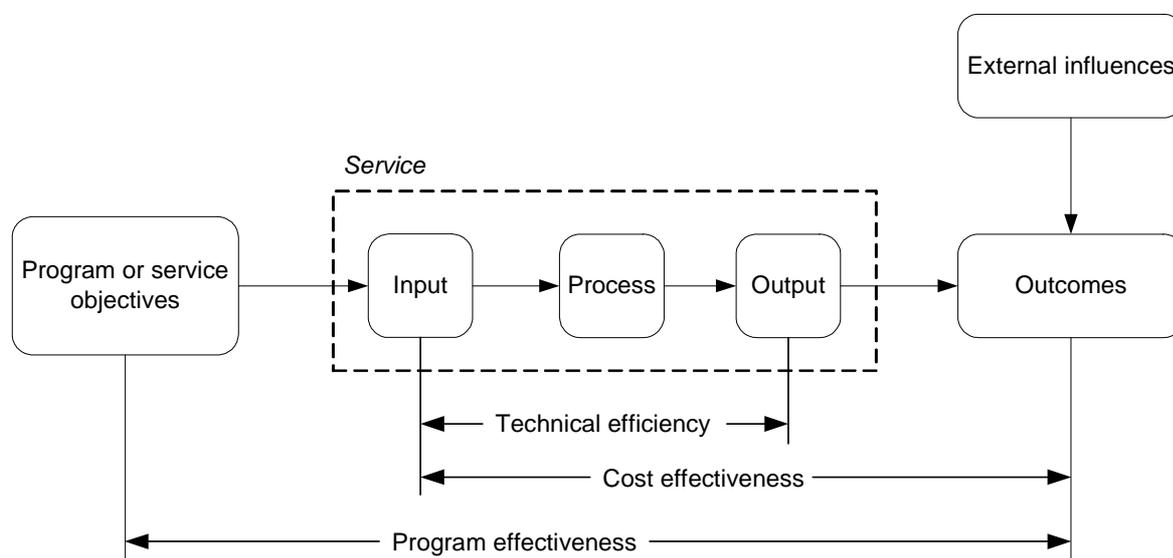
The service process

As part of the review of the framework, the relationships among objectives, inputs, outputs and outcomes were examined. Figure 1.2 (a new diagram presented for the

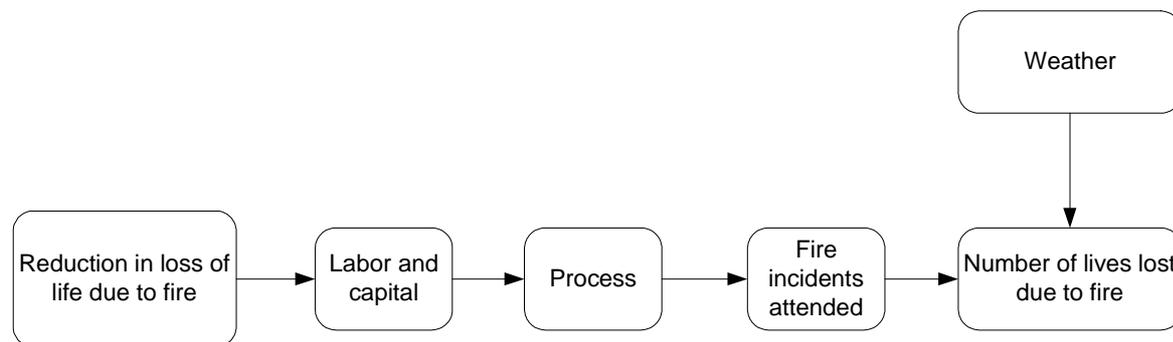
first time in this Report) portrays the influence of factors external to the service and distinguishes between program efficiency and program effectiveness.

For each service, governments have a number of objectives that normally relate to desired outcomes for the community. To achieve these objectives, governments fund service providers and/or provide services. To do this, service providers transform funds/resources (inputs) into services (outputs). The impacts of these outputs on individuals, groups and the community are the outcomes of the service. Often, outcomes are also influenced by factors external to the service. Outputs too may be affected by external factors, but to a lesser extent.

Figure 1.2 **Service process**



Example: fire services



Objectives

A number of the objectives (or desired outcomes) for each government funded service are similar across jurisdictions, although the priority that each jurisdiction

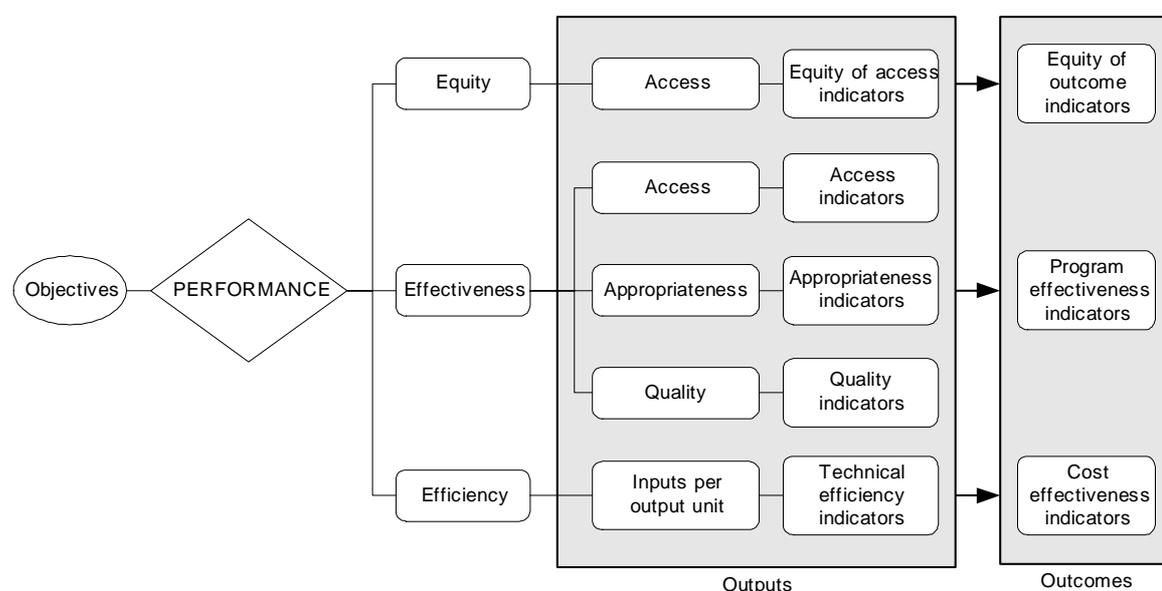
gives to each objective may differ. The Steering Committee’s approach to performance reporting is to focus on the extent to which each *shared* objective for a service has been met. Objectives for each service are outlined, and performance indicators consistent with those objectives are reported.

Separating outputs and outcomes

Outcome indicators provide information on the impact of a service on the status of an individual or a group, and on the success of the service area in achieving its objectives, although other factors may affect outcomes for an individual or group. The outcomes of a service should align with the objectives of the service. Outputs, on the other hand, are the services delivered.

While the aim of the Review is to focus on outcomes, they are often difficult to measure. The Report thus includes measures of outputs with an understanding that there is a correlation between some outputs and outcomes, and that measures of outputs can be proxies for measures of outcomes. The ‘percentage of accredited mental health facilities’, for example, is an output measure that can be used as a proxy for ‘quality care in mental health facilities’ (the outcome measure). For this reason, budget statements may specify that a service will aim to produce outputs with certain characteristics such as quality, timeliness and responsiveness.

Figure 1.3 A general framework and examples of performance indicators



Outcomes may be short term (intermediate) or longer term (final). Short term outcomes are usually more closely linked to the operations of the service provider, whereas longer term outcomes are more affected by capital investment and external factors. A police random breath testing program, for example, (set up relatively

quickly via a reallocation of resources) may achieve the intermediate outcome of fewer drunk drivers and lead to a short term reduction in road deaths, but the final outcome of a permanent long term reduction in road deaths will reflect external factors such as the design quality of cars and capital investment in improved roads or additional random breath testing units.

The approach in this Report is to:

- use both short term (or intermediate) and long term (or final) outcome indicators as appropriate where possible
- make clear that the service is only one contributing factor and, where possible, point to data on other factors. (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.)

Output indicators can be grouped according to the desired characteristics of a service — for example, accessibility, appropriateness or quality. These desired characteristics may differ across services. By contrast, outcomes depend on the performance of a service in a number of characteristics, and are subject to external factors; as such, they are not grouped in the same way.

Equity, effectiveness and efficiency

Since its inception, the Review has taken a comprehensive view of performance monitoring, acknowledging the tradeoffs inherent in allocating resources and the dangers of analysing only some aspects of the service. A change in service delivery may increase the level of resources per unit of output (a decrease in measured efficiency) but lead to better quality services (an increase in effectiveness). In addition, a unit of service may have a high cost, for example, but be more effective than a lower cost service in meeting each client's specific needs and, therefore, be more cost-effective. Performance assessment should thus incorporate indicators across all relevant dimensions.

In the past, the Review framework gave equal prominence to effectiveness and efficiency as the two overarching dimensions of performance. Equity was treated as a subdimension of effectiveness. Performance literature, on the other hand, often refers to equity as a third element of performance, separate from effectiveness and efficiency. The principal reason for the separation is that effectiveness indicators are generally absolute measures of performance, whereas equity indicators relate to the gap between service delivery outputs and outcomes for special needs groups and the general population. The Review's new framework reflects this approach.

Moreover, accentuating equity highlights the potential for tradeoffs across all three performance dimensions — equity, effectiveness and efficiency. Improving outcomes for a group with special needs, for example, may necessitate a decrease in measured efficiency. Assessing performance across all three dimensions remains important.

Equity

Equity in the context of this Report reflects equity of access, whereby all Australians are expected to have fair access to services. Equity indicators measure how well a service is meeting the needs of certain groups in society. The term ‘equity’ has a number of interpretations which are discussed in box 1.5.

Box 1.5 Equity

Equity is an important concept in economic literature, where there are two elements of equity:

- horizontal equity — the equal treatment of equals
- vertical equity — the unequal but equitable treatment of unequals.

In the context of performance measurement for service delivery, horizontal equity would be exhibited when services are available to everyone in the community, and there are no restrictions on access — that is, everyone is allowed to access the service.

For service delivery to exhibit vertical equity, the service would need to account for the special needs of certain groups in the community and adjust aspects of service delivery to suit these needs. This approach may be needed where geographical, cultural or other reasons mean some members of the community have difficulty accessing the service.

Facilitating access to key services for people with special needs is an important reason for governments to fund services (for example, housing services for those having difficulties accessing housing in the private sector). A number of criteria can be used to classify those groups who may have special difficulties in accessing government services. These include:

- language or literacy proficiency
- gender
- age
- physical or mental capacity
- race or ethnicity

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- geographic location.

In addition to reporting access indicators for those with special difficulties in accessing services, the Report contains a chapter on services for people with a disability (chapter 13).

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. Improvements to reporting for this group are discussed in chapter 2. In April 2002, COAG asked the Steering Committee to prepare a regular report on key indicators of Indigenous disadvantage as part of the COAG reconciliation commitment. This new publication (discussed earlier) is separate from the Report on Government Services and focuses on outcomes for Indigenous people. The Report on Government Services will continue to contain key indicators on the delivery of services to Indigenous Australians.

Identifying service recipients as belonging to groups with special access difficulties poses challenges, particularly when relying on client self-identification. If members of such groups are required to identify themselves, then the accuracy of the data will partly depend on how a group perceives the advantages (or disadvantages) of identification and also whether such perceptions change over time. Varying definitions of these groups in data collections over time and 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 point of comparison when examining service delivery to special needs groups. This approach is sensible for some services (for example, schools), but must be treated with caution for other services (for example, aged care). Another option is to collect a more accurate profile of need (for example, the Supported Accommodation Assistance Program's collection of data on the characteristics of those seeking assistance).

Where geographic location is used to identify groups with special needs, data are usually disaggregated into metropolitan, rural and remote areas. These classifications are generally based on population density and/or the distance that residents need to travel to access services. Most data collectors are moving towards classifying geographic region according to the Accessibility/Remoteness Index of Australia (ARIA). ARIA measures the remoteness of a point based on the physical road distance to the nearest urban centre.

Such classifications are imperfect indicators of the time and cost of reaching a service. Further, they do 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. Moreover, for some services, classification systems based on distance or population are not useful indicators of access to services (for example, ambulances can sometimes respond more quickly in rural areas than in metropolitan areas because there is less traffic).

Effectiveness

Effectiveness indicators reflect how well the outputs of a service achieve the stated objectives of that service. Indicators of the effectiveness of outputs in the new framework can be grouped according to desired characteristics that are considered important to the service. For most chapters, these desired characteristics include access, appropriateness and/or quality.

Access

Access indicators reflect how easily the community can obtain a delivered service (output) (for example, access to school education and police services). In this Report, access has two main dimensions, undue delay (timeliness) and undue cost (affordability). 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 services meet client needs. An appropriateness indicator for the Supported Accommodation and Assistance Program, for example, is the proportion of clients receiving the services that they are judged to need. Appropriateness indicators also seek to identify the extent of any 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 medical treatments available for particular populations is not known. However, data on differences in service levels can indicate where further work could identify possible underservicing or overservicing.

Quality

Quality indicators reflect the extent to which a service is suited to its purpose and conforms to specifications. The Review includes 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 in which to deliver a service, and each alternative has different implications for cost and quality. Information about service quality is needed to ensure governments consider all useful delivery alternatives.

The Steering Committee's approach is to identify and report on *aspects* of quality, particularly, actual or implied competence. Actual competence can be measured by the frequency of positive (or negative) events resulting from the actions of the service (for example, deaths resulting from health system errors such as an incorrect dose of drugs). Implied competence can be measured by the extent to which aspects of the service delivery process (such as inputs, processes and outputs) conform to specifications — for example, through accreditation.

Data generated by services for quality control purposes can often be a useful source of information for quality indicators. The extent to which aspects of service delivery (such as inputs, processes and outputs) conform to specifications are a proxy for quality outputs — 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 access and appropriateness (figure 1.3). This distinction is somewhat artificial because these other aspects of service provision also contribute to a meaningful picture of quality. No perfect indicator of service quality exists; each indicator has its own strengths and weaknesses.

Efficiency

Efficiency indicators reflect how well services use their resources to produce outputs and achieve outcomes. Government funding per unit of service is typically used as an efficiency indicator — for example, recurrent funding per annual curriculum hour for vocational education and training. Such an indicator is, however, unlikely to encompass a service's full cost to society.

Where possible, full unit costs are used as the indicator of efficiency. Comparisons of unit cost of a service are a more meaningful input to public policy when they use

the full cost to government, 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, overheads or the user cost of capital). The Steering Committee believes, where full cost information is not available in the short term, that data should at least be calculated consistently across jurisdictions. Further, data treatment should be fully transparent.

Where there are shortcomings in the data, other indicators of efficiency are used (including partial productivity ratios such as staff level per student in government schools, staff per prisoner in corrective services and administrative costs as a proportion of total expenditure in services for people with a disability).

1.6 Using the data in this Report

Data comparability

For each service, the performance indicator framework shows which data are provided on a comparable basis and which are not strictly comparable. Where data are not strictly comparable, appropriate qualifying commentary is provided in the text or footnotes. 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)
- benchmarks differ (for example, literacy standards)
- the sample size is too small for statistical reliability.

These differences may result in biased estimates, but it is not always clear whether biases are necessarily material. Even where the differences are significant, relatively simple adjustments may resolve them in many cases: for example, payroll tax exemption has a material influence on the comparability of unit cost indicators, and adjustments to cost data are made to account for payroll tax in most chapters (SCRCSSP 1999). Differences in the marginal tax rates of payroll tax systems, conversely, are unlikely to have a material impact on unit costs.

Validation

Data contained in this Report vary in the extent to which they have been reviewed or validated. At a minimum, all data have been signed off by the contributor and subjected to peer review by the working group for each service. Some data are verified and supplied by data collection agencies such as the Australian Bureau of Statistics and the Australian Institute of Health and Welfare.

Timeliness and accuracy

Timeliness of data is an important consideration for policy decision making. Sometimes, however, there is a tradeoff between the accuracy of data and its timely availability; in particular, data that are provided in a timely fashion might have had fewer opportunities to undergo rigorous processes of validation.

The Review's process of iterative data collection is intended to manage this tradeoff between timeliness and accuracy. The Review publishes data that jurisdictions have provided on an annual basis, with appropriate qualifications. The ongoing nature of the Report provides an opportunity for the Review to improve the data, particularly its comparability, over time. This approach has increased scrutiny of the data and led to timely improvements in data quality.

Improving the timeliness and accuracy of the data requires a high level of cooperation between the Steering Committee and participating agencies from all jurisdictions. Users of the Report are also 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 differing environments in which service agencies operate affect both the outcomes achievable and those achieved by the agencies. There may be significant differences in clients, available inputs, prices and geography, and any comparison of performance across jurisdictions needs to consider these differences. Relatively high unit costs, for example, may result from geographic dispersal, a high proportion of special needs clients, inefficient performance or a combination of these and other factors. Similarly, a poor result for an effectiveness indicator may have more to do with client characteristics than service performance. The provision of information that allows effective interpretation is sometimes more important than the result.

The Report does not attempt to adjust results provided by jurisdictions for differences that may affect service delivery, however, it does provide information on environmental differences to assist readers to interpret performance indicator results. Users of the Report will often be better placed to make the necessary judgments, perhaps with the benefit of additional information about their jurisdiction's circumstances or priorities. The Commonwealth Grants Commission adopts a different approach reflecting its different role (SCRCSSP 2000).

The Report provides information on environmental differences to assist readers to interpret performance indicator results. This information takes the form of profiles of each service area, footnotes to tables and figures, and a statistical appendix (appendix A). The statistical appendix provides a range of general descriptive information for each jurisdiction, including the age profile, spatial distribution, income levels and education levels of the population, the tenure of dwellings and cultural heritage (such as Indigenous and ethnic status). The information for each jurisdiction has two parts: a description of the main distinguishing characteristics and a set of source tables.

1.7 Other approaches and exercises

Techniques for measuring efficiency

The approach to developing the efficiency indicators used in the Report is primarily that of unit cost (although some chapters contain other measures of efficiency). Data envelopment analysis (DEA) is another measurement technique that appears to be suited to assessing efficiency in the delivery of government services. Typically using linear programming, DEA calculates the efficiency of an organisation within a group relative to observed best practice (not actual best practice) within that group. The approach operates by identifying best performers in terms of input use and output production. Other service providers are allocated a single efficiency score based on their performance relative to these best performers.

Data envelopment analysis is capable of handling the multi-input, multi-output production processes that often exist in government service provision. Moreover, this technique, unlike other more sophisticated tools, does not require outputs to be priced — an advantage that has obvious application to government services. Like any efficiency measurement tool, however, outputs (and units of measure) still need to be identified for estimation purposes.

Such analysis requires accurate data on all relevant input and output levels. Service providers that do not have a typical relationship between their inputs and outputs

can have a significant impact on the results. In addition, a fairly large sample of service providers is required. This approach has been used to measure the performance of a range of service providers internationally, and its applicability in the Australian context has been examined.

The Steering Committee's publication *Data Envelopment Analysis — A Technique for Measuring the Efficiency of Government Service Delivery* (SCRCSSP 1997a) explains DEA's conceptual underpinnings, how to interpret the output from DEA models, and the technique's strengths and weaknesses. Also, through the use of case studies on hospitals, dental services, police, motor registries and corrective services, it provides a practical guide to developing and refining a DEA model and interpreting the results. Directed at those responsible for providing government services and those accountable for the delivery of these services in a cost-effective manner, it aims to encourage people to think about how more detailed and rigorous analysis of performance can assist in improving the efficiency with which resources are used to provide essential services to the community.

The World Health Organisation (WHO) report *The World Health Report 2000 — Health Systems: Improving Performance* uses another efficiency measurement technique. This report outlines an approach to performance measurement by identifying two important aspects needed to judge performance: (1) attainment — that is, achievement of the objectives of good health, responsiveness and fair financial contribution — and (2) performance — that is, the comparison of what has been achieved (attainment) with the best that could be achieved with the same resources (potential attainment). The WHO derived a frontier corresponding to the most that could be expected of a health system (a level of attainment that a country may achieve but that no country surpasses), using information from many countries. Performance is measured on how far actual attainment lies from this frontier (WHO 2000).

'Measuring Australia's progress'

The Australian Bureau of Statistics published *Measuring Australia's Progress* for the first time in April 2002 (ABS 2002). The publication presents data on measures (or indicators) that relate to progress in three general areas; economic, social and environmental. It presents a suite of headline and supplementary indicators of key aspects of progress, and discusses the links between them. The aim is to help Australians address the question 'Has life in our country got better, especially over the past decade?', allowing readers to draw their own conclusions about overall progress. The Steering Committee has drawn on aspects of this approach in its report on *Overcoming Indigenous Disadvantage: Key Indicators*.

Performance monitoring in other countries

Performance reporting exercises are undertaken in other countries using various approaches. In the United Kingdom, agency performance is measured against the achievement of targets set out in public service agreements. These agreements set out the aim of the department or program, the supporting objectives and the related performance targets that are to be achieved during a specified period. There has been a shift in the emphasis of targets towards an outcome focus (The Comptroller and Auditor-General 2001).

In the United States, the Government Performance and Results Act 1993 requires agencies to develop multi-year strategic plans, annual performance plans and annual performance reports. Performance measures are targets set by the departments (US General Accounting Office 2000).

In Canada, performance information is organised around 200 key results commitments made by federal departments and agencies. These commitments state what departments intend to achieve with the resources they have been allocated. Each department produces an annual performance report and the Treasury Board of Canada Secretariat produces the annual report *Managing for Results*, which provides an overview. Performance frameworks and the types of indicator used vary across departments (Treasury Board of Canada 2000).

1.8 References

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