
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 role of this Report); and
- to report on service provision reforms that governments have implemented or that are under consideration.

A Steering Committee, comprising senior representatives from the central agencies of all governments, was established to manage the Review with the assistance of a Secretariat provided by the Productivity Commission.

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 to be 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 data in this Report can be an incentive to improve performance by fostering improvements in government services through:

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

In June 2001, a survey of users and producers of the Report was undertaken. The feedback survey achieved a response rate of nearly 40 per cent, which was somewhat lower than for the survey undertaken in 1998. The results have been made available to Review participants and will be used in assessing how to enhance reporting. Some of the key findings are outlined in box 1.1.

Box 1.1 Key results of the feedback survey

In June 2001, the Secretariat undertook a survey of users of, and contributors to, the Report to obtain feedback on the success of the Report in meeting the objectives of the Review.

Overall, around three-quarters of respondents rated the Report as 'good' or 'very good' on a range of criteria — credibility, relevance and objectivity — and nearly 60 per cent of respondents similarly rated the timeliness of its data.

In addition, respondents were asked to rate the usefulness of the various types of information presented in the Report by service area.

More than 80 per cent of respondents considered the profiles provided on the individual sectors (such as school education, public hospitals, child protection and aged care) to be 'useful' or 'very useful' and about three-quarters of respondents similarly rated the Report's coverage of policy developments and key performance results.

The Steering Committee will use the survey results to continue to improve the Report.

1.2 Scope

This seventh *Report on Government Services* contains performance information on 12 key service areas (box 1.2). 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.

Why governments deliver services

Governments deliver services for a number of reasons, and 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 other services are typically used by each person in the

Box 1.2 Services covered in the 2000 Report

Education and training	— School education (chapter 3) — Vocational education and training (chapter 4)
Health	— Public hospitals (chapter 5) — General practice (chapter 6) — Breast cancer control and mental health (chapter 7)
Justice	— Police (chapter 8) — Court administration (chapter 9) — Corrective services (chapter 10)
Emergency services	— Emergency management (chapter 11)
Community services	— Aged care (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, and Commonwealth Rent Assistance (chapter 16)

community at some stage during their life (for example, school education, police services and emergency services). More generally, the services included in this Report are largely concerned with:

- providing public goods, 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). This reduces transaction costs (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 that governments see as having particular merits or reflecting significant spillover effects in society. Examples include health services, ambulance services, community services and housing.

How governments deliver services

Governments deliver services 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 (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 where non-government groups such as charities, not-for-profit organisations and private providers also contribute resources for the services covered by the Report, those costs should be taken into account.

The purpose of the Report is to provide information to assist government decision making, and the relevant information required depends on the type of assessment that needs to be made 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 the decision of 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, it is accountable for all resources used and the Report includes the full costs. 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 allows governments to compare the internal management of their services with that of their counterparts in other jurisdictions. 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.

(Continued next page)

Box 1.3 (continued)

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, and there are difficulties in collecting data to make such comparisons. 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.

Sometimes, a private organisation will offer to deliver a service at a lower price to government than offered by an equivalent government provider, even though it may use at least as many resources as used by the government provider. This 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 such as donations, church buildings and volunteers that are not costed at market rates.

Funding government services

The services covered in the Report absorb a significant level of government expenditure. They accounted for approximately \$64.3 billion in 2000-01 (figure 1.1), representing around 27.5 per cent of government expenditure in that year (equivalent to about 9.6 per cent of gross domestic product).

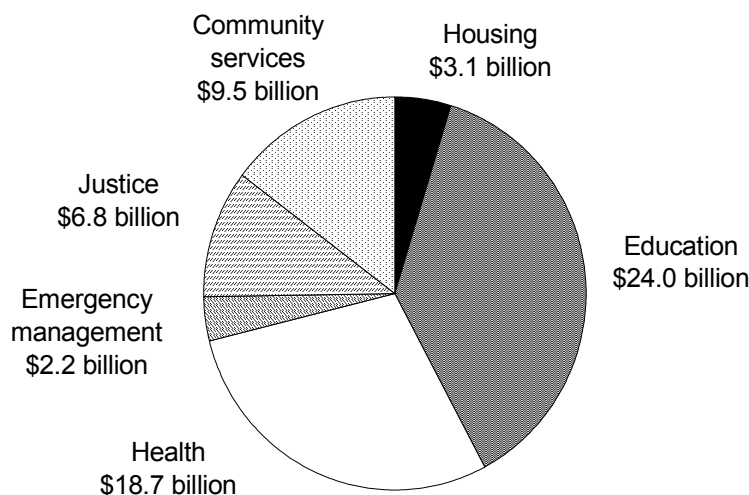
1.3 Approach

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;

Figure 1.1 **Estimated government recurrent expenditure on services covered by the Report, 2000-01^{a, b, c, d, e, f}**



^a Data for 2000-01 were not available for all services. The Report uses 1998-99 data for breast cancer screening and non-inpatient mental health care; 1999-2000 data for school education, public hospitals and general practice services; and 2000 data for vocational education and training. ^b These figures are not directly comparable to those reported in SCRCSSP (2001) because some service areas have used different data sources. ^c Health expenditure includes data for public hospitals, general practice, public health expenditure on breast cancer screening services and non-inpatient mental health services. ^d Increased housing expenditure in 2000-01 was partly due to an 8.0 per cent real increase in the maximum rate of Commonwealth Rent Assistance as compensation for the goods and services tax (GST), and \$89.7 million of GST compensation paid by the Commonwealth to State and Territory governments under the Commonwealth State Housing Agreement. ^e Health expenditure excludes patient transport. ^f Community services expenditure excludes juvenile justice.

Sources: relevant chapters.

- *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 has a higher priority than using a better indicator that allows no comparison. Where data are not yet comparable, they can still provide a useful basis for evaluating performance. Data for many services have been published in each of the seven reports; and
- *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).

Why measure performance?

The Steering Committee defines ‘performance’ in terms of how well a service meets its objectives, recognising the influence of external factors. Measuring the performance of government services is important for a number of reasons. The services covered in this Report are vital to the community’s wellbeing. Improving them will result in major social and economic benefits. Governments are continually re-evaluating whether the community is receiving the appropriate service mix and whether the services are getting to those most in need. Moreover, governments need to know whether their policies are effective and whether they are being implemented efficiently.

Performance measurement can:

- 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 performance;
- encourage ongoing performance improvement;
- encourage efficient service delivery; and
- promote analysis of the relationship between agencies and between programs, allowing governments to coordinate policy within and across agencies.

Why report comparative performance?

There are two main reasons that comparative performance information across jurisdictions is reported:

- to facilitate yardstick competition which enhances incentives for agencies to address substandard performance; and
- to allow agencies to identify peer agencies that are delivering better or more cost-effective services from which they can learn.

Comparative performance measurement is important for government services because the limited information is available to those deciding what services to supply and to whom. Each jurisdiction has, for example, only one police service, one protection and support service and one public hospital system. 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 can facilitate surrogate competition across jurisdictions. Governments and the community can assess service delivery and policy development in the context of the performance of other jurisdictions.

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, 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 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, deinstitutionalising 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).¹

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.

Providing performance information across jurisdictions can encourage innovation (and thus performance improvement). Traditionally, much of the effort to improve the effectiveness of government services has focused on increasing the level of resources devoted to them. This 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, accounting for the majority of the increase in real average annual income over the past decade (Bland and Will 2001). Innovation (the

¹ The implementation issues associated with these types of reform are examined in SCRCSSP (1997b) and SCRCSSP (1998).

introduction of new products or processes) can be important to productivity growth in all sectors, including government services.

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 involves 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 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.

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 Report are also subject to other comparative performance measurement across jurisdictions. Advantages of the approach taken in the Report are that there is a focus on non-technical information, making it accessible to non-specialists, and that the Report is produced on a regular basis.

This Report examines 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. 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 is the reporting of performance information on Commonwealth Rent Assistance (chapter 16).

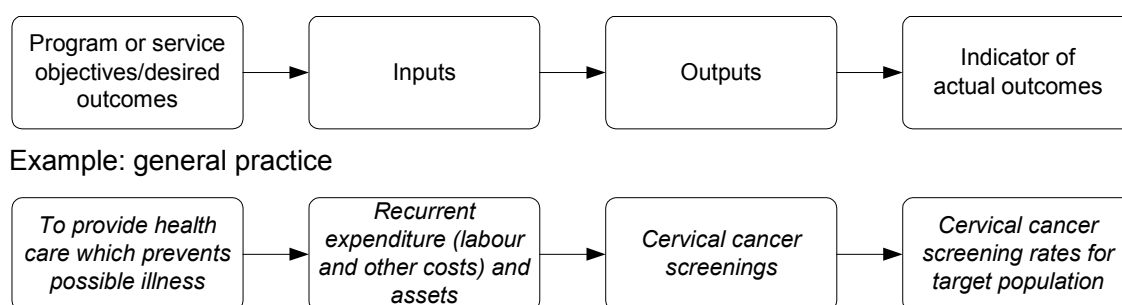
The service process

The basic relationship between objectives, inputs, outputs and outcomes is set out in figure 1.2. 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.

The general framework

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

Figure 1.2 **Service process**



reporting is to focus on the extent to which each *shared* objective for a service has been met. Objectives for each service area are outlined and performance indicators consistent with those objectives are reported.

The Steering Committee has developed a general framework for performance indicators (figure 1.3).² Within the framework, performance is assessed in terms of effectiveness and efficiency. *Effectiveness* is a reflection of how well the outputs of a service achieve the stated objectives. *Efficiency* is a reflection of how well governments use their resources to produce units of services.

Service provision can sometimes involve a tradeoff between elements of effectiveness and efficiency.³ 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. A standard unit of service may be, for example, more costly to produce but more effective in meeting each client's specific needs. Thus, performance assessment should consider both efficiency and effectiveness indicators.

Effectiveness indicators in this Report include indicators of:

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

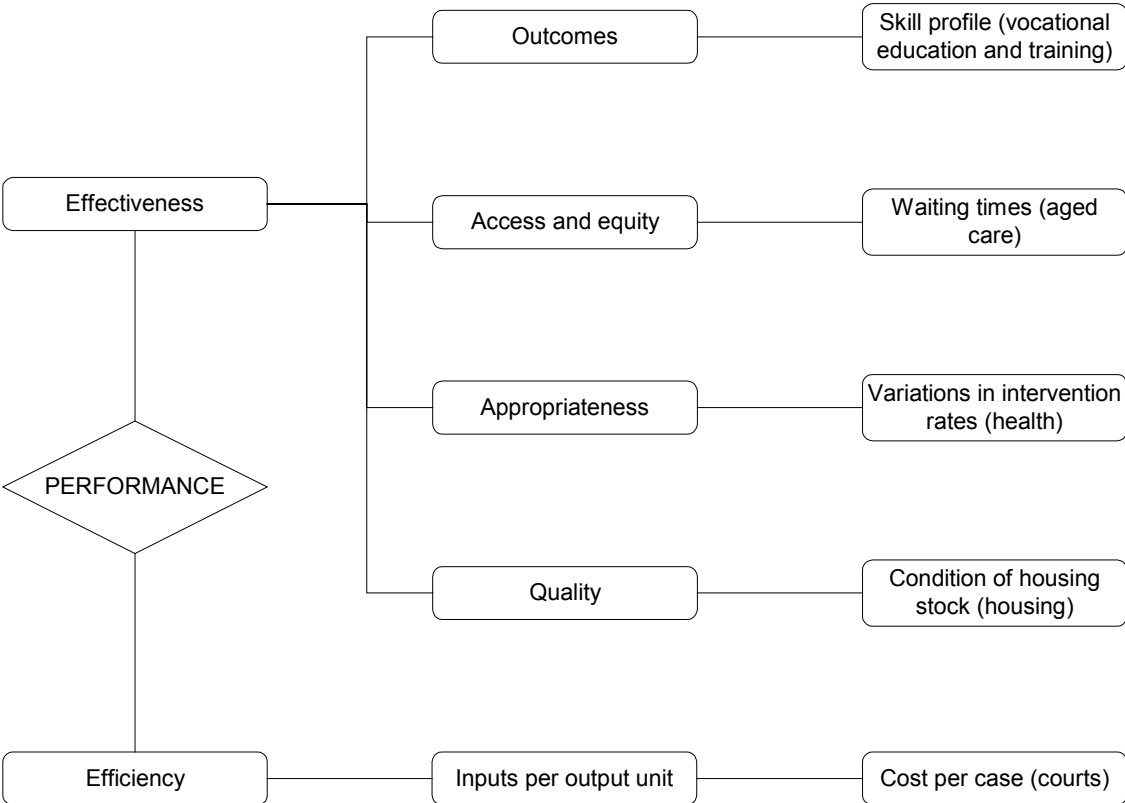
The indicator of efficiency generally used is the level of government inputs per unit of output. Each chapter of the Report includes descriptive information about

² The performance indicator framework for schools, used for the first time in the 2001 Report, is a departure from the general framework.

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

services and the context of their delivery, recent policy developments, a discussion of future directions in performance reporting, and comments from each jurisdiction.

Figure 1.3 A general framework and examples of performance indicators



Outcomes

The actual outcomes of a service area should reflect the objectives of the service area; it is important, therefore, to report outcome indicators (or their proxies) when measuring performance. Outcome indicators provide information on the impact of a service on the status of an individual or a group, although other factors may affect actual outcomes for an individual or group. Outputs are the services delivered by the service area.

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 of a service range from immediate and specific (short term) results to long term or broad changes in the community. Short term specific outcomes often lead to broader outcomes. As outcomes become less specific and more broad, it becomes increasingly difficult to assess the separate role that a particular service area has had relative to other factors. One of the broad outcomes (objectives) for maternity services, for example, is that services are safe and of high quality. While one of the outcome indicators — rate of neonatal deaths per 1000 births — indicates the effectiveness of the service area, external factors (such as general health and wellbeing of the mother) will also affect the indicator.

The approach in this Report is to:

- use, where possible, both short term (or intermediate) and long term (or final) outcome indicators; and
- 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).

Access and equity

Enabling appropriate access to key 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 target group (for example, to housing services for those having difficulties accessing housing in the private sector).

Access has three main dimensions — preventing discrimination, undue delay, and undue 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;

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- physical or mental capacity;
 - race or ethnicity; and
 - geographic location.

In addition to reporting access indicators for individual service areas, the Report has devoted a chapter to examining the effectiveness and efficiency of 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. Chapter 2 provides more detail on the progress in this area.

Identifying service recipients as members of 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 whether such 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 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 (SAAP) 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 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 SAAP, 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.

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 in which 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). This distinction, however, is somewhat artificial because other aspects of service provision 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). 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 the costs of, and reduce delays in, performance reporting. Although the Steering Committee values time series data as a means of evaluating developments in service delivery, performance indicators will sometimes change from one Report to another when better or more appropriate ones are developed.

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 is not to be interpreted as encompassing a service's full cost to society.

Where possible, full unit costs are used as the indicator of efficiency. 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 and staff per prisoner in corrective services). 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 or overheads). 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, treatment should be fully transparent.

Using the data in this Report

Data comparability

For each service area, the performance indicator framework shows which data are provided 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.

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 subject to peer review by the working group for each service. Some data are supplied by data collection agencies such as the Australian Bureau of Statistics (ABS) 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; data that are provided in a timely fashion may have had fewer opportunities to undergo rigorous processes of validation.

The Review recognises the importance of both timely and accurate data. The Review's process of iterative data collection is intended to manage this tradeoff. The Review publishes data that jurisdictions have provided, with appropriate 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 timely improvements in data quality.

Improving the timeliness and accuracy of the data — an ongoing task — 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 Report aims to present indicators that help users 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. Each government's priorities, tradeoffs or targets may be unknown and may change over time. Presenting a range of performance indicators encourages users to consider overall performance, rather than performance against a single indicator. Moreover, each user is left to judge the appropriate tradeoffs between objectives.

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 Indigenous and ethnic status). 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 Report 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, perhaps with the benefit of additional information about their jurisdiction's circumstances or priorities. The Commonwealth Grants Commission adopts a different approach, but this reflects its different role (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 Report aims to provide a comprehensive set of performance information. Nevertheless, 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 force some students to travel further). This highlights the importance of using performance indicators as part of a broader set of tools when assessing policy choices.

1.4 Other approaches and exercises

Efficiency measures

The approach to developing indicators of efficiency 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 well 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 multi-input, multi-output production processes, as often exist in areas of government service provision. Moreover, this technique, unlike other more sophisticated tools, does not require outputs to be priced, which has obvious application to government services. It should be noted, however, that like any efficiency measurement tool, 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 published a report in 1997, *Data Envelopment Analysis — A Technique for Measuring the Efficiency of Government Service Delivery* (SCRCCSP 1997a), that explains DEA's conceptual underpinnings, how to interpret the output from DEA models and its strengths and weaknesses. Also, through the use of case studies on hospitals, dental services, police, motor registries and corrective services, the report provides a practical guide to developing and refining a DEA model and interpreting of results. The DEA report is directed at those responsible for providing government services and those accountable for their delivery 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.

Another efficiency measurement technique was used in the World Health Organisation report *The World Health Report 2000 — Health Systems: Improving Performance*. This report outlines an approach to performance measurement by identifying two important aspects needed to judge performance. The first is attainment — that is, achievement of the objectives of good health, responsiveness and fair financial contribution. The second is performance — that is, the comparison between what has been achieved (attainment) and the best that could be achieved with the same resources (potential attainment). 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) was derived using information from many countries. Performance is measured on how far from this frontier actual attainment lies (WHO 2000).

Programme for International Student Assessment

The Organisation for Economic Cooperation and Development (OECD) launched the Programme for International Assessment to monitor the outcomes for students in 29 member countries and several other countries. The results will be published every three years, along with other indicators of education systems, allowing countries to compare the performance of their education systems with those of other countries.

Between 4500 and 10 000 students from each participating country will be surveyed in an internationally standardised assessment. The program covers three broad areas: reading literacy, mathematical literacy and scientific literacy. The first assessment took place in 2000 and results were published in late 2001 (Lokan, Greenwood and Cresswell 2001).

The assessments will provide various types of indicators, including:

- indicators of a baseline profile of the knowledge and skills of students;
- indicators showing how such skills relate to important demographic, social, economic and educational variables; and
- trends from ongoing data collection and showing changes in outcome levels, outcome distribution and outcomes over time (OECD 1999).

Australia's survey was undertaken by the Australian Council for Educational Research on behalf of the OECD.

Measuring Australia's progress

The ABS has indicated it will produce a new publication, *Measuring Australia's Progress (MAP)*, in April 2002. The publication will present data on measures (or indicators) that relate to progress in three general areas; economic, social and environment. The approach adopted is to present a suite of indicators of key aspects of progress, side by side, and to discuss the links between them. The aim is to provide 15 headline indicators and to track progress over time, allowing readers to draw their own conclusions about overall progress (ABS 2001).

Performance monitoring in other countries

Performance reporting exercises are undertaken using various approaches in other countries. In the United Kingdom, agency performance is measured in respect to 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 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 (GAO 2000).

In Canada, performance information is organised around 200 key results commitments that federal departments and agencies have made. 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 an annual report, *Managing for Results*, which provides an overview. Performance frameworks and the types of indicators used vary across departments (Treasury Board of Canada 2000).