Integrating indicators

Theory and practice in the disability services field

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The Australian disability services field is currently characterised by rapid policy development and changes in the way services are conceptualised, funded and delivered. Thus there have been changes in the information that disability administrators need to inform policy and planning relating to services funded under the Commonwealth/State Disability Agreement (CSDA). It is in this context that the Australian Institute of Health and Welfare (AIHW) was commissioned to undertake the Integrating Indicators project for the National Disability Administrators (previously the Disability Services Sub-Committee).

The aim of the project is to develop a national framework in which current Australian practice in the disability services field can be viewed in the context of theoretical approaches to indicating supply, demand, input, output, outcome and performance. There are three components to the project:

- reviewing current indicators of supply, input measures, output measures, performance indicators and outcome measures, as well as indicators of demand available from population surveys, client assessment processes and jurisdictional coordinated databases;

- reviewing relevant literature as it applies to the community services field and the disability services field in particular; and

- synthesising the two reviews, placing practical approaches in the context of more theoretical approaches to need, demand, input, output and outcome.

The project identifies opportunities for integrating practical and theoretical approaches, in so far as such integration can contribute to improved data collection and/or service planning, delivery, funding, monitoring and/or management. It also contributes to the future development of the CSDA Minimum Data Set (MDS) and other work on performance indicators in the disability services field.

In May 1999 the AIHW sent to each jurisdiction a request for information to inform the project. A large amount of very useful material was received over the next three months. After reading and digesting this material, the AIHW sent a preliminary summary back to each jurisdiction for feedback on accuracy and comprehensiveness. Some further information and clarification was also sought at this stage.

The final summaries are presented in a working paper (AIHW 2000), available from AIHW on request. They are used as a basis of the review of current practice in Chapter 3. This review reflects practice in the field as at July 1999. Due to rapid evolution in the field, it is inevitable that this review will become outdated as new developments occur.

The AIHW contracted a consultant to provide theoretical expertise. The consultant prepared a review of literature relevant to performance indicators. A summary of this review forms the basis of the theoretical material presented in Chapter 2 of the report.

Three frameworks have been developed by AIHW and the consultant to provide a 'map' of the field as a context within which to identify priority areas for indicator development. The frameworks draw together material provided by jurisdictions (e.g. Treasury funding

models, disability service funding models, and information on disability services program structures) and theoretical literature relevant to performance indicators. They benefited from the intellectual input of a number of people, including AIHW staff and the Reference Group, and continued to evolve throughout the course of the project.

Report outline

Chapter 1 is a brief introduction that gives the terms of reference of the project and sets out the structure of the report.

Chapter 2 presents and explains the three frameworks. These are used throughout the remainder of the report as a basis for organising and analysing information. This chapter also provides a summary of issues relevant to indicator use and development.

Chapter 3 is a review of the current 'state of play' regarding performance indicators in the disability services field, based on material provided by jurisdictions.

Chapter 4 presents an assessment of information-rich and information-poor areas using the frameworks of Chapter 2. Priority areas for indicator development are then identified and discussed. The final section outlines implications for the CSDA MDS and suggests a way forward on indicator development.

The frameworks

Figure 2.1 Major players and structures in the disability services field (p. 7)

This figure provides a broad context for the consideration of information regarding performance indicators relevant to the disability services field. It can be used to consider experience at an individual level or at the collective level.

The person occupies the central position at the top of the figure. Environmental factors and personal characteristics influence the person's level of functioning and disability (Body Functions and Structure, Activities and Participation). This in turn affects the person's level of need and demand for services and assistance. Need and demand may be addressed via family and carers, the broader community, governments or generic (non-disability-specific) services. Disability-specific services and assistance may be provided informally by family or friends, or formally by non-profit organisations, government agencies or for-profit organisations. The services and assistance provided contribute to outcomes for individual consumers and for the community as a whole. These outcomes feed back to the person, influencing levels of functioning and disability.

Figure 2.2 Service funding and delivery models (p. 8)

This figure illustrates the main ways in which government funds, allocated through disability services programs, are used to fund, purchase and provide services. Broadly, funds may be allocated to service providers or directly to consumers (i.e. consumer-based funding).

The many means by which funds are allocated to providers are grouped into three broad models:

- **Block grants**, where the amount of funding a provider receives is generally determined by historical precedent, and related to the cost of inputs.

- **Output-based funding**, where the amount of funding is linked, at least in part, to the number of units of service output purchased.

- **Outcome-based funding**, where providers receive funding from government on the basis of outcomes achieved.

Approaches to consumer-based funding are also divided into three broad categories:

- **Voucher model**, under which the consumer is given vouchers to purchase services, usually from a range of providers participating in the voucher scheme.

- **Direct consumer funding**, where funds are allocated directly to the consumer (i.e. the person with a disability, or his or her family, carer or advocate).

- **Brokerage**, where funding is allocated to the consumer via a service broker, who purchases services to meet the needs of the individual consumer.

The figure is useful for making comparisons between models in terms of the points at which data can be collected, the type of data that might realistically be collected, and the scope for aggregation of data (e.g. to assess program-level performance).

Figure 2.3 Performance indicators framework (p. 9)

This figure illustrates the relationships between performance-related concepts and measures. Terms are not defined as such, as definitions will vary depending on the perspective taken.

The central column of the figure shows the flow from consumer needs to outcome goals (often specified at whole-of-government level) and more specific output objectives. Inputs are purchased and, through processes and activities within an agency, are converted to service outputs (which can be measured in terms of quantity, quality, timeliness, cost and location). Outputs contribute to outcomes for individual consumers and thus for the community as a whole. Measures of outcomes achieved and outputs produced can be compared against outcome goals and output objectives, respectively. On the right-hand side of the figure are performance indicators of efficiency (the rate of translation of inputs into outputs), effectiveness (the rate of translation of outputs into outcomes), and various related measures that involve an element of cost.

The 'state of play'

The 'state of play' in the disability services field, as at July 1999, is reviewed in Chapter 3.

Structures

Organisational structures affect the delivery of services and the collection and reporting of information relevant to performance. 'Structures' include funding and reporting models in place at whole-of-government level and program level, and service delivery models.

Governments fund community service departments to provide or fund disability services. Departments may either provide services directly, or fund non-government organisations to provide services. There has been a trend towards funding departments against

outcomes or outputs articulated at whole-of-government level, with departments required to report to Treasury and/or the Office of the Auditor-General against these outcomes or outputs. Inevitably, these high-level funding and reporting arrangements influence the way departments responsible for disability services conduct their business.

There have been significant changes in the disability services field in recent years, affecting the way services are funded and delivered to clients. In the United States, Schalock (1999) has identified two important forces driving change in the disability field: a shift towards more person-centred values, and the economic-based restructuring of services. These forces can also be recognised in the Australian disability services field.

The shift towards person-centred values is reflected in changing attitudes towards disability, changing views on how the needs of people with disabilities can best be met, and increased input of people with disabilities and their families (individually and collectively) into service planning and provision. There is a trend towards seeking clients' views on disability services (quality, appropriateness, etc.) through satisfaction surveys and other feedback mechanisms. The shift towards person-centred values is also reflected in the rise of consumer-based service funding models. Under these models services can be provided more flexibly to better meet individual needs.

The economic-based restructuring of services involves an increased focus on accountability, efficiency and effectiveness. This is reflected in a number of related trends, including the rise of the purchaser–provider model, which has been adopted in most jurisdictions. The separation of purchaser and provider roles allows increased transparency and accountability, and increased efficiency and effectiveness through the introduction of competition between service providers. In practice, the separation is achieved by (i) departments purchasing services from non-government providers, and/or (ii) the creation of a 'government provider' of services, separate from funding/purchasing units within government.

There is also a move towards output-based funding, which has been advocated at whole-of-government level in most jurisdictions. In line with this trend, reporting requirements are tending to become more detailed, with agencies often required to report on how funds have been used to provide the service outputs contracted. Reporting requirements sometimes also relate to service standards, outcome achievement and other aspects of performance.

Service funding and delivery models

Models currently in use or under development were reviewed with reference to Figure 2.2 (Service funding and delivery models). In practice, not all models fit into one of the six distinct categories in Figure 2.2—the field is currently characterised by hybrid or transitional models.

Block grant funding is still in place in several jurisdictions, sometimes as the main model but more often as a remnant model being progressively replaced by output-based and/or consumer-based funding. There are also examples of models which represent a transitional stage between block grant and output-based funding.

Output-based funding is being adopted in most jurisdictions, with work on defining and costing units of service output still generally in progress. Outcome-based funding is emerging as a new model. However, there is a general need for further development work to establish ways of linking funding to outcome achievement. Under the case-based funding model currently being trialed by the Commonwealth, funding for service providers is linked to the achievement of specific employment outcomes for consumers.

Standardised service purchasing contracts are used in several jurisdictions. These set out reporting requirements, which may include output measures, compliance with standards and measures of effectiveness or outcome achievement. Examples vary in terms of the extent to which reporting requirements are detailed in the standard service agreement form (e.g. whether counting rules are specified), and this is likely to affect the degree to which data are comparable between agencies within a jurisdiction.

Consumer-based funding models are in place in most jurisdictions. Most often these involve brokerage arrangements, under which funds for the individual are managed by an agency which may provide services directly and/or purchase services from other providers. Under many models the individual consumer has a say in deciding what services are purchased. Some examples of direct consumer funding are in place. No examples of voucher funding were identified.

There are several other funding models in use which cannot easily be characterised using the framework of Figure 2.2. These include models that involve cooperation and resource sharing between agencies, in some cases between specialist disability service providers and mainstream service providers.

Definition of key terms and concepts in the field

There is substantial variation in the way performance-related concepts such as 'input', 'output', 'outcome', 'efficiency' and 'effectiveness' are understood and operationalised in the disability services field. A common understanding of these central concepts is essential if meaningful and comparable performance data are to be collected.

In this report the term 'performance' is used broadly. Measures of input, process, output, outcome, quality, effectiveness and efficiency are all potentially relevant to notions of performance in a disability services context.

An important distinction can be made between 'measuring' and 'indicating' performance. Measurement generally involves basic quantification (e.g. the number of service recipients), while indicators are higher level summaries of information. Indicators provide evidence that implies something more general about performance—that is, they are information about a selected aspect of performance which is indicative of broader performance. This is useful where causal links are not obvious and changes in performance are difficult to measure directly. For example, it may not be possible to 'measure' outcomes in some situations, but it may be reasonable to develop an outcome 'indicator' that is a proxy, perhaps using information about something that is expected to be associated with good outcomes.

Inputs

In the economics literature, inputs are the resources (e.g. staff, equipment, premises) that are used to produce outputs. The cost of inputs is what is paid to purchase those resources. Often the term 'inputs' is used more loosely to include funding. With recent trends in the economic restructuring of services, governments have become more interested in information on outputs and outcomes, and are placing less emphasis on inputs.

Outputs

Definitions of outputs do not vary greatly in the disability services field. They are widely understood to be 'goods and services produced by, or on behalf of, a government agency and provided to customers outside the agency' (Tasmanian Department of Treasury and

Finance 1996). High-level outputs are often articulated at whole-of-government level as a basis for allocating funds and assessing program performance. They may be grouped into 'output groups' or 'output classes', which often relate to a particular government outcome.

At program level, outputs are usually more closely specified to relate directly to services purchased and provided. Disability services programs in most jurisdictions have been working towards defining meaningful 'units' of service output. The ability to quantify outputs is essential for output-based funding, and for assessing efficiency and effectiveness. Because of the range of services funded under the CSDA, it is not feasible to use a single 'unit of service' measure regardless of service type. However, it is desirable to achieve some level of consistency, so that comparable performance measures can be generated.

Various units are used currently in service purchasing contracts for specifying quantity of output. Number of clients is a commonly used unit although, without further information, such a measure may not provide a good indication of actual 'service outputs' delivered. Hours of service are used in some jurisdictions for some service types. Other units being developed include: hours of service weighted by, e.g. staff:client ratio; number of clients weighted, e.g. by intensity of assistance; period of care; and instance or occasion of service. This is an area in which much development is currently occurring.

Information on output quality, timeliness and location (i.e. where outputs are delivered) is also important for making comparative assessments (e.g. between agencies). Measures of quality, timeliness and location relating to service outputs are used in some jurisdictions, but in general these are not as well developed as quantity measures.

Costing service outputs is central to output-based funding and measures of efficiency. Establishing the full cost of service outputs tends to be problematic, as it is difficult to determine the contribution of sources other than CSDA funding to services provided by non-government agencies. Also, allocating indirect costs to specific outputs can be difficult. This area has been a focus, particularly of treasury departments, in recent years, and several jurisdictions have developed guidelines on output costing.

Service quality

The National Standards for Disability Services were endorsed by the (then) Council of Social Welfare Ministers in June 1993. They have been adopted in all jurisdictions, and several jurisdictions have developed their own set of standards, based closely on the National Standards. The approach taken to the implementation of quality standards in most jurisdictions tends to emphasise the need for a climate of continuous quality improvement, rather than rigid compliance. However, compliance with the Disability Service Standards is a requirement built into contracts between governments and non-government service providers in several jurisdictions.

Outcomes

In the current policy environment there is a strong emphasis on outcomes. This emphasis is reflected in the main goal statement in Clause 4(1) of the 1998 CSDA: 'The Commonwealth and the States strive to enhance the quality of life experienced by people with a disability through assisting them to live as valued and participating members of the community'.

It is the aim in many Australian jurisdictions to move towards allocating funding for services on the basis of outcomes, or at least on the basis of outputs or output groups that are related to outcomes articulated by government.

There is substantial diversity in how the term 'outcome' is defined and how the concept is operationalised (e.g. in service contract reporting requirements). Definitions are often quite broad and encompassing, for example 'the impact of the service on the status of individuals or a group' (SCRCSSP 2000). However, some definitions are very specific. For instance, under the Commonwealth's proposed case-based funding model, 'employment outcome' is defined as work which is for an average of at least 8 hours or greater per week and at a wage which is either award-based or part of a legal industrial agreement.

Quality of life and participation are themes common to many definitions of 'outcome' in the context of disability services.

It can be useful to group outcomes according to the structural level at which they apply:

- **Individual outcomes**. These relate to the individual consumer, and may be narrow (e.g. getting a job) or broad (e.g. improved quality of life).

- **Service-level outcomes**. These are based on aggregations of individual outcomes, and thus reflect how well a service is achieving outcomes for its clients.

- **Service provider outcomes**. These relate to how well a service is conducting its business (e.g. improved efficiency or compliance with service quality standards).

- **Community-level outcomes**. These tend to be articulated by governments and are often about providing access to appropriate services that will help improve the quality of life of people with disabilities. They commonly incorporate notions of participation, rights and inclusion. For example, 'access to high quality services that advance the development and promote the dignity of people with intellectual, physical and/or sensory disabilities' (Victorian Department of Treasury and Finance 1999).

Efficiency and effectiveness

'Efficiency', in Figure 2.3 (Performance indicator framework), is the rate of translation of inputs into outputs. However, in practice efficiency is often used to mean the cost per output (cost-efficiency in Figure 2.3). In the *Report on Government Services 2000* (SCRCSSP 2000), efficiency is defined as 'a reflection of how well organisations use their resources to produce services'. Unit cost is commonly used as an indicator of efficiency.

In Figure 2.3 'effectiveness' is the translation of outputs into outcomes. In the *Report on Government Services 2000* (SCRCSSP 2000), effectiveness is defined as 'a reflection of how well the outputs of a service achieve the stated objectives of that service'. There are three groups of effectiveness indicators in the framework of performance indicators for disability services: 'participation outcomes', 'quality' and 'access and equity'. Effectiveness is a difficult concept to operationalise, as this relies on clear criteria for assessing outcome achievement, and establishing links between service outputs and outcomes.

Need and demand

In an AIHW report examining demand for disability support services in Australia (AIHW 1997b), 'demand' is defined as 'expressed need'. In addition, distinctions are made between 'met demand', 'unmet demand' and 'potential need'. There was little discussion of the concepts of 'need' and 'demand' in the materials provided by jurisdictions to AIHW for this project.

Data currently available and data developments

Work on the development of performance-related data is progressing rapidly in different jurisdictions. Material provided was used to look at the type of data collected, the method of collection, whether data are consistent (e.g. between service providers, service types, jurisdictions) and whether they are aggregated for use at program or whole-of-government level. While a lot of progress is being made there is clearly scope for more coordinated data development work.

Inputs and costs

While there is currently little government interest in collecting data on inputs per se, there is much more interest in collecting data on dollars consumed in providing service outputs.

Some national data on the cost of government-provided accommodation services, and contribution of government funds to non-government-provided accommodation services, are presented in the *Report on Government Services 2000* (SCRCSSP 2000). They are used as indicators of efficiency. These are program level data, and so do not provide any detail at the sub-jurisdiction level. Also, these figures do not reflect the full cost of non-government-provided services.

It is difficult to obtain data on the contribution of non-CSDA funds to services provided by non-government agencies. Based on figures published in annual reports and financial statements of the 57 largest non-government organisations that provided disability services in 1997–98, government funds accounted for, on average, 50% of total funds (AIHW unpublished data).

In most jurisdictions some financial data are collected through administrative processes, although there is generally little information concerning how funding is used to provide specific service outputs. However, development work is occurring rapidly in this area in a number of jurisdictions. As part of the Commonwealth's case-based funding trial, detailed data on cost will be obtained from some service providers and appropriate methodology will be developed to attribute service provider cost at the individual job-seeker level.

Outputs

A major source of data on outputs is service contract reporting requirements. In some jurisdictions these data are collated and reported regularly at program level (e.g. Victoria, Australian Capital Territory). 'Number of clients' is the most common measure, often accompanied by demographic data (e.g. age, sex, Indigenous status). A number of jurisdictions collect information on the total number of people who receive services during the year. The current CSDA MDS provides information on the number of clients who access services on a single snapshot day.

Other measures of output are collected by administrative means in some jurisdictions. For example, information on hours of support provided is collected for some service types in New South Wales, Victoria and Western Australia. 'Number of contacts during the reporting period' is collected for psychiatric disability services in Victoria.

Under some consumer-based funding models, information on outputs purchased is recorded as part of the normal administrative processes, though these data do not generally appear to be aggregated to program level.

Outcomes

Some data on outcomes are being developed, but this area is still patchy from a national perspective. In some jurisdictions providers are required to report on outcomes under service contracts, but standard approaches to assessing outcomes do not seem to have been developed. In Western Australia, community level 'access outcomes' for people with disabilities resulting from activities carried out by public authorities under Disability Services Plans are monitored and reported by the Disability Services Commission.

The AIHW has used the Participation dimension of the draft ICIDH–2 as a basis for analysing Australian Bureau of Statistics (ABS) survey data to look at participation of people with a disability in four key areas: living arrangements and self-care; education, work, leisure, and spirituality; economic life; and mobility and social relationships (AIHW 1999).

The *Report on Government Services 2000* presents some data on community participation outcomes: proportion of accommodation clients receiving community-based care or support (from CSDA MDS data); labour force participation (ABS disability survey data); and social participation (ABS disability survey and the national client satisfaction survey data). These are relatively high-level indicators of outcome (i.e. factors that could be expected to be associated with improved quality of life for people with disabilities).

Some information relevant to outcomes is available through service user feedback mechanisms and client satisfaction surveys. For instance, in New South Wales, non-government providers report information from service user evaluations. However, this type of information perhaps relates more to service quality than to outcomes as such.

Substantial development work is currently occurring in some jurisdictions in order to improve data on outcomes. For instance, in 1998, Disability Services in Tasmania began a pilot project to trial the Personal Outcomes Assessment Tool to assess service providers purely in terms of quality outcomes for individuals. Under the Commonwealth's case-based funding trial, data on employment outcomes for consumers will be collected.

Quality

Many jurisdictions collect information on quality relating to the Disability Services Standards. Often this information is collected through self-assessment processes as part of agency-level continuous quality improvement strategies. Therefore, the data are not generally readily comparable between agencies. However, in Western Australia the Periodic Service Review system for residential accommodation services, when fully established, is expected to provide data that can be aggregated to provide quality performance indicators for residential services. Also, in Victoria, data on service quality collected from providers through a self-assessment process are being worked into a report that will provide data feedback at a state-wide level, including information relating to service providers' performance against the Victorian Standards for Disability Services (by service type).

Efficiency and effectiveness

Data relating to efficiency and effectiveness are presented in the *Report on Government Services 2000*. The measures are relatively high level, and draw largely on data from the ABS disability survey, the CSDA MDS and the National Client Satisfaction Survey.

High-level indicators of efficiency and effectiveness are published in the annual report of the Western Australian Disability Services Commission against each of ten program-level outputs. Efficiency indicators are cost per service user or cost per person with a disability

in Western Australia, depending on whether outputs are services delivered to individuals, or directed at community level (e.g. the 'access improvement' output). Effectiveness indicators include take-up rate per Western Australian with a disability (i.e. service users as a proportion of people receiving disability-related pensions or benefits), increases in client numbers in certain service types, and consumer satisfaction with services.

Need and demand

The ABS disability survey is the primary source of national data on demand for services. The report on demand for disability services, produced by AIHW in 1997, provided estimates of the level of unmet demand for accommodation and support, respite and day programs. The 1993 ABS disability survey data were used as a primary data source for estimating numbers of people with unmet demand (AIHW 1997b).

There are a number of sources of data on demand for services in different jurisdictions. Some jurisdictions maintain service needs registers that contain quite comprehensive data on demand (e.g. Victoria). Some one-off studies have also been conducted (e.g. South Australia and the Northern Territory).

Conclusions reached

The final chapter of the report (Chapter 4) explores the way forward for indicator development, both in the context of the CSDA MDS and more broadly.

Identifying priority areas for indicator development

An assessment of information-rich and -poor areas of the frameworks presented in Chapter 2 was conducted, as a basis for identifying priority areas for indicator development.

Other factors considered in identifying priority areas were:

- policy-relevance and currency of the area;
- importance of the area as reflected by the disability administrators' stated information needs; and
- the suitability of indicator development to meet information needs (i.e. indicator development may not be the most appropriate approach in some areas).

Efficiency and effectiveness

Cost-efficiency (cost per unit output) is of interest to governments to answer the important question: 'Can outputs (of comparable quality and specifications) be provided more cheaply?'. To develop cost-efficiency indicators it is necessary to collect data on the cost that can be related to identifiable service outputs.

Effectiveness (translation of outputs into outcomes) and cost-effectiveness (cost per outcome) are both of central interest to governments, which aim to deliver outcomes to consumers within the constraints of limited budgets. Cost-effectiveness indicators provide a basis for addressing the question: 'Can outcomes be provided more cheaply?'. The related question, to be addressed by effectiveness indicators, is: 'Can alternative outputs be purchased which will produce more or better outcomes?'. This bears on issues of service or output 'substitutability'—i.e. whether some outputs are better at achieving outcomes, or whether some outputs achieve the same outcomes at less cost.

To indicate effectiveness, it is necessary to (a) define and collect data on outputs; (b) identify a causal relationship between outputs and outcomes; and (c) develop a way of assessing outcome achievement. To indicate cost-effectiveness, information on cost is needed, and there must be some way of relating costs to particular outcomes.

Cost-efficiency, effectiveness and cost-effectiveness are composite or 'secondary' measures in that they are derived from information on cost, output and outcome (see Figure 2.3). Thus, determining ways of measuring or indicating cost, output and outcome is fundamental to the improvement of these overarching indicators.

Outcomes, outputs and costs

'Outcomes' are a priority area for development—they are highly policy-relevant, administrators want more information, and our review suggests that further development in this area is needed. Developing indicators is likely to be a particularly useful approach, as the concept of 'outcomes' is complex and high level, making direct 'measurement' problematic.

'Costs' and 'outputs' are also identified as priority areas for development. They are currently receiving much policy attention and are identified by administrators as areas where more information is required.

Other areas

'Quality' is an area of high policy-relevance that is relatively information-poor and has been identified among administrators' stated information needs. However, national indicator development is not seen as the best approach in this area currently. In some jurisdictions the quality information currently collected is a by-product of agency-specific quality improvement strategies. In addition, approaches to quality vary substantially between jurisdictions. Thus, developing meaningful, comparable indicators at national level is likely to be very difficult at this stage, and it may be more profitable to allow developments to continue at jurisdiction level and revisit this area again in a couple of years.

Similarly, several other areas that were identified as relatively information-poor were not considered to be current priority areas for indicator development. These areas were: generic services; environmental factors; and consumer needs.

The way forward

Thus, three priority areas for indicator development are identified: outcomes, outputs and cost. These are areas that are highly policy-relevant, and have added importance because they provide the building blocks for indicators of cost-efficiency, effectiveness and cost-effectiveness.

In Section 4.3 of the report, some specific suggestions regarding potentially fruitful directions for indicator development are put forward against each of these priority areas. In Section 4.4, implications for the CSDA MDS and options for further work on indicator development are discussed.

Immediate implications for the CSDA MDS

The redevelopment of the CSDA MDS presents opportunities to progress the development of data relevant to indicators.

Outcomes: The National Community Services Data Dictionary data elements, particularly those focusing on participation, should be used as a basis for developing a question(s) on outcomes and/or effectiveness. These data elements are based on the conceptual framework of the draft ICIDH–2, and aim to capture important aspects of the experience and quality of life of people with disabilities (see Appendix).

Outputs: A number of output measures should be investigated for pilot testing: 'cases on the books', periods of service, episodes of service, instances of service, and hours of service are all potential output measures. The work could be progressed, in the context of the CSDA MDS redevelopment, via the process described overleaf (Phase One).

Cost: Discussions of financial data in the course of the CSDA MDS redevelopment project concluded that it is necessary to explore alternative methods for obtaining the financial information. Further work in this area should produce recommendations for the National Disability Administrators on minimum financial data items required to meet their information needs, and methods of collecting them conveniently and accurately, preferably by extracting financial data from existing financial data systems within jurisdictions. A unique agency identifier may enable financial data from administrative systems to be linked to client-oriented data gathered via the CSDA MDS collection.

Implications for further development of outcome, output and cost indicators

The disability services field is currently characterised by rapid policy development and the emergence of new approaches to planning, funding and providing services, and collecting data. This environment of rapid evolution presents both difficulties and opportunities for indicator development. Conceptual development on its own cannot produce good data unless it retains a strong base in reality. It is suggested that further work on indicator development should proceed in two broad phases.

Phase One

Outcome, output and cost-related data items for the CSDA MDS will require some further work and pilot testing. This work should occur within the time frame agreed by the National Disability Administrators for the CSDA MDS redevelopment. An appropriate approach may be to convene a working group that would undertake intensive development of data items over one or two workshops. Members of the group should, collectively, have expertise to put theory, policy, administration and data collection on the table together.

The data items developed should have a strong grounding in current practice 'on the ground', to ensure that collection of the data is feasible and that the resultant measures or indicators are relevant, not only in the context of high-level policy, but also at program and service level, for planning and management purposes.

Phase Two

There is clearly scope for further work on indicator development, beyond the scope and timeframe of the CSDA MDS redevelopment. Rather than allowing policy innovations to

move too far ahead of data in a fast-evolving field, and taking periodic steps to respond with data developments after the fact, a more proactive approach could be taken to the development of outcome, output and cost indicators. This would involve establishing a mechanism for developing some common, meaningful concepts, primarily for use in administration but also to provide immediate data spin-offs. These key concepts could be used, for instance, as common 'hooks' in service agreements so that nationally consistent data (e.g. on outputs) would emerge from administrative processes. There is thus scope for data development and policy development to occur simultaneously. In particular, work might focus on opportunities presented by development work currently occurring at jurisdiction level on consumer-based funding models and output-based funding.

The working group established under Phase One could continue this conceptual and data development work over a specified time frame, giving priority to areas that emerge as most pressing or most potentially rewarding. The working group would report to the National Disability Administrators, as there will be questions of feasibility and policy overriding all issues.

Future work

This report, *Integrating Indicators: Theory and Practice in the Disability Services Field*, was presented to the National Disability Administrators for consideration at their meeting on 23 March 2000, and was accepted.

Acknowledgments

1. Introduction

This project forms part of a work program that the Australian Institute of Health and Welfare (AIHW) has been commissioned to undertake for the Disability Services Subcommittee (DSSC)[1]. The DSSC comprises the senior administrators of disability support services from each Australian jurisdiction, and is responsible for overseeing the funding and provision of services under the Commonwealth/State Disability Agreement (CSDA). The AIHW is an independent national authority established under Commonwealth legislation to develop, collate, analyse and disseminate national statistics and information on health and welfare services.

1.1 Aim of project

The aim of the project was to develop a national framework in which current Australian practice in the disability services field can be viewed in the context of theoretical approaches to indicating demand, input, output, outcome and performance.

The project involved:

- reviewing relevant literature, as it applies to the community services field and the disability services field in particular;

- reviewing indicators of demand, input, output, outcome and performance now being developed or in use in the disability services field in Australia;

- synthesising the two reviews, placing practical approaches in the context of more theoretical approaches to need, demand, input, output and outcome; and

- considering opportunities for integrating practical and theoretical approaches, in so far as such integration could contribute to improved data collection and/or service planning, delivery, funding, monitoring and/or management. In particular the project was to contribute to the future development of the CSDA Minimum Data Set (MDS) and other DSSC work on performance indicators.

1.2 Outline of report

This report represents the synthesis of the review of theoretical literature and the review of current practice in the Australian disability services field.

Chapter 2 develops and describes frameworks that:

- provide a 'map' of the field in which indicators might be required;

- illustrate the relationships between different key elements in the field;

- simplify and synthesise the large amount of material reviewed;

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[1] The Disability Services Subcommittee was renamed the National Disability Administrators in early 2000. This report makes several references to the DSSC, as this was the name used during most of the life of the project.

- provide an overall perspective so that areas needing further development can be identified.

The material synthesised to create the frameworks includes: general management and whole-of-government diagrams, Treasury approaches, disability frameworks in use in various jurisdictions, funding models, and AIHW disability data frameworks. Both the theoretical literature review and the material provided by disability administrators in Australian jurisdictions was drawn on in creating these frameworks. Chapter 2 also provides a summary of issues relevant to indicator use and development.

Chapter 3 examines practice in the disability services field in the context of the frameworks introduced in Chapter 2, drawing heavily on the detailed material that was provided by disability administrators in all jurisdictions (see AIHW 2000). Organisational structures—both funding and reporting models—are discussed from the perspective of how they affect the delivery of services and the collection and reporting of information. Performance-related concepts—such as input, output, outcome, efficiency and effectiveness—are examined as they are used in the field. Finally, performance-related data currently collected or under development are described and their consistency examined, as well as the methods of collection and aggregation. This review of the current 'state of play' reflects practice in the field as at July 1999. Due to rapid evolution in the field, it is inevitable that this review will become outdated as new developments occur.

Chapter 4 draws out the relevance of the reviews carried out for the disability field. It identifies opportunities for integrating practical and theoretical approaches, in so far as such integration could contribute to improved data collection and/or service planning, delivery, funding, monitoring and/or management, and suggests some practical options for the development of indicators in the disability field. In particular, it focuses on the implications for the future development of the CSDA MDS and other DSSC work on performance indicators.

2. A theoretical context

The primary purpose of this chapter is to present and explain three frameworks that have been developed as part of this project to assist in the analysis of theory and practice concerning performance indicators in the Australian disability services field. The chapter also contains a summary of relevant theory. In particular, some important considerations relating to the development and use of performance indicators are raised.

The frameworks in this chapter are based on a review of the relevant literature and the extensive material sent to the AIHW by disability administrators in each Australian jurisdiction. This material included Treasury funding models, disability service funding models, and information on disability services program structures. The resulting three frameworks thus represent a synthesis of a very large amount of material, and have been developed in a way that ensures their relevance to the disability services field in Australia at present. The frameworks illustrate major players and structures in the disability services field (Figure 2.1), service funding and delivery models (Figure 2.2) and performance indicators relevant to the field (Figure 2.3).

2.1 Frameworks for viewing performance in the disability services field

Major players and structures

Figure 2.1 aims to show general relationships between high-level concepts: the person, functioning and disability, need and demand for support, services and assistance provided, and outcomes at the individual and community level. It provides a broad context for the consideration of more specific information regarding performance indicators relevant to the disability services field.

This framework can be used to consider experience at an individual level—a person's level of need, the services and assistance they receive and outcomes for that individual. It can also provide a perspective at the collective level—levels of need and demand in a community, the mix of informal and formal responses to meet demand and outcomes assessed at a community level.

The top part of Figure 2.1 shows the factors driving need and demand for disability services. The person is placed centrally. Attributes of the person's environment (technologies, social factors, etc.) and personal characteristics (age, health conditions and related risk factors, etc.) influence the person's level of functioning and disability. Functioning and disability are conceptualised using the three dimensions of the draft ICIDH–2: Body Functions and Structure (and impairment thereof), Activities (and activity limitations) and Participation (and participation restrictions). The draft ICIDH–2 is an international disability classification, and belongs to the 'family' of classifications developed by the World Health Organization (WHO 1999).

The person's level of functioning and disability may give rise to need for assistance and support. This need may be translated into demand for services in a variety of service domains. 'Demand', in the context of disability services, is defined as 'expressed need'

(AIHW 1997b). Various factors may affect the translation of need into demand. To a large degree, demand for disability services is regulated by service eligibility criteria. However, social factors, such as awareness of services available, attitudes towards disability and attitudes towards asking for assistance and receiving government services, may also influence levels of demand.

There is a range of formal and informal responses to the demands of people with disabilities. Responses originate from different levels or sectors of society (individual, community, government, for-profit organisations). Demand can be addressed by the provision of specialist disability services and assistance (provided formally or informally) and by non-disability-specific, or generic, services. The service domains listed in Figure 2.1 reflect the broad service type categories recognised in the CSDA MDS.

The impact of the services and assistance provided can be assessed in terms of outcomes, both at the individual (consumer) and collective (community) level. The dot points under 'consumer outcomes' are based on the chapter headings of the Participation dimension of the draft ICIDH–2. This reflects a major objective of disability services and programs—to facilitate the participation of people with disabilities in a range of life domains.

It is important to note the link between outcomes, at the bottom of Figure 2.1, back up to the person (and hence to the aggregate level of need and demand for services and assistance). This is in recognition of the fact that the outcomes of services and assistance provided can feed back to the person and their level of functioning and disability. The 'loop' also represents the concepts of met and unmet need.

Service funding and delivery models

Figure 2.2 relates to the middle section of Figure 2.1 (responses to need or demand and providers of service and assistance). It illustrates the main ways in which services are funded, purchased and provided in the disability field. It does not represent the provision of informal services and assistance or generic services.

Government funds for disability services are either allocated to service providers or directly to consumers. The many means by which funds are allocated to providers have been grouped into three broad models:

- **Block grants**. Under this model the amount of funding a provider receives is generally determined by historical precedent and related to the cost of inputs (e.g. staffing costs). This has been the main service funding model in the Australian disability services field in the past. It covers allocation of funds to non-government organisations and for direct government service provision.

- **Output-based funding**. Under this model, government essentially purchases service outputs from providers (government or non-government). The amount of funding is linked, at least in part, to the number of units of output purchased. Providers may be obliged to compete for service contracts, and competition may be on the basis of the cost, quantity or quality of outputs.

- **Outcome-based funding**. If discrete and measurable 'outcomes' of a service intervention can be identified, providers may receive funding from government on the basis of outcomes achieved.

In recent years there has been an increasing interest in consumer-based funding, as a means of targeting services more appropriately and flexibly to meet the needs of individuals. Three broad approaches are taken:

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- **Voucher model**. Under this model the consumer is given vouchers with which they can purchase services. Generally, vouchers are service-specific and entitle the consumer to a predetermined quantity and quality of that service. Usually the consumer will be able to choose from a range of providers participating in the voucher scheme, but sometimes a single provider is specified.

- **Direct consumer funding**. Under this model funds are allocated directly to the consumer (i.e. the person with a disability, or his or her family, carer or advocate). The consumer can use the funds to purchase disability-specific or generic services or equipment.

- **Brokerage**. Under this model funding is allocated to the consumer via a service broker, who then purchases services to meet the needs of the individual consumer. Usually the individual has input into deciding what services are appropriate to meet their needs. If the broker is also a service provider, the broker may provide some or all of the services directly to the consumer.

Disability-specific services are provided by government, non-profit or for-profit agencies. Under consumer-based funding models, individuals might also use funding to purchase generic services. The box in the bottom left corner of Figure 2.2 represents other sources of revenue that contribute to services provided by non-government organisations.

The primary purpose of this figure is to provide a framework within which to discuss the different service funding models in use or under development in the Australian disability services field. Many of the models currently in use do not fit neatly into a single box in Figure 2.2, but reflect hybrid or transitional approaches to service funding and delivery.

The figure is useful for making comparisons between models in terms of the points at which data can be collected, the type of data that might realistically be collected, and the scope for aggregation of data (e.g. to assess program-level performance).

The performance indicator framework

Figure 2.3 illustrates the relationships between performance-related concepts and measures. Definitions of terms are not provided as such. As will be discussed in Chapter 3, a plethora of definitions for each term can be found in performance-related documents. Definitions will vary, depending on the perspective taken.

The central column of Figure 2.3 shows—flowing from consumer demands—outcome goals (often specified at whole-of-government level) and output objectives (specified at program level or in service funding contracts), which determine the service outputs purchased. Service or program funding is used to purchase inputs (resources) which, through service processes or activities, are used to produce outputs (goods or services). From a performance perspective, there may be interest in measuring or assessing the quantity, quality, timeliness and cost of outputs produced, and perhaps also where the outputs were provided (i.e. location). The quality of service processes (as distinct from outputs) may also be assessed, perhaps against specific quality standards.

Service outputs contribute to outcomes for consumers, which may be defined narrowly (e.g. finding a job) or more broadly (e.g. quality of life). Community outcomes reflect an aggregation of individual consumer outcomes, plus factors that can only be measured at the community level, such as community attitudes to disability. These other factors may potentially be influenced by disability services.

The boxes in the right hand column represent performance indicators of efficiency (the rate of translation of inputs into outputs), effectiveness (the rate of translation of outputs

into outcomes), and various related measures that involve an element of cost (represented by diamond-shaped boxes).

On the left side of the figure, performance indicators related to the achievement of output objectives and outcome goals are represented. Output objectives may be specified not only in terms of the quantity of outputs produced, but also in terms of the quality, timeliness and, in some cases, where the outputs are delivered (i.e. location). The extent of achievement of outcome goals is expected to impact on the level of unmet demand in the community or the target population.
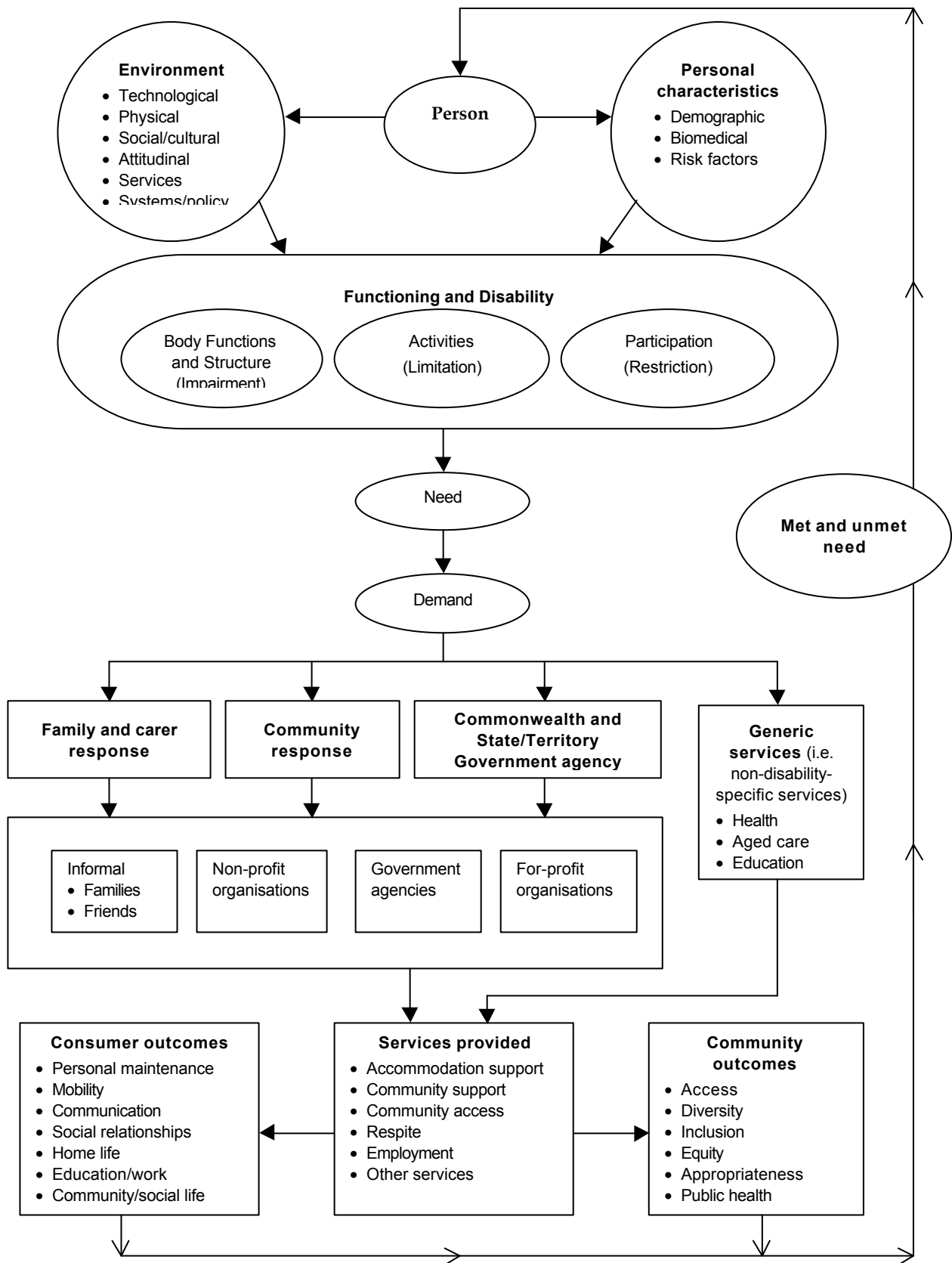
Figure 2.1: Major players and structures

Sources: Adapted from AIHW 1997a:292; WHO 1999.
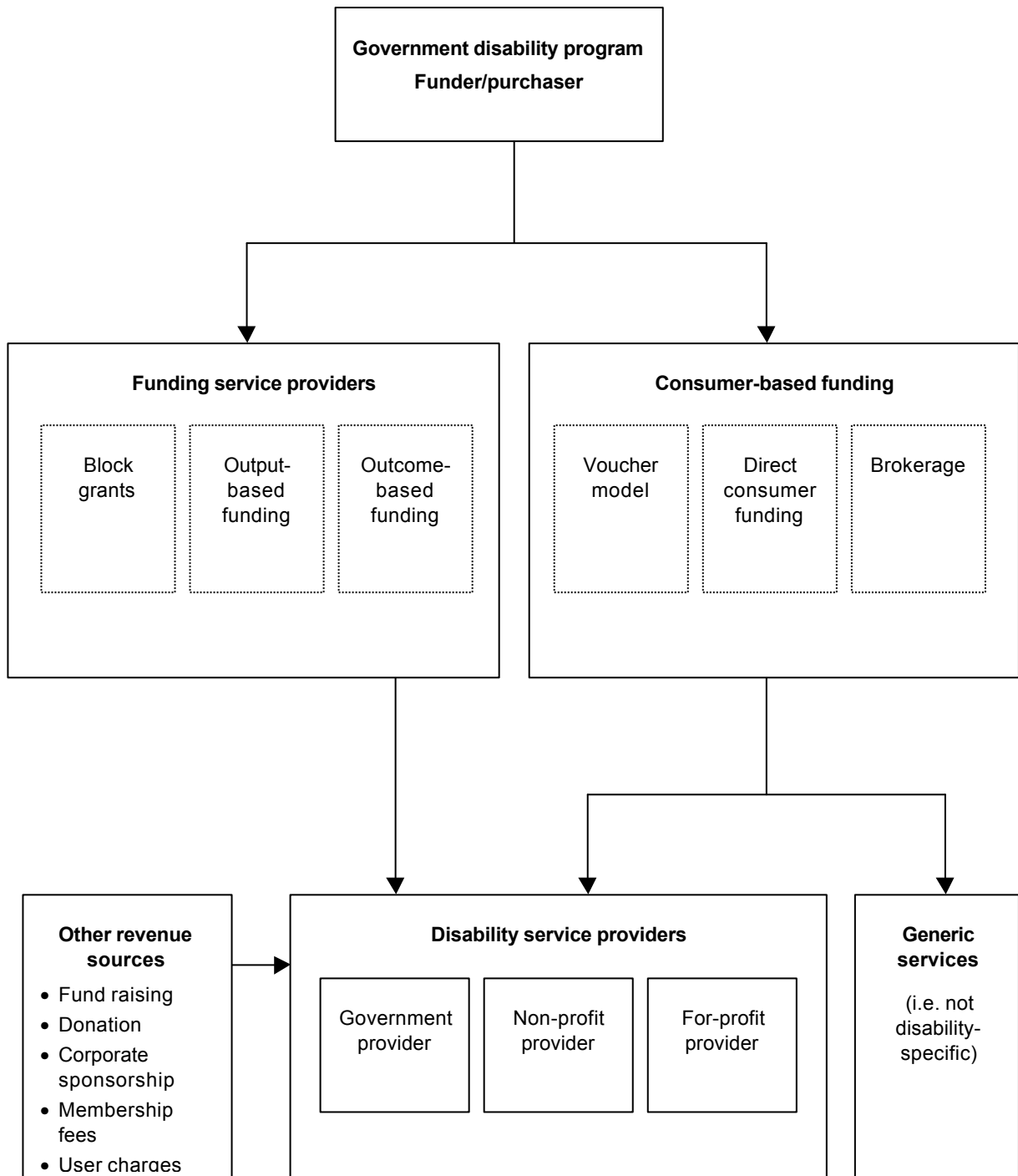
Figure 2.2: Service funding and delivery models
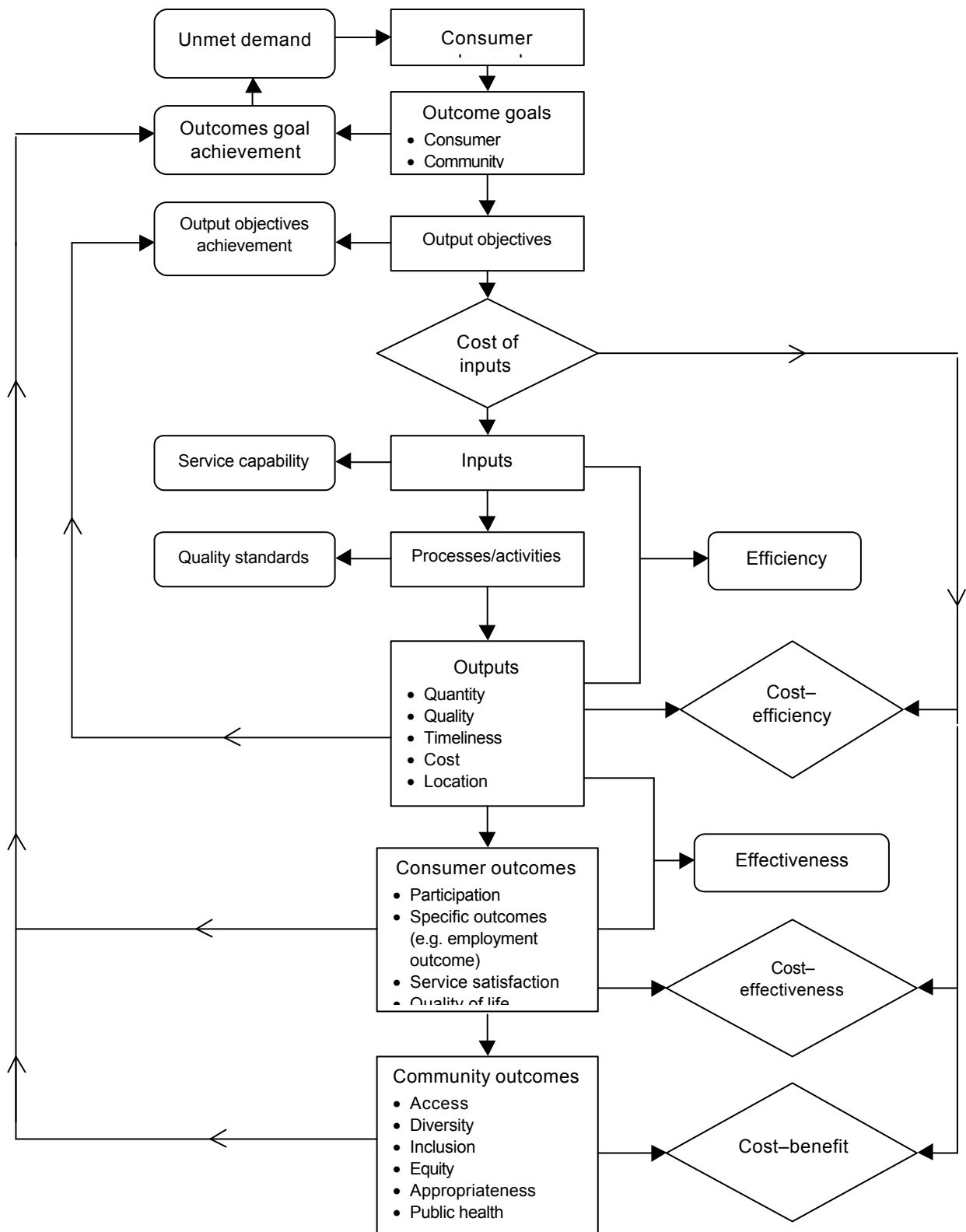
Figure 2.3: Performance indicator framework

Source: Adapted from Eggleton 1990

2.2 Performance indicators: a review of issues

Why the trend towards performance measurement?

The past two decades have seen important changes in the way politicians and administrators go about the 'business of government'. These changes have been driven by a number of factors, including increasing globalisation of trade, population growth, advances in knowledge and technology, and changing expectations concerning appropriate service levels. These factors have placed pressure on governments to find more effective and efficient ways to provide services.

Consequently, governments have adopted a range of management practices that originated in the private sector, including the use of strategic plans that identify goals and objectives, the outsourcing of non-core functions, increased focus on customers' needs, and greater accountability for outcomes. There has been a shift of attention away from the traditional focus on inputs and processes and toward output production and outcome achievement. The increased emphasis on accountability for outputs and outcomes has resulted in a shift towards performance indicator reporting and efficiency and effectiveness audits.

Major change has occurred in the community services sector in Australia, reflecting changes that have been seen overseas. In particular, the introduction of competition and the creation of 'quasi-markets' into the delivery of community services have been seen as a way of increasing efficiency and improving consumer choice (Hoyes et al. 1992). The separation of funder, purchaser and provider roles is central in facilitating this change. Reforms at higher levels of government have influenced management policies and practices in individual departments and non-government organisations. There has been a trend toward the adoption of practices such as corporate and strategic planning, accrual accounting, identifying and costing outputs, and attempts to articulate and assess the achievement of outcomes. In the *Report on Government Services 2000* it is stated that, as government services are important to the community and absorb significant government expenditure, governments should be accountable for the performance of their services. Also, reporting on a comparative basis can facilitate ongoing performance improvements (SCRCSSP 2000:3).

These reforms have impacted on the disability services sector in Australia. Government expenditure on disability services under the CSDA was $2.04 billion in 1998–99. Additional expenditure on services for people with disabilities came via the Commonwealth Rehabilitation Service Australia and Home and Community Care (HACC) programs, and brought total government expenditure to $2.4 billion (SCRCSSP 2000). However, the sector is characterised by significant levels of unmet demand for services (AIHW 1997b). The current CSDA emphasises that parties to the Agreement have continuing responsibilities for 'transparency and accountability to Parliaments, funders and citizens concerning the equitable, efficient and effective provision of specialist disability services' (Part 6). In addition, it is agreed in Part 7 that governments with responsibilities for administering services will 'report against agreed nationally consistent performance indicators of efficiency and effectiveness'.

What is performance measurement about?

In the for-profit sector, organisational performance has traditionally been conceptualised primarily in terms of the achievement of financial goals. Assessing performance using financial indicators has advantages. First, there exists a set of generally accepted accounting principles to guide the measurement and reporting of economic transactions in financial terms. Second, even if the organisation is involved in a range of activities, the use of financial measures allows the costs and outcomes of these to be counted and aggregated in a common denominator (i.e. dollars). When financial goals are dominant, the organisation has the flexibility to alter its focus, in terms of its customers, markets and products, in order to achieve its mission.

However, financial indicators provide a rather narrow, short-term view of performance, and it is increasingly being recognised that non-financial indicators of performance are also required for planning and control purposes (Ittner & Larcker 1998). One response to this has been the 'balanced scorecard', which incorporates performance indicators relating not only to financial aspects of the organisation but also to its relationships with its customers, its internal processes and its capacity to learn and develop over time (Kaplan & Norton 1996, 1993, 1992).

In the context of non-profit organisations operating in the community services sector, measuring performance is more complex. Non-profit organisations are driven primarily by their missions, rather than by financial rewards. This introduces an element of organisational rigidity not so dominant in the for-profit sector (Kanter & Summers 1987). Non-profit organisations cannot simply alter their missions to move into more profitable markets or industries. Also, outputs tend to comprise services rather than goods. Because of their intangible nature, services are often difficult to define and measure. Additionally, the mission, goals and services of these organisations are founded in social values, and tend to be the result of bargaining processes among coalitions of constituents (Tusi 1990; Bluedorn 1980; Connolly et al. 1980). In the disability services sector, important constituents include the government, professional experts, service providers, consumers and carers who may all have differing views about the nature, volume and quality of services required, and the priority that these should be accorded. This diversity of stakeholder views can make the development of agreed approaches to performance measurement and reporting more challenging.

Performance indicators: who uses them and what are they for?

Pressure on public sector agencies and non-profit organisations to generate performance information has come both from external sources, such as government Treasury departments and Offices of the Auditor-General, and internal sources, such as initiatives by management designed to improve organisational performance (Funnel 1996).

Generally, a distinction can be made between external and internal users of performance information. Among external users, a distinction can be drawn between users in government (e.g. Cabinet committees, departments of Treasury) and users in the wider community (e.g. consumers, advocacy groups, researchers, media). External users within government are likely, in general, to have some expertise in the interpretation of performance information. Among users in the broader community, some groups may have more limited skills for interpreting performance information. Internal users, such as program managers, are likely to have a better knowledge of the context within which the reported performance was achieved, and a better understanding of how the data were obtained. Consequently, they may have a greater understanding of the information and its limitations.

In recent years a number of surveys have focused on who uses performance information, and how it is used, in the public sector. A recent US study found that about two-thirds of municipalities surveyed derived their indicators from their mission, goals and objectives, but only 42 per cent of these said that their approach was driven by 'what was important to measure', rather than 'what was available' (Poister & Streib 1999). Interestingly, 90 per cent of municipalities reporting performance indicators stated that the primary motivator was the desire to make better decisions. Over 40 per cent said that the public demand for enhanced accountability was a motivating factor, one-quarter were motivated by pressures from elected officials, with others also being motivated by federal requirements, the business community and state mandates.

The Organisation for Economic Cooperation and Development (OECD 1994) reported that the primary uses of performance indicators differed across member countries. In the US, performance indicators were used primarily for improving the management and operation of programs, in Norway and the Netherlands they were used primarily for promoting efficiency and program quality. In the United Kingdom and Australia more explicit use of performance indicators was made for both internal and external reporting. A later study (OECD 1997) of 10 member countries (including Australia) found that most countries had not yet managed to integrate performance information into their budgetary processes.

Studies of performance indicator usage have also been undertaken in Australia. The New South Wales Council of Social Service (1990) identified a number of purposes for which non-profit organisations could use performance indicators:

- evaluating performance;
- gaining feedback from consumers;
- reassessing investment policies;
- demonstrating value for money for funds provided;
- improving policies, programs and procedures;
- assisting in budget preparation and justification; and
- motivating employees.

Kluvers (1998) investigated the development and use of performance indicators in local government in Victoria. Commonly reported uses included allocating resources, increasing productivity, assessing programs and analysing policy decisions. The most frequently used performance indicators were those relating to operational efficiency, followed by effectiveness, output, workload and staffing indicators. Clark (1999) looked at the extent of use of Victorian government departments' annual reports by external users. 'Descriptive reviews of operations' (27 per cent) and 'statistical performance information' (24 per cent) were rated the most useful aspects of the reports, ahead of 'financial statements' (22 per cent). In contrast to Kluvers' findings, Clark found that the most useful performance indicators were those relating to outcomes and effectiveness.

Selecting performance indicators

According to the Australian Statement of Accounting Concepts SAC 3 (Qualitative Characteristics of Financial Information), information reported externally should satisfy the three primary criteria of relevance, reliability and validity. These criteria are reviewed briefly below.

Relevance

'Relevance' relates to the need for performance indicators to bear a logical relation to users' needs, aims and interests, and provide an appropriate basis for decision making and evaluation. Performance indicators should meet the needs of both internal and external users. Therefore, before selecting indicators, it is necessary to identify who will use them and how they are likely to be used. Indicators should also bear a strong relationship to the program's goals and objectives (Palfreyman 1998; Hazell & Nicoll 1995). Performance assessment can only be conducted effectively when the program's objectives are attainable, clear, specific and measurable, and linked to plausible targets. Difficulties are likely to arise when objectives relate to longer term outcomes that may be difficult to specify.

In order to provide a complete and comprehensive picture of performance, indicators should incorporate non-financial as well as financial, and qualitative as well as quantitative, information (Palfreyman 1998; Epstein & Manzoni 1997). They should be designed in such a way as to guard against the selective reporting of only positive results. However, this must be balanced against the danger of overloading users with irrelevant or redundant information (Vitale & Mavrinac 1995), and overburdening service providers, for whom supplying information is likely to be costly. In general, a smaller number of high-quality indicators is preferable to a larger number of lower quality indicators.

Timeliness is another quality that bears on the relevance of performance indicators. Palfreyman (1998) states that, in order for performance indicators to be relevant, both the measurement and reporting of performance should be done within a suitable time period to provide a meaningful guide for future action.

Reliability and validity

'Reliability' is concerned with the extent to which similar results can be obtained when the measurement process is carried out by different people at different locations and/or different times (Western Australian Office of the Auditor General 1998; Alberta Treasury 1996). Reliability is also concerned with the ability of indicators to produce unbiased information (AARF & AASRB 1990; Corbett 1996:189–90).

To ensure freedom from bias an internal control system should be developed to avoid manipulation of performance data (Davies & Shellard 1997). Also, wherever possible, an independent third party should be involved in the production of performance information (Alberta Treasury 1996). While some level of random error is to be expected, it must not be allowed to reach levels such that the information conveyed is distorted (Alston 1995).

'Validity' concerns the extent to which indicators do in fact measure what they are purported to measure. In this respect, clear definition of the relevant variables is essential.

Communication criteria

Having developed indicators that are relevant, reliable and valid, they must be communicated in such a way that users can understand and interpret them appropriately. The information reported should be clear, concise and simple. The intent of the indicators should be clear, and they should be easily understood by all potential users. Indicators should be published with accompanying information concerning any factors that may have impacted on the reported performance (GASB n.d.).

Effective communication of performance indicators also relies on 'comparability'. That is, users must be able to 'discern and evaluate similarities in, and differences between, the nature and effects of transactions and events, at one time and over time' (AARF &AASRB

1990). Performance indicators should be produced and reported on a consistent basis, through time and across programs (Corbett 1996; National Performance Review 1997). Consistent definitions, measurement practices, presentation formats and organisational structures should be used (Western Australian Office of the Auditor General 1998).

Problems associated with performance indicators

Some drawbacks associated with performance indicators are identified in the literature. These drawbacks may be to do with the process by which indicators are developed, and/or how they are used. In particular, it is important to be aware that much of the theory relating to performance indicators comes from the private, for-profit sector. Therefore, principles underlying their use are not necessarily directly transferable to the public sector (La Trobe University & Flinders University 1999).

In the context of community services there are particular challenges, including the long time-scale over which some outcomes are expected, the complexity of influences on the wellbeing of consumers, variation in expectations and needs across stakeholder groups and the difficulty of reducing qualitative experiences to quantitative measures (La Trobe University & Flinders University 1999). Below, some problems and difficulties associated with performance indicators, particularly in a community services context, are outlined briefly.

Problems associated with the development of indicators

In developing indicators, problems may arise if insufficient attention is focused on the information needs the indicators are to address, the feasibility of collecting data, and the meaningfulness of the indicators in the context of the specific program for which they are designed. For instance, the time-scale over which performance monitoring is conducted should match the time-scale on which outcomes are produced by the particular program. Involving stakeholders in the development of indicators can reduce these problems.

There is a danger that indicator development will be driven by data that are currently available, or what is easily measured, rather than by the information that is needed (Mussared 1999). Basing indicators on existing data can become a problem if other considerations, such as usefulness, validity, reliability, are not also taken into account (Martin & Kettner 1996). Therefore, it is important to clearly identify information needs before developing indicators, and to consider the meaningfulness of the measures or indicators identified.

Another common error is the identification of a very large number of measures, concentrating solely on numerical data. Monitoring performance under contracting arrangements can tend to favour quantitative measures, at the expense of assessments of quality or outcome (La Trobe University & Flinders University 1999). The effect of too many indicators may be to overburden the suppliers of the information (i.e. service providers) and to 'swamp' the users of the information. The use of performance indicators may be counter-productive if the cost and administrative burden placed on providers reduces their ability to provide services. Therefore, performance information should focus on a small set of relatively independent, critical indicators, chosen with an understanding of what information is actually needed (Tasmanian Department of Treasury and Finance 1998).

The Deputy Secretary of Department of Treasury and Finance (Tasmania), in a presentation to an International Quality and Productivity Centre Conference, noted that, in some agencies, output information is only prepared to meet Treasury reporting

requirements and is not routinely used for internal management purposes (Mussared 1999). Data quality may be jeopardised if those collecting them do not perceive that they gain any benefit from them. 'The quality and validity of data collected is of common concern in performance measurement. Compliance in data collection is significantly reliant on the collectors seeing some value in the reporting' (Jolley 1999). Therefore, indicators developed for use at national level should also be useful at agency level for management purposes.

Problems associated with the use of performance indicators

Once performance indicators have been developed, it is necessary to monitor their implementation, both in terms of their effect on the organisations providing information and in terms of how the performance information is used. It may be necessary to adjust the indicators, the monitoring process, or the way performance information is disseminated, in order to tackle problems that arise.

One problem associated with the use of performance indicators is 'goal displacement'— this describes what happens when the criteria by which performance is measured become the end goals. The danger is that, over time, the measurement system will redefine the organisation's mission and goals in terms of only those aspects which can be cost-effectively measured. Also, the focus on technical performance measurement can tend to divert attention away from the human factor in care-giving services (La Trobe University & Flinders University 1999). Managers may come to focus on short-term, quantifiable results, ignoring longer term, qualitative outcomes. Measurement of selected aspects of program performance may divert attention from important but unmeasured activities. The risk of this occurring is likely to increase when funding is tied to performance with respect to particular indicators.

Performance indicators may be used by organisations to improve their external image, rather than to improve aspects of performance. Institutional theorists argue that an organisation's ability to survive rests in large part on its ability to conform to the expectations of external constituencies (DiMaggio & Powell 1983). Organisations may develop a variety of rational procedures, processes and rules that do not necessarily improve the quality of decisions and related outcomes, but maintain appearances that confer legitimacy on the organisation (Carruthers 1995). This is more likely to occur when performance criteria are poorly defined and understood.

'Creaming' describes the practice of service providers giving preference to clients who are likely to achieve better outcomes and/or consume fewer resources. In the context of output-based funding, providers competing for service contracts may have an incentive to maximise the quantity of service outputs they can produce for a given cost, by minimising the average level of need of clients. This problem may be reduced by adjusting funding models to reflect differences in clients' levels of need and monitoring performance separately for these different client groups. Statistical techniques can be used to help control for client characteristics or other factors that may affect outcomes. Wholey and Hatry (1992) give an example of a program in which rewarding high performance with increased funding initially resulted in creaming. However, this problem was remedied by the development of a model that allowed for adjustment of performance standards to reflect differences in client characteristics and local economic conditions, thus encouraging provision of services to 'tougher' cases.

Problems can also arise because of the misuse or misinterpretation of performance information. This may impact negatively on service provider organisations, who may become less willing to provide performance information, thus potentially leading to lower

data quality. Misuse of negative findings (e.g. by media and lobby groups) may be reduced by including explanatory material along with program performance data (Wholey & Hatry 1992).

Qualitative information is very important in understanding performance. Quantitative measures should not be presented without accompanying information providing a context in which they can be properly understood (Tasmanian Department of Treasury and Finance 1998).

Under-utilisation of performance information may also have negative effects on data quality. Service agencies may be less willing to invest resources in providing data if there is little use being made of those data. To avoid this situation, the use of performance data should be promoted, and they should be published in accessible formats and made readily available to stakeholder groups. In Western Australia, the *Financial Administration and Audit Act 1985* makes the reporting and audit of performance indicators mandatory for government departments and statutory authorities. Similarly, the increasing adoption of purchaser–provider models is likely to increase awareness and utilisation of performance information.

3. The current 'state of play'

In this chapter, current practice in the disability services field is reviewed. The review is based on material provided to AIHW by disability administrators in each jurisdiction. Detailed summaries of the material are contained in a working paper (AIHW 2000), which is available from AIHW on request. The frameworks presented in Chapter 2 are used as a tool in the analysis of this material.

Section 3.1 looks at the way organisational structures in different jurisdictions affect the delivery of services and the collection and reporting of information relevant to performance. This covers funding and reporting models in place at whole-of-government level and program level. The range of service delivery models currently in use in the disability services field is reviewed.

Section 3.2 examines performance-related concepts such as 'input', 'output', 'outcome', 'efficiency' and 'effectiveness'. It investigates variation in the use of these terms in the context of disability services. A common understanding of these central concepts is essential if meaningful and comparable performance data are to be collected.

Section 3.3 reviews performance-related data currently collected in different jurisdictions, looking at how data are collected, whether data are consistent (e.g. between service providers, service types, jurisdictions) and whether they are aggregated for use at program or whole-of-government level.

3.1 Structures

Whole-of-government funding and reporting models

Governments fund community services departments to provide or fund disability services. Departments may either provide services directly or fund non-government organisations to provide those services. Treasuries require funded departments to be accountable for funds. Also, Treasuries need information about what services are provided, and to what effect, as a basis on which to make future funding allocation decisions. Consequently, there has been a trend towards funding departments against outcomes or outputs articulated at the whole-of-government level. Departments are then required to report to Treasury and/or the Office of the Auditor-General against these outcomes or outputs. The Victorian Department of Treasury and Finance (1997b) states that 'Departments are accountable for the delivery of outputs that contribute to intended outcomes. To assist decision making on which outputs Government is to fund, output information should clearly illustrate a link to outcomes'.

High-level outcomes articulated by government are often included in broad policy statements that do not lend themselves to direct assessment (i.e. as to whether they have been achieved). They tend to be community-level outcomes, or aggregate outcomes. For example, a list of 'whole-of-government priorities and outcomes' is given in the Queensland Treasury's 2000 budget papers. Under the priority 'safer and more supportive communities', one of the supporting outcomes is 'a community in which diversity is valued'. Under the priority 'better quality of life', one of the supporting outcomes is 'services and facilities that promote equitable and active participation by all Queenslanders'.

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Where a department is funded against government outcomes, service outputs purchased or provided by the funded department are expected to contribute to the achievement of outcomes. In reality, however, it is acknowledged that establishing a causal relationship between service outputs and broad, high-level outcomes is difficult (Victorian Department of Treasury and Finance 1997b). Often this is left as a matter for development, or the responsibility is passed to individual departments to show how the outputs they purchase contribute to the government's outcomes.

In some jurisdictions, departments are funded under particular high-level outputs or output groups (which may be linked to government outcomes). For example, in Victoria the disability services output group is described as 'continuing care and support services for people with disabilities, their carers and their families', and relates to the government outcome 'access to high quality services that advance the development and promote the dignity of people with intellectual, physical and/or sensory disabilities' (Victorian Department of Treasury and Finance 1999). There is usually a requirement for output reporting to Treasury and/or the Office of the Auditor-General.

Jurisdictions vary in terms of the extent to which these high-level funding and reporting arrangements are in place at whole-of-government level. In several jurisdictions, these models are still in the process of being implemented, and methodologies for output-based funding remain under development.

Program-level funding and reporting models

There have been significant developments in the disability services field in recent years, affecting the way services are funded and delivered to clients (people with disabilities and their families). Common themes characterising these developments include:

- tailoring services to meet individual needs;
- encouraging client input into service planning and assessment;
- funding specific service outputs;
- a greater emphasis on service quality and accountability;
- increasing the efficiency and effectiveness of services;
- targeting services more effectively to particular groups; and
- ensuring equitable access to appropriate services.

A combination of factors has affected policy relating to disability services and, more broadly, the environment in which services are delivered, resulting in changes in the way disability services are conceptualised, funded and provided. Two important forces driving change are a shift towards more person-centred values and the economic-based restructuring of services (Schalock 1999).

The shift towards person-centred values is reflected in changing attitudes towards disability, changing views on how the needs of people with disabilities can best be met, and increased input of people with disabilities and their families (individually and collectively) into service planning and provision. Evidence of this at national level is seen in the establishment of the National Disability Advisory Council in 1996. The Council is made up of people with disabilities, families, carers and service providers, and its role is to facilitate consultation and advise government on a range of policies and programs (AIHW 1999).

There has also been a recent trend towards seeking clients' views on disability services (quality, appropriateness, etc.) through satisfaction surveys and other feedback

mechanisms. The shift towards person-centred values is also reflected in the rise of consumer-based service funding models, under which clients play a substantial role in deciding what service outputs to purchase to meet their own needs and goals. In order to improve service flexibility, there is increasingly a focus on assessing individuals' needs in a holistic manner, and tailoring services, or putting together a service package, to meet those needs.

The economic-based restructuring of services involves an increased focus on accountability, efficiency and effectiveness in a climate of unmet demand and limited resources. Several interrelated broad policy directions reflect this focus:

- **Adoption of the purchaser–provider model.** The separation of the roles of service purchaser (generally a government department) and service provider (either a non-government organisation or a government service provision entity) removes the potential for conflict of interest which may arise if a single government entity is engaged in both funding and providing services. Other expected advantages include the scope for increased transparency and accountability, and increased efficiency and effectiveness through competition between service providers.

- **Output-based funding.** Departments are moving towards funding or purchasing services from providers on the basis of the specific outputs to be provided. Output-based funding has been advocated at whole-of-government level in most jurisdictions—departments are encouraged to use output-based funding arrangements with non-government providers.

- **Accountability and reporting requirements.** With the implementation of output-based funding arrangements, reporting requirements are tending to become more detailed, with agencies often required to report on how funds have been used to provide the service outputs contracted. Reporting requirements may also cover the quality of outputs, the extent to which service standards have been met, and the extent to which specific outcomes have been achieved.

Against this backdrop, service funding and delivery models currently in use or under development in the Australian disability services field are reviewed below.

Purchaser–provider approach

Jurisdictions in which a 'government provider' of disability services has been created, and is separate from funding and purchasing units within government, include New South Wales, Western Australia and the Australian Capital Territory.

The New South Wales Ageing and Disability Department (ADD) was created in 1995 as a 'purchaser of services', as part of a 'purchaser/provider split' from those departments involved in direct service provision (e.g. Department of Community Services). ADD has had to develop policies, planning, monitoring and contracting processes as part of its regulatory role in the human services 'market' (ADD 1999a).

In Western Australia, the Disability Services Commission (DSC), established in 1993, is responsible for policy and program development and service planning. It is made up of seven Directorates. The Policy and Planning Directorate is the funder. The Service Purchasing Directorate purchases all DSC-funded non-government-provided services, as well as services provided directly by the DSC through the Accommodation, Metropolitan, Medical and Country Services Directorates. There is also a Corporate Management Directorate.

Since the adoption of the purchaser–provider model in the Australian Capital Territory in 1996, Health in the Australian Capital Territory public sector has been divided into two

parts: (1) Department of Health and Community Care, (2) ACT Health and Community Care Service, a statutory body, made up of the Canberra Hospital and ACT Community Care. The Department is responsible for policy development and planning and purchasing services, while the ACT Health and Community Care Service is the government provider (Moore 1998*).*

In Chapter 2, three service funding models were outlined under the general heading of the purchaser–provider approach: block grants, output-based funding and outcome-based funding (Figure 2.2). These models all involve government allocating funds to service providers (government or non-government), rather than directly funding individual consumers. While the three models as outlined in Chapter 2 are conceptually quite distinct, many service funding models currently in use in the disability services field do not fit neatly into one or other of the three models.

Historically, block grants have been the most common service funding model, with governments allocating blocks of funding, often to large, established non-government providers. The amount of funding is determined largely on the basis of historical precedent. Requests for additional funds to cover new or expanded services tend to be related to input costs (e.g. the cost of additional staff).

Although there has been a major move away from block grant funding, services in some jurisdictions are still funded in this way. There are also many examples of funding approaches which represent a transitional stage somewhere between block grant and output-based models.

Most jurisdictions are working towards competitive, output-based funding of services. However, while providers may compete for contracts to provide certain services, historical arrangements often continue with established providers. Because of difficulties with defining and costing outputs, funding might still be input-based and historically determined to some extent. Large, established non-government providers of disability services are likely to rely on a certain level of annual government funding in order to remain viable, and to continue to provide services to established clients.

Outcome-based funding presents additional challenges because of the difficulty of defining outcomes precisely enough for outcome achievement to be used as a 'trigger' for payment of funds. However, given that delivering outcomes to consumers should be the primary objective of all services, outcome-based funding strategies have definite appeal.

The type of funding model used is likely to have implications for the type and level of detail of service data that can be collected, either through administrative reporting requirements or data collections such as the CSDA MDS. Below, some examples of funding models and reporting arrangements currently in use are discussed briefly.

Examples of block grant funding and reporting arrangements

Commonly, reporting requirements under block grant funding models are limited to a financial acquittal of funds. Agencies may be required to specify how the funds were used to purchase inputs (e.g. staff, equipment, premises) but are usually not required to report on service outputs provided.

Block grants are used to fund disability services in some jurisdictions. For instance, in the Northern Territory, most services are currently provided through block grants to non-government service providers, and no input or output information is collected. Providers are awarded grants on the basis of submissions and are required only to provide an expenditure acquittal. Queensland also reported that, apart from the individualised funding component of Disability Program funding, disability services are currently funded

on a subsidy basis using block grants—the amount of funding allocated to an organisation is determined mainly on historical precedent with indexation.

Examples of output-based funding and reporting arrangements

From the material provided by jurisdictions it appears that full output-based funding for disability services is not in place in any jurisdiction. However, in several jurisdictions, standard contracts between the government department and the non-government provider specify the amount of service to be provided. Providers are required to report on the amount of service actually provided (e.g. in terms of client numbers, or hours of service), and often also on service quality (e.g. whether relevant standards have been met).

In Victoria, several service types are purchased using output-based funding. For example, providers of psychiatric disability services are accountable for ensuring that they provide the services purchased from them and that their 'activity levels' meet service targets set. In most cases, agencies that deliver at least 95% of the budgeted activity level will receive the full level of funding. Activity levels are defined in terms of 'occasions of service' or 'bed-days', depending on the particular service (Victorian Department of Human Services 1998:48).

In South Australia, while it was stated that services are purchased from provider agencies using block grants, standardised Funding and Services Agreements specify the number of individuals to be supported. Reporting requirements under agreements include assessment against the National Standards for Disability Services, financial information (statements of income and expenditure, annual reports or audited financial statements) and activity information.

Similarly, in Tasmania service providers were said to be 'block funded' to provide a certain level of service (i.e. client numbers, hours of support) to a specified standard (consistent with legislation). While the level of funding is historically based for existing services, output-based funding is being introduced for new services.

The Commonwealth provides employment assistance funding to non-government organisations in the form of block grants, but the 1999-2000 Service Agreement for Employment Assistance requires each funded organisation to provide a performance report, including an assessment of actual outcomes against targets. Performance targets are expressed in terms of numbers of clients in different categories (e.g. new job seekers, continuing workers, etc.).

These examples illustrate the point that, in many jurisdictions, hybrid or transitional service funding models are currently in place. It might be expected that there will be continued movement in the direction of output-based funding, as methodologies for quantifying and costing outputs are developed. However, because of the history and the nature of the sector, and the important role played by established non-government service provider organisations, there may not be a complete shift to competitive, output-based purchasing arrangements.

Outcome-based funding

Some jurisdictions have signalled their intention to move towards outcome-based funding (e.g. Tasmania). Many factors may contribute to outcomes, so is not always possible to attribute an outcome to a specific service intervention. Also, it can be difficult to articulate outcomes in such a way that they can be readily measured. Specifying outcomes in more narrow terms may make it easier to link funding to outcome achievement.

The Commonwealth Department of Family and Community Services is currently conducting a trial of case-based funding for open employment services for people with disabilities (Commonwealth Department of Family and Community Services 1999). Payments to service providers are to be based on the relative needs for assistance of their job seeker clients, grouped into three funding bands. The assessment process for determining the relative support needs of clients is currently being developed. A preliminary assessment instrument developed for field trial collects information on both frequency and intensity of support needed (Pearson 2000).

Under the proposed model, service providers do not have to spend the precise amount of funding allocated on a particular job seeker to achieve employment outcomes (i.e. some people will need more assistance and some less within each band). Payments will be linked to employment outcomes, and will be paid in three instalments: a placement payment, an interim outcome payment (when the client has been in employment or training for 13 weeks) and a final outcome payment (when the client has been in employment for 26 weeks). This approach can perhaps be characterised as outcome-based funding, with outcomes weighted according to the level of need of service recipients. One of the aims of the trial is to determine whether this funding approach will give service providers greater flexibility and opportunities for innovation in meeting the employment needs of job seekers.

Service purchasing contracts

Where funds are allocated to service providers, a contract is drawn up between the purchasing department and the provider organisation. In many jurisdictions, standard service purchasing contracts are now in use. These usually set out reporting requirements for non-government service providers, which commonly include output measures relating to quantity and quality, and perhaps timeliness. Measures of effectiveness, or achievement of outcomes may also be included.

Table 3.1 provides a comparison of examples of standard service contracts provided by different jurisdictions. Some contracts do not detail reporting requirements in the standard form, but leave blank spaces where these details can be filled in (e.g. Australian Capital Territory). This raises the question of the extent to which measures reported are consistent between service providers. It may be that the purpose of the reporting requirements is primarily accountability, and to ensure that minimum standards are being met, rather than to produce data that can be used to compare the performance of different providers.

In some jurisdictions, however, reporting requirements appear to be more standardised. In New South Wales, self-assessment packages to be completed by service providers give measures to be reported in some detail. In theory, this should provide a source of information that can be used to compare the performance of different providers, or as a basis for improving output costing. However, it seems that data provided by individual service providers are not generally being aggregated at program level for these purposes.

Consumer-based funding

Consumer-based funding models for disability services have been introduced in most Australian jurisdictions, with only the Commonwealth not currently operating any consumer-based funding programs. Table 3.2 presents of some examples of consumer-based funding models operating in different jurisdictions. Often these programs are targeted at specific groups of consumers but aim to provide a flexible mix of services to meet individual needs (e.g. post-school options programs). In Chapter 2, consumer-based funding models were grouped broadly under three headings: voucher models, direct consumer funding and brokerage.

On the basis of material provided by jurisdictions to AIHW, it seems that there are no examples of voucher models currently operating in the Australian disability services field.

Under direct consumer funding models, funds are allocated directly to individual consumers. This does occur under some programs currently in operation, for instance Local Area Coordination in Western Australia. However, brokerage models are more common. Funds are allocated to a brokerage agency, in respect of a particular individual, and the brokerage agency then provides services directly to the individual and/or purchases services from other providers for the individual (e.g. the Individual Support Packages Program in the Australian Capital Territory).

A slightly different arrangement exists is Queensland under the Moving Ahead Program, for post-school options. Under this program, after the individual's goals have been identified, appropriate generic and disability-specific service providers are identified. Each service provider submits a costed program proposal, and a funding recommendation in respect of the individual is developed and submitted to Central Office for approval. If approved, funds are allocated directly to service providers, each of whom is required to sign a grant agreement.

Under some programs, information relevant to performance measurement is recorded as a normal part of the administrative process. For example, under the Individual Support Packages Program in the Australian Capital Territory, and the Moving Ahead Program and Adult Lifestyle Support in Queensland, the individual's goals are identified and recorded. This information could potentially be used as a basis for measuring outcome achievement, and thus program effectiveness, if a standard process for assessing progress against goals was in place. Under Queensland's Moving Ahead Program, information is recorded on hours of support provided. Indeed, in most consumer-based funding programs where there is some form of brokerage arrangement, information on the amount paid for particular service outputs purchased is likely to be recorded at some point in the administrative process. However, there are no examples of these data being aggregated to assess the performance of consumer-based funding programs.

While there is an increasing trend towards consumer-based funding in most jurisdictions, this approach to service delivery is not seen as appropriate in all circumstances. Thus it is likely that consumer-based funding will continue to account for only a proportion of government disability funding. In the Australian Capital Territory, for instance, of total CSDA funding in the year 1998–99, only 9% went to individualised funding (ACT DHCC 1999).

Other models

Several funding models currently in use are not easily characterised using the framework of Figure 2.2. Some of these are models under which services are aimed at a community level, rather than an individual level. Some models involve cooperation between agencies, or even across program areas. These models may raise special considerations relating to data collection and performance measurement. For instance, it may be more difficult to identify and cost service outputs, and outcomes may need to be conceptualised at a community rather than an individual level.

Table 3.1: Comparison of service purchasing contracts and reporting requirements in various jurisdictions

Jurisdiction	Costs and inputs	Outputs	Outcomes, performance indicators	Quality/standards	Reporting requirements
NSW[a]	Information on client fees.	Service user characteristics total number of users for year; age profile; gender and ethnicity. Capacity, occupancy rate, period of operation, vacancies, waiting list information (depending on service type).		Compliance with Disability Services Standards. Outcomes against continuous improvement strategy (developed by individual providers). Service User evaluation (covering quality, appropriateness, etc.).	• Provider required to report all details specified in previous columns. • Financial reporting under funding agreement not covered by self-assessment package.
Vic[b]	Information on 'unit priced', 'other' and 'non-service' funds for each service activity.	Performance target for key output measure to be specified.	Performance measures and targets specified for each service type in Victoria's Regional Reporting Framework (see Table 3.11).	Standards and guidelines to be specified.	• Provider required to report all details specified in previous columns. • Annual financial indicators statement.
Qld[c]	Information on grant budget: salaries, operating costs, and non-recurrent funds.	Primary target groups and service provided to be specified.	Goals and objectives of the service, and performance indicators to be specified.		• Assessment of performance against indicators to be provided to the Department annually. • Progress against performance indicators under previous agreement recorded in current agreement.
WA[d]	Details of 'annual cost of direct service hours'; 'other costs of service'; 'total cost of service'; funding: DSC, other (including client fees), total.	Service description given. Outputs to be specified in terms of x number of hours per day/year of support for x number of clients (exact specifications vary with service type). Client target group to be specified.	Outcomes specified in standard form for particular service type.	National Disability Service Standards.	• 'Output measures of performance': hours of direct service per annum; no. of service recipients per annum. • Extent to which National Disability Service Standards met (via self-assessment). Extent to which outcomes achieved (process for assessing effectiveness to be developed in first 12 months of contract).

(Continued)

Table 3.1 (continued): Comparison of service purchasing contracts and reporting requirements in various jurisdictions

Jurisdiction	Costs and inputs	Outputs	Outcomes, performance indicators	Quality/standards	Reporting requirements
Tas[e]	Annual funds provided under agreement.	Clients within the scope of the agreement are named individually.	'Objectives and outcomes of the service' (i.e. 'actual goals' and 'expected consumer outcomes'); strategies (how objectives to be achieved, with time-frames and performance measures) and 'activities' (description of day-to-day operation—what money to be spent on), to be specified.	'Standards assessment' to be kept on file, covering list of areas (management processes; privacy and confidentiality, access to service, etc.). Service will be assessed at least annually against Standards for Services for People with Disabilities.	• Provider required to participate in the CSDA MDS. • Quarterly report outlining changes to the list of clients specified in the agreement and major changes in service provision. • Quarterly cash flow reports (actual against projected expenditure, for each service funded under Agreement).
ACT[f]	Purchase price. Where the provider is funded for more than one service it shall provide an estimate of the amount of money divided between the services.	'Services' and 'outputs' to be specified.	'Outcomes' and performance indicators (quality, quantity, timeliness and cost) to be specified.	Some requirements set out in Clause 5.1, under 'provider's obligations'. 'Performance standards' to be specified.	• Output reports, quarterly (format and content checklist not provided to AIHW). • Financial reports, quarterly (details/format to be provided by provider). • Cash/financial statement at end of contract period: details of expenditure, and audit report. • Annual report on 'activities in relation to the services'.

(Continued)

Table 3.1 (continued): Comparison of service purchasing contracts and reporting requirements in various jurisdictions

Jurisdiction	Costs and inputs	Outputs	Outcomes, performance indicators	Quality/standards	Reporting requirements
Commonwealth[g]	Total funding, broken into wage subsidies and employment assistance.	Service outlet activity details, service specialisation (target groups), and services offered.	Performance targets, for each outlet, covering total new job seekers, new job seekers 15–24 years, new worker target, re-placement target, continuing worker target, continuing worker part-year target, independent workers, number of wage subsidies.	Compliance with the applicable Disability Services Standards.	• Detailed annual income and expenditure statement, including identifying the purposes for which funding has been used; statements of assets and liabilities and cash flow. • Half-yearly report of performance against performance targets; information on people assisted in reporting period, and snapshot day (in various categories based on work status).

(a)   NSW Ageing and Disability Department, self-assessment package for non-government service providers 1999.
(b)   Victorian Department of Human Services, sample service agreement.
(c)   Families, Youth and Community Care, Disability Program Service Agreement.
(d)   Disability Services Commission, WA, Schedule B: description of activities purchased by the Commission (schedule to service purchasing contracts used for non-government-providers).
(e)   Tasmanian service agreement.
(f)   ACT service purchasing contract.
(g)   Commonwealth 1999–2000 Service Agreement.

Table 3.2: Examples of direct consumer funding models in the Australian disability service field

Jurisdiction	Individual funding model
NSW	Several consumer-focused models are in use. These include individualised packages of crisis support for people with high and complex needs, Attendant Care Packages for people with physical and sensory disabilities, Post School Options.
Vic	There is a trend towards funding a variety of services via client-based funding models, including brokerage. A small number of agencies are funded, often across a region, to purchase services on an individual basis for referred clients. Services currently funded using this method include day programs , flexible care packages, respite, in-home accommodation support (attendant care) and early intervention.
	Under the Futures for Young Adults program, a joint initiative of Victorian Department of Human Services and the Victorian Department of Education, services are funded on an individual basis, sometimes via a brokerage arrangement. Flexible Care Packages are designed to assist families and other unpaid carers of people with moderate, severe and profound disabilities by providing a flexible mix of services. These packages utilise case management and discretionary funds.
Qld	Local Area Coordination, modelled on Local Area Coordination in WA, is being piloted in five rural areas, and will be implemented progressively. It is described as a combination of case management, brokerage, and community development.
	Adult Lifestyle Support is a model under which funding for an individual is paid to a nominated disability support service which will provide or coordinate the required services. The registration form for this program allows for detailed description of the person's disability, needs and current situation. There is also a 'goal statement'—the applicant should record their most important goals that relate to changing/improving their current situation.
	The Moving Ahead Program is a post-school transition program. An individual may receive funding under the program for up to 2 years and up to $16,500. The funding in respect of an individual goes directly to service providers, but is portable between services. An Individual Service Plan is developed which includes the individual's vision and goals. Progress against goals is assessed at 12 months. An individual program report form is used to record aspects of individual budget and total support hours (one-on-one and group) provided in each quarter.
WA	Local Area Coordination has been operating in Western Australia since 1987. Consumer-managed funding is facilitated, supported and monitored by the local area coordinator, who also has a limited 'discretionary' budget from which one-off funding can be allocated to individuals. The local area coordinator assists people with disabilities and their families to access formal services and purchase their own supports, and to monitor the quality and quantity of services and supports.
SA	Five Options Co-ordination Agencies were created in 1995 to provide overall service coordination for clients with disabilities: Brain Injury Options Co-ordination, Adults with Physical and Neurological, the Crippled Children's Association, the Intellectual Disability Services Council, and Sensory Options Co-ordination. Under the options coordination model, the agency coordinates and purchases services for clients based on their individual needs using brokerage funding.
	Client Managed Services—a model under which clients are given a pool of funding and arrange and purchase services they feel they require—is envisaged for the future.
Tas	Tasmania is establishing a Post School Options program involving cooperation between agencies to achieve specified outcomes for individuals. This will involve planning between agencies and across service types. Outcomes will probably be measured in terms of successful completion of agreed activities and/or the success of activities in securing long-term options for clients.
ACT	The Individual Support Packages Program was introduced in 1994. Funds allocated to an individual are administered through auspice agencies. An independent information, negotiation and brokerage service, Community Connections, provides support for people with disabilities and their families to make decisions about their support needs, priorities and lifestyle options. Individuals and their families, with support from Community Connections and others, decide on the outcomes they wish to achieve and what service interventions to purchase. The role of the service provider includes 'provide services as purchased or negotiated' and 'assure the quality of services provided'. The role of the person and their family includes 'assess the quality and effectiveness of the services in improving their lives'.
NT	Care Coordination, a service provision model similar to Local Area Coordination (as implemented in WA) was introduced in 1997. Now well-established in Darwin, it is being expanded to other districts. Possibilities for a 'single point of entry' model are being investigated in conjunction with Care Coordination.
Commonwealth	No individualised funding.

In Western Australia, public authorities are required to develop and implement Disability Services Plans, aimed at making services and facilities accessible to people with disabilities. This is a major component of the Government's Count Us In strategy, and the Disability Services Commission is involved in monitoring and reporting on Disability Services Plans.

A similar program operates in New South Wales. Under the Disability Policy Framework most State Government agencies are required to produce 3-yearly Disability Action Plans, in which they detail the ways they are improving the accessibility of their services for people with disabilities. In developing Disability Action Plans, agencies are required to identify the barriers to their services that people with disabilities face, and to devise strategies for removing the barriers within a manageable timeframe. Local government authorities are also encouraged to participate in this process. The Framework also provides for joint initiatives between program areas.

In Victoria, providers of community development services are funded to work with other organisations to increase community-wide recreational opportunities for people with disabilities.

In South Australia, 'Joint Ventures' is a model under which two or more parties (one of which is an Options Co-ordination Agency) enter jointly into a project. Each party agrees to contribute a certain level of resources to the venture, which may include 'in kind' resources or intellectual property.

Tasmania is also establishing a model that will involve planning and collaboration between agencies and across service types to achieve specified outcomes for individuals. It is anticipated that outcomes may be measured in terms of successful completion of agreed activities and/or the success of activities in securing long-term options for clients. Under this type of model it may be particularly difficult to cost service outputs and to attribute outcome achievement to particular service providers.

3.2 Concepts

Jolley (1999) said, in the context of community health, 'there are no universally understood definitions of terms used in performance measurement. Input, output and outcome, and notions of efficiency, customer service and quality assurance have been borrowed from the private (for-profit) sector without careful consideration of their meaning in a publicly-funded human services setting'.

This section focuses on the performance-related concepts current in the Australian disability services field. It addresses the question: do people share a common understanding of terms such as output, outcome, effectiveness and efficiency? It is essential to look at these issues before talking about how to measure or indicate aspects of performance.

Performance and performance measurement

'Performance' is often used as a broad umbrella term. Measures of input, process, output and outcome, quality, effectiveness and efficiency are all potentially relevant to notions of performance in a disability services context. However, in some instances, 'performance' and 'performance measurement' are defined in more specific terms.

In Western Australia's *Review of Performance Indicators* (DSC 1998b), performance indicators are defined as 'measures of achievement used to assess overall performance and the success of programs in terms of *efficiency* and *effectiveness*'. Effectiveness indicators,

relating to outcomes, are seen as the principal concern of Parliament and the Office of the Auditor-General. Efficiency indicators, relating to outputs, are seen as the principal concern of Treasury. Operational indicators, relating inputs to activities or workloads and resource deployment, are primarily relevant to daily management within the agency. This highlights the fact that different aspects of performance may be of interest to players at different levels within the disability sector.

Some definitions are framed more closely around outputs. For instance, the Victorian Department of Treasury and Finance (1997b) defines performance measures as 'measures of quantity, quality, timeliness and cost used to assess the production and delivery of outputs'. The Queensland Treasury (1997b) defines performance measures as 'quantifiable units of measurement used to determine and assess the delivery of outputs. They establish how performance will be judged for each output by translating it into a measured value of quantity, quality, cost, timeliness and, where appropriate, location'.

The Tasmanian Department of Treasury and Finance (1998) states that performance information should be 'suitable for use as evidence in making decisions. It can be in the form of numbers (data, or quantitative information) or words (qualitative information).'

To 'measure' or to 'indicate'?

The terms 'measure' and 'indicator' are often used interchangeably. However, sometimes a distinction is drawn between the concepts of measuring and indicating performance. Measurement generally involves basic quantification (e.g. the number of service recipients). Indicators tend to be higher level summaries of information, or may combine information from different sources (e.g. to give a ratio). In Western Australia's *Review of Performance Indicators* (DSC 1998b), it is stated that performance indicators are designed to indicate (i.e. to 'point out' or 'give ground for inferring'). This function is distinguished from the idea of measurement, which implies some degree of precision. Performance indicators are not definitive, self-explanatory measures—they need careful interpretation.

The Tasmanian Department of Treasury and Finance (1998) also makes a distinction between direct measures and indicators. Direct measures generate information that can be used as evidence about actual achievement of what was measured. Indicators are derived from a relationship between direct measures, and are often expressed in the form of an index, ratio, or per unit measure. Indicators provide evidence that infers something more general about performance—that is, they are information about a selected aspect of performance which is indicative of broader performance. Indicators can be a guide to performance where causal links are not obvious and where changes in performance are difficult to measure directly. Achievement against a performance indicator is judged by comparing against specific criteria, such as targets or benchmarks, which reflect performance expected.

It may be possible to develop useful indicators in circumstances where direct measurement is not possible. For instance, it may not be possible to measure outcomes in some situations, but it may be reasonable to develop an outcome indicator that is a proxy, perhaps using information about something that is expected to be associated with good outcomes. An example may be the percentage of accommodation support clients who are receiving services in community settings rather than institutional settings, if it is assumed that people living in community settings are likely to have a higher quality of life.

Inputs

In Figure 2.3 'inputs' are resources (staff, equipment, premises, etc.) which are used to produce outputs. Information on inputs may be relevant to questions such as: Are funds being used to their best advantage to purchase inputs? Is the level of quality of inputs (e.g. training levels of staff) appropriate? How does the nature of the inputs purchased impact on efficiency?

These questions are likely to be primarily of interest at the service agency level. In the context of output-based funding models, governments theoretically have little interest in information on inputs. As long as the service provider produces the outputs as required under the service contract, it is no business of the purchaser how funds are translated into outputs. Under more traditional, input-based approaches to service funding (i.e. block grants), agencies justify requests for increased funding on the basis of the inputs they need to purchase in order to maintain or increase levels of service provided. In the past, inputs to be purchased with government funding have sometimes been tightly specified (e.g. the proportion of funds to be spent on salaries, administration expenses, etc.) (SCRCSSP 1997).

In practice, the term 'inputs' is often used more loosely to include funds. The Queensland Treasury (1997b) defines inputs as 'resources in the form of people, materials, energy, facilities and funds that an agency uses in activities to produce outputs'. Information on funds used to produce outputs is clearly of interest to governments. In particular, information on the full cost of producing outputs, rather than 'cost to government', is necessary in order to properly cost outputs, as a basis for implementing output-based funding.

Outputs

Definitions

While 'outputs' may be goods or services, in the disability field the focus is primarily on services, except perhaps in the context of equipment schemes. Definitions of outputs given in documents provided by jurisdictions do not vary a great deal (Table 3.3). The majority of these materials are publications produced at whole-of-government level (e.g. by departments of Treasury).

The Tasmanian Department of Treasury and Finance (1996) defined outputs as 'goods and services produced by, or on behalf of, a Government agency and provided to customers outside the agency'. This definition is fairly representative of those canvassed.

The definition provided by the Queensland Treasury (1997b) emphasises that outputs are 'discrete' services or products, reflecting the need to be able to identify 'units' of service, for the purpose of quantifying outputs.

The definition given by the Victorian Department of Treasury and Finance makes the point that outputs are 'final products', as distinct from the intermediate products and services that may be provided within a department as inputs to the eventual departmental outputs (Victorian Department of Treasury and Finance 1997b).

Below, output concepts are discussed, first at whole-of-government level, often in relation to budget processes, then at program and subprogram level, in the context of measuring services purchased and provided.

Table 3.3: Definitions of 'output' used in the Australian disability services field

Source	Definition
SCRCSSP (2000). *Report on Government Services 2000*.	The service provided by a service area (e.g. a treated case is an output of a public acute care hospital).
Australian Healthcare Associates (1996). *Commonwealth/State Disability Agreement Evaluation. The Cost Study*.	The products, results or outputs achieved from service delivery, e.g. an hour of direct care provided.
Queensland Treasury (1997b). *Managing for Outcomes in Queensland.*	Discrete services or products produced by agencies and purchased by the Government, for external customers and consumers.
Queensland Treasury (1997a). *Guidelines for Grant Administration*.	Output measures: show the extent to which operational targets have been achieved.
Victorian Department of Treasury and Finance (1997b). *Output Specification and Performance Measurement Guide.*	Final products and services delivered to an external party. Intermediate products and services may also be provided within a department as inputs to the eventual departmental outputs. Suggested categories of outputs: policy advice; ministerial services; administration of legislation and regulations on behalf of Government; provision of products and services to the community.

Output groups: outputs need to aggregated into manageable amounts of output information or output groups to assist planning, budgeting, performance monitoring and reporting. Output groups bring together outputs which contribute to common outcomes. Should provide a meaningful level of data aggregation for government resourcing decisions and performance analysis. |
| Commonwealth Department of Finance and Administration (1999). *The New Framework*. | The goods and services produced by agencies on behalf of Government for external organisations or individuals. |
| Alt Statis & Associates (1996). *Scoping Study on Unit Costing and Output Based Funding* | The product actually delivered to a client by a service. Examples include a delivered meal or a specified amount (or unit) of child care, residential care, counselling, etc.

'Unit of service' refers to how outputs are measured. |
| Tasmanian Department of Treasury and Finance (1996). *The Output Methodology and the Budget Process*. | Goods and services produced by, or on behalf of, a government agency and provided to customers outside the agency. |
| Tasmania's Service Agreement | Any service and goods produced by the organisation. |

High-level outputs

Outputs are often articulated at whole-of-government level, as a basis for allocating funds and assessing program performance. In the Australian Capital Territory 1997–98 budget papers it was stated that 'the value of outputs is assessed by how effectively they contribute to the outcomes sought by the Government on behalf of the community' (ACT 1997). High-level outputs provide a way of defining broad categories of service activity, for purposes related to program-level funding and the budget process. Therefore, they do not necessarily relate closely to how services are delivered 'on the ground'.

Output groups

At whole-of-government level, outputs are often related to particular government outcomes, and may be grouped into 'output groups' or 'output classes'. The Victorian Department of Treasury and Finance (1997b), in its *Output Specification and Performance Measurement Guide*, states: 'Outputs will need to be aggregated into manageable amounts of output information or output groups to assist planning, budgeting, performance monitoring and reporting. Output groups bring together outputs which contribute to common outcomes' and 'should provide a meaningful level of data aggregation for Government resourcing decisions and performance analysis'.

Some output groups are very broad and high level. For instance, in Tasmania disability services are funded under the output group 'Community and Rural Health'. A key objective of this output group is 'to invest in the provision of community based services and reduce provision of services in institutional settings'.

In some instances output classes are linked more closely to service provision 'on the ground'. In the South Australian Department of Human Services two output classes apply to disability services:

• Accommodation and Support, described as 'accommodation provided in conjunction with care or support to individuals with disabilities'; and

• Community Based Care, described as 'direct care, intervention, support services and goods provided from a variety of sources to assist persons with disabilities and their carers to maintain quality of life in the wider community'.

In Victoria, the disability services output group is described as 'continuing care and support services for people with disabilities, their carers and their families' (Victorian Department of Treasury and Finance 1999). The key government outcome for the group is 'access to high quality services that advance the development and promote the dignity of people with intellectual, physical and/or sensory disabilities'. The Disability Services output group consists of nine outputs: Congregate Residential Care; Community Based Accommodation and Support; Community Access; Equipment Services; Respite Services; Case Management and Brokerage; Specialist Services; Information Advocacy Services; Quality Improvement Services. These outputs are used for program-level reporting. Within these outputs, 18 discrete service activities are recognised for funding purposes.

Outputs at the service provision level

At program level, outputs are usually more closely specified to relate directly to services purchased and provided. Disability services programs in most jurisdictions have been working towards defining meaningful units of service output and devising ways of measuring different aspects of service outputs (e.g. quantity, quality, timeliness). This is necessary both for administering service purchasing contracts with non-government providers, and for fulfilling program-level reporting requirements.

In Queensland, performance reporting requirements for the Disability Program are currently being developed. One measure seems essentially to be a measure of output: 'Number of hours of direct client contact per month for community teams and therapy staff'. There are also several measures based on client counts that can be more accurately described as measures of throughput, for example: 'Number of people receiving accommodation support'. However, one of these measures is a weighted client count, and therefore potentially more indicative of service outputs delivered: 'Number of clients receiving 1–8 hour, 9–16 hour and 17–24 hour accommodation support from government provided services'.

Commonly, five characteristics of outputs are identified: quantity, quality, cost, location and timeliness (Figure 2.3). These are all relevant to measures of performance. Quantifying and costing outputs is central to output-based purchasing. Assessing, or setting standards for, the quality of outputs is also critical when comparing potential service providers for the purpose of allocating funding.

In tendering for the provision of service outputs, a purchaser faces a range of options with regard to what aspects of the outputs (quantity, quality and price) are specified as required, and what aspects are left unspecified, and thus provide a basis on which potential providers will compete:

- The minimum quality of outputs and the total funding can be specified, with providers competing on both quantity and quality above the minimum level.

- The unit price and quantity of outputs can be specified, with providers competing on quality.

- The quality and quantity of outputs can be specified, with providers competing on unit price.

- The total fixed price can be specified, with providers competing on the quality of the overall service and the quantity of outputs provided. (SCRCSSP 1997:23)

It is thus necessary to be able to measure or assess quantity, quality and cost of outputs. In some circumstances it may also be relevant to consider the timeliness of service provision, and where services are provided (i.e. location).

Quantity

A considerable amount of attention is currently being focused on options for defining meaningful 'units' of service, as a basis for quantifying disability services and community services more generally. Various units are used currently in service purchasing contracts for specifying the quantity of output being purchased. However, these units are often somewhat crude, and may not be directly comparable between services.

For instance, number of clients is a commonly used unit. While this is clearly a relevant measure of quantity for some service types, for most services there would be strong arguments for weighting clients to reflect the fact that some clients have higher support needs than others and therefore will require more costly service interventions. Simple counts are unlikely to provide a good basis for comparison between different services, or even an informative measure of the amount of service being provided by a single service provider. Also, in the context of output-based funding arrangements, failing to weight client counts may be an incentive for service providers to take on low-needs clients in preference to more 'expensive' high-needs clients.

Because of the range of services funded under the CSDA, it is not feasible to use a single 'unit of service' measure regardless of service type. However, it is desirable to achieve some level of consistency, so that comparable performance measures that rely on quantification of outputs (e.g. measures of efficiency) can be generated.

Options for units of service include:

- number of clients (possibly weighted by intensity of assistance required);

- hours of service (possibly weighted, e.g. by staff:client ratio);

- instances or occasions of service.

In New South Wales, the population group planning model currently being developed uses 'hours of service' provided as a measure of output, except for transport and meals services,

for which 'occasions of service' is used. Output measures are still under development for some service types.

In the Australian Capital Territory, units of service used in annual purchase agreements between the Government and service providers vary depending on service type. For example, accommodation support services may be quantified using number of beds or number of places. A respite or community access service may be quantified using hours of service (with a distinction between hours of service provided on an individual basis and on a group basis). The 1999 *Strategic Plan for Disability Services in the ACT* recognises the need to 'develop consistent definitions of outputs for services which provide similar types of support and purchase against these outputs' (ACT DHCC 1999).

In Victoria, high-level reporting against outputs mostly uses number of clients as the basic measure of quantity (Table 3.4). Thus, 'client' is the unit of service used for most activities, with clients sometimes being grouped by age. 'Hours of service provided' is used for a small number of activities. For advocacy and information services, measures include number of clients, attendances, hits on website per time period. However, units of purchase are currently undergoing review, and the possible weighting of units is being explored. A taxonomy of service units has also been developed, as set out in Table 3.5.

A New South Wales project on the Classification of Community Care and Support Need is investigating a question related to quantifying service outputs: Over what period of time is need measured? Five options have been identified:

- episode of need (the period in which a person has a disability, impairment or handicap, which may be a lifetime for some clients);

- episode of support and care (the period in which a person receives care and support services, which may be a lifetime);

- period of care (a defined period, e.g. 3 months, at the end of which the client is reassessed);

- day of care (all services received on single day);

- occasion of service.

The development work under way in several jurisdictions is evidence of a recognition that defining units of service output is of central importance, particularly in the context of output-based purchasing. However, in deciding on appropriate units of service output there are clearly inescapable trade-offs between the amount of effort needed to collect the required information, the level of detail of the information, and comparability of measures between services.

Quality

Being able to define and measure quality in relation to service outputs is essential in the context of output-based purchasing. It is at least necessary to be able to ensure that outputs purchased meet minimum quality standards.

The Queensland Department of Treasury defines quality, relating to outputs, as 'how well the output is to be performed. There are many dimensions of quality, including: accuracy, completeness, accessibility, availability or continuity, risk coverage, compliance with legal standards, satisfaction of customer needs'. The Victorian Department of Treasury and Finance says 'quality usually reflects service standards based on customer needs—the product or service should fit the purpose for which it was intended. Quality measures

Table 3.4: Victorian Treasury performance measures relating to quantity

Output	Treasury performance measures
Output group: Disability Services	
Congregate Residential Care	No. of clients in training centres
Community Based Accommodation and Support	No. of clients in community-based accommodation support services
Community Access	No. of clients with day activities; no. of 'Futures For Young Adults' clients
Equipment Services	No. of aids and equipment items supplied; no. of clients accessing aids and equipment
Respite Services	No. of carer households provided with a respite service
Case Management and Brokerage	No. of clients receiving case management services through client services teams; no. of clients receiving Flexible Care Packages
Specialist Services	No. of clients receiving a service
Information Advocacy Services	No. of clients receiving advocacy support; no. of visits to the website
Quality Improvement Services	No. of research projects funded
Output group: Mental Health Services	
Community Care and Support	No. of clients in residential rehabilitation; no. of clients in home-based outreach support
Prevention and Promotion	No. Mental Health Week events
Training, Research and Development	No. mental health academic positions sponsored; no. postgraduate nursing placements (mental health)
Output group: Youth and Family Services	
Family and Individual Support: Early Intervention Services for Families	Total no. of clients

Table 3.5: Victorian taxonomy of units of service output

	Items	Episodes	Cases	Programs
Service recipient	Individual client	Individual client	Individual client	Defined population or subpopulation
Type of service	Single instance provided to individual clients	Package of interventions to meet individual client needs	Package of interventions to meet individual client needs	Set of activities to meet agreed goals and objectives
Intake processes	—	Intake assessment to determine client needs and define services provided during episode	Intake assessment to determine client needs and define services provided that comprise the case	Dependent upon definition of population and/or catchment
Duration	Either short or long duration; duration standardised according to type of service	Time-limited duration	Ongoing care over a long period	—
Closure	Clearly defined closure conditions	Clearly defined closure conditions	No clearly defined closure conditions	—

balance efficiency with effectiveness. Quality measures address standards to be met, access issues, customer focus issues, and/or timing issues relating to customer service'. However, measuring service output quality is not easy, and approaches currently in use are not well developed.

In South Australia, the quality performance measure used for both output classes under which disability services are purchased is 'percentage of service providers with National Disability Service Standards included in funding and service agreements'. Similarly, in Western Australia non-government providers are required to report on the extent to which the National Disability Service Standards are met (assessed via self-assessment). Assessment of services against the Standards is discussed further below. In Victoria, Treasury quality performance measures are specified for service activities under each output class, as listed in Table 3.6.

In its response to AIHW's request for information the Commonwealth Department of Family and Community Services stated that there is currently little information on service quality, but that data on the number of assessments or audits conducted, number of training courses and number of complaints might substitute. However, using data on number of complaints is potentially problematic, as increased complaints could reflect better mechanisms for consumer input rather than lower quality service.

Table 3.6: Victorian Treasury performance measures relating to quality

Output	Treasury performance measures
Output group: Disability Services	
Congregate Residential Care	Percentage of clients with appropriate day activities; percentage of total accommodation and support clients in training centres
Community Based Accommodation and Support	Percentage of clients successfully achieving the majority of objectives in their Program Plan
Community Access	Percentage of clients successfully achieving the majority of objectives in their Program Plan
Equipment Services	Percentage of referrers satisfied with response to clients' needs
Respite Services	No quality measure specified
Case Management and Brokerage	Percentage of clients achieving the majority of objectives specified in their Program Plan
Specialist Services	Percentage of clients successfully achieving the majority of objectives in their Program Plan
Information Advocacy Services	Percentage of websites compliant with appropriate guidelines for accessibility
Quality Improvement Services	Percentage of eligible providers participating in a quality self-assessment process
Output group: Mental Health Services	
Community Care and Support	Percentage improvement in consumer and carer satisfaction
Prevention and Promotion'	No quality measure specified
Training, Research and Development	No quality measure specified
Output group: Youth and Family Services	
Family and Individual Support: Early Intervention Services for Families	Services that have implemented program standards for Specialist Children's Services

Cost

Costing service outputs on a per-unit basis is, again, central to output-based purchasing. The Queensland Treasury, in *Managing for Outcomes in Queensland*, states that 'total cost is equal to the total value of all the resources used in the production of outputs' (Queensland Treasury 1997d). Several jurisdictions have developed guidelines on output costing. These generally cover such issues as allocation of direct and indirect costs to specific outputs (e.g. Queensland Treasury 1997c; Victorian Department of Treasury and Finance 1997a).

However, establishing the full cost of service outputs is problematic. In particular, determining the full cost of outputs produced by non-government providers requires knowing the contribution from sources other than CSDA funding (e.g. fundraising, user charges, volunteer labour, etc.), and this information is often not readily obtainable. Also, under traditional block grant funding arrangements it can be difficult for agencies to track the relative contribution of government funds to specific service outputs. Even under output-based funding arrangements, government departments may not know the extent to which funding provided covers the full cost of outputs.

The average cost per place for accommodation outputs, presented in the *Report on Government Services 2000*, is 'cost to government' rather than total cost. Thus government-provided places show up as more expensive to government than non-government-provided places, both for institutional/large residential accommodation and community accommodation and care services.

Location

'Location' concerns the geographical location where service outputs are delivered. Several jurisdictions have recognised information on location as important, but generally lacking at present. Information on location is of particular relevance to questions about equity of access to services.

Location can be related to cost, as it may be more expensive to deliver services in certain locations (e.g. remote areas). Performance measures relating to location can assist in making transparent the costs associated with providing services to meet specific government initiatives (Queensland Treasury 1997d). Also, recognising that some providers face higher costs in delivering services, because of location, is necessary in an environment where providers are competing for service contracts.

In some circumstances it is necessary to specify the location of outputs to be delivered under a service purchasing contract. For instance, where it is important to ensure that services are provided for particular target communities, the purchaser may require that a specified proportion of outputs be delivered in particular locations.

Information on location is likely to be of particular importance in jurisdictions where a substantial proportion of the population lives in rural or remote areas. However, in all jurisdictions, information on location of services could be used in conjunction with information on the distribution of people with a disability (e.g. from population-based surveys) to assess whether services are being targeted appropriately. As demographics change over time, reassessment of the location of disability services is likely to be necessary.

Information on location of service delivery, together with information on the residential addresses of individual recipients, can be used to investigate issues of access. If services are provided at a central location, and some recipients must travel large distances to reach them, issues of equity of access may arise.

Under the Memorandum of Understanding on Joint Planning for Older People and People with Disabilities and their respective Families and Carers in New South Wales, it is stated that:

> There is a significant number of individuals residing in NSW who use multiple and inter-related services provided from a range of programs. It is in the interests of the agencies, service providers and service users that Departments are more able to map the location, type and capacity of these interrelated services.

(Commonwealth Department of Family and Community Services et al. 1998).

Timeliness

The Victorian Department of Treasury and Finance defines timeliness measures as 'parameters for how often, or within what time-frame, outputs will be delivered (usually turnaround times or waiting or response times)'. Timeliness can be seen as an aspect of quality (Queensland Treasury 1997d).

Measures of timeliness might include the amount of time between registration of need and provision of service. This kind of information could potentially be provided by waiting lists, but to be reliable there would need to be standard rules for maintaining waiting lists.

Queensland's Disability Program performance reporting requirements, currently under development, include a number of timeliness measures:

- proportion of Adult Lifestyle Support funding packages implemented by the agreed date (set by the Minister);
- proportion of Moving Ahead Program funding schedules implemented by the agreed date;
- proportion of Local Area Coordination pilots commenced by the agreed date; and
- proportion of respite services developed by the agreed date.

In South Australia, timeliness measures for each of the two output classes under which disability services are purchased have yet to be developed.

In Victoria, Treasury performance measures for timeliness are specified for some service activities:

- respite services: percentage of respite information provided to client within 3 days;
- case management and brokerage services: percentage of clients waiting less than 3 months for a case management service; and
- specialist services: percentage of clients waiting less than 3 months for a case management service.

Quality and the National Standards for Disability Services

Quality may relate to outputs, as discussed above, but also to processes (how services are delivered) and inputs (e.g. quality of equipment, training levels of staff, etc.).

The National Standards for Disability Services were endorsed by the (then) Council of Social Welfare Ministers in June 1993. They have thus been adopted in all jurisdictions, and several jurisdictions have developed their own set of standards, based closely on the National Standards. In addition, quality frameworks and similar mechanisms, aimed at monitoring the quality of services and promoting continuous improvement, have been established in some jurisdictions.

A draft report on quality improvement in human services in the Australian Capital Territory states that there is a need to distinguish between how quality is factored into purchasing decisions and contracts, on the one hand, and standards and processes directed to quality improvement on the other. Quality standards are best used as a tool in service improvement and evaluation of quality—'compliance' is not a useful objective. The report states that:

> Quality standards provide a guide to good practice for services. They establish what is known and expected in a given service sector or industry in relation to quality and effectiveness of services. Standards are usually expressed as broad statements concerning what is aimed for and are most useful when accompanied by more detailed indicators which suggest the things you would look for to know the standards are being achieved.

(Rogan & Porcino 1998).

Box 3.1 sets out the National Standards for Disability Services. The 11 Disability Services Standards are set out under Section 9C of the Commonwealth *Disability Services Act 1986*. The Standards were adopted in the 1991 by all jurisdictions through the 1991 CSDA. The 1998 CSDA states, in clauses 6(3) and 6(4), that the parties are to ensure that 'agreed national quality standards are upheld and monitored'.

Many jurisdictions have produced jurisdiction-specific disability service standards closely modelled on the National Standards, often with more detailed supporting standards and accompanying examples of good practice. Compliance with the Disability Services Standards is often a requirement built into contracts between governments and non-government service providers. For example, in the Commonwealth's 1999–2000 Service Agreement, the Minister has a number of options in the event that an organisation does not meet the Disability Services Standards. These include instructing the organisation make specified changes to its operation of the service outlet concerned, suspending funding payments, and terminating the service agreement.

Outcomes

In the current policy environment there is a heavy emphasis on outcomes. This emphasis is reflected in the main goal statement in Clause 4(1) of the 1998 CSDA: 'The Commonwealth and the States strive to enhance the quality of life experienced by people with a disability through assisting them to live as valued and participating members of the community'.

The concept of Participation, the third dimension of disability in the draft ICIDH–2, is of central relevance to outcomes related to disability services. The United Nations *Standard Rules on the Equalization of Opportunities for Persons with Disabilities* states that:

> In all societies of the world there are still obstacles preventing persons with disabilities from exercising their rights and freedoms and making it difficult for them to participate fully in the activities of their societies. It is the responsibility of States to take appropriate action to remove such obstacles.

(United Nations 1994:8–9)

It is the aim in many Australian jurisdictions to move towards allocating funding for services on the basis of outcomes, or at least on the basis of outputs or output groups that are related to outcomes articulated by government. For instance, one of the key objectives of the South Australian Government's Government Management Framework is to ensure that the public sector plans, allocates, monitors and accounts for resources in terms of what it intends to achieve for the community (outcomes) and the services (outputs) it will provide.

Box 3.1: National Standards for Disability Services	
Standard 1 Service access	Each consumer seeking a service has access to a service on the basis of relative need and available resources.
Standard 2 Individual needs	Each person with a disability receives a service which is designed to meet, in the least restrictive way, his or her individual needs and personal goals.
Standard 3 Decision making and choice	Each person with a disability has the opportunity to participate as fully as possible in making decisions about the events and activities of his or her daily life in relation to the services he or she receives.
Standard 4 Privacy, dignity and confidentiality	Each consumer's right to privacy, dignity and confidentiality in all aspects of his or her life is recognised and respected.
Standard 5 Participation and integration	Each person with a disability is supported and encouraged to participate and be involved in the life of the community.
Standard 6 Valued status	Each person with a disability has the opportunity to develop and maintain skills and to participate in activities that enable him or her to achieve valued roles in the community.
Standard 7 Complaints and disputes	Each consumer is free to raise and have resolved any complaints or disputes he or she may have regarding the agency or the service.
Standard 8 Service management	Each agency adopts sound management practices which maximise outcomes for consumers.
Standard 9 Employment conditions	Each person with a disability enjoys comparable working conditions to those expected and enjoyed by the general workforce.
Standard 10 Employment support	The employment prospects of each person with a disability are maximised by effective and relevant support.
Standard 11 Employment skills development	The employment prospects of each person with a disability are maximised by effective and relevant training.

In Figure 2.1, two categories of outcomes are represented: consumer outcomes and community outcomes. These two categories should be related. Community-level outcomes should reflect an aggregation of individual consumer outcomes, plus factors that can only be measured at the community level, such as community attitudes to disability and equity of access to services.

However, it is also relevant to consider outcome achievement at the level of the service. Service providers funded by government are often required to report on achievement of outcomes, to demonstrate accountability. Information on outcome achievement may also be used for internal service management purposes. A distinction will be made in this report between 'service provider outcomes' and 'service-level outcomes'. Service-level outcomes are based on aggregations of individual outcomes, and thus reflect how well a service is achieving outcomes for its clients. Service provider outcomes, in contrast, relate to how a service is conducting its business. A service provider outcome may be improved efficiency, or compliance with quality standards. There should be a relationship between these two, because a service agency that is conducting its business well might be expected to be better at delivering outcomes to its clients.

Below, definitions of outcomes and examples of outcomes that have been articulated at different levels are drawn from the materials provided by jurisdictions, to explore the concept of 'outcome' as it is used currently in the Australian disability services field.

Definitions of outcomes

Table 3.7 gives a range of definitions of 'outcome' used in the Australian disability services field. In the glossary of the *Report on Government Services 2000*, outcome is defined as 'the impact of the service on the status of individuals or a group. A service provider can influence an outcome but external factors can also apply' (SCRCSSP 2000). This is a very broad definition. It does not specify what aspects of the 'status' of individuals or a group are of interest—this will depend, among other things, on the nature and objectives of the service. The definition does flag an important problem with the concept of 'outcome': it can be difficult to determine the impact of a service intervention in isolation from other factors that may affect the 'status' of an individual or group.

Quality of life is a theme common to many definitions of outcomes in the context of disability services. This is highly appropriate given the emphasis on quality of life in the main goal statement in the CSDA (page 39). The report on the cost study, conducted as part of the review of the 1992 CSDA, defined outcomes as 'measurable changes in the quality of life of clients as a result of service provision' (Australian Healthcare Associates 1996).

In many of the documents on output- and outcome-based purchasing that have been produced by Commonwealth, State and Territory Government Treasuries over recent years, outcomes focus on the impacts of services at the community level. For instance, the Tasmanian Department of Treasury and Finance defined outcomes as 'the effects on the community of the outputs that are purchased by the Government'. However, at lower levels of government (e.g. within disability programs) or at service provider level, the focus may be on groups (such as service users) or individuals. The New South Wales self-assessment package for Department of Community Services' large residential services defines outcomes as 'statements of what the service expects to achieve for Service Users in terms of enhanced lifestyles and facilitation of opportunities within the scope of the service'.

Few definitions of outcomes grapple with the issue of whether outcomes should be measurable. In a New South Wales scoping study on unit costing and output-based funding, however, outcome is defined as 'a measurable change in (or preservation of) the quality of life of the consumer attributable to a service output received (or service intervention) or series of interventions' (Alt Statis & Associates 1996).

Whether an outcome is measurable will depend very much on how it is defined. Broad, high-level outcomes of the kind often articulated by governments may be very difficult to measure. Because of the difficulty of assessing achievement of outcomes, outcomes are sometimes stated in terms of what are essentially outputs. The Queensland Treasury (1997d) states that, in some cases, 'output performance measures may also be outcome indicators'. In fact, at the community level and the service level, the distinction between outputs and outcomes can be somewhat blurred.

Community-level outcomes

Community-level outcomes articulated by governments are often about providing access to appropriate services that will help improve the quality of life of people with disabilities. They commonly incorporate notions of participation, rights and inclusion.

High-level outcomes are also often linked with the budget process. The Victorian Department of Treasury and Finance (1997b) states that 'Departments are accountable for the delivery of outputs that contribute to intended outcomes. To assist decision making on which outputs Government is to fund, output information should clearly illustrate a link to outcomes'. For 'disability services' the key government outcome is 'access to high quality

Table 3.7: Definitions of 'outcome' used in the Australian disability services field

Source	Definition
SCRCSSP (2000). *Report on Government Services 2000*.	The impact of the service on the status of individuals or a group. A service provider can influence an outcome but external factors can also apply.
Australian Healthcare Associates (1996). *Commonwealth/State Disability Agreement Evaluation. The Cost Study*.	Measurable changes in the quality of life of clients as a result of service provision.
Queensland Treasury (1997b). *Managing for Outcomes in Queensland.*	The effects on, or consequences for, the community, of the services and products (outputs) purchased by the Government.
Queensland Treasury (1997a). *Guidelines for Grant Administration*.	'Impact measures' (sometimes known as outcomes or final output measures) assess the extent to which the scheme is securing its wider goals and objectives. Establishing impact measures is not always easy but is a key step in establishing a clear view of the true benefits of a scheme.
Victorian Department of Treasury and Finance (1997b). *Output Specification and Performance Measurement Guide.*	Government's desired or intended impacts/effects on the community. Outcomes are often achieved through a variety of outputs and other actions (e.g. legislative regulation of an industry).
Commonwealth Department of Finance and Administration (1999). *The New Framework*.	The results, impacts or consequences of actions by the Commonwealth on the Australian community.
NSW Self assessment package for Department of Community Services' large residential services.	Statements of what the service expects to achieve for service users in terms of enhanced lifestyles and facilitation of opportunities within the scope of the service.
Alt Statis & Associates (1996). *Scoping Study on Unit Costing and Output Based Funding*	A measurable change in (or preservation of) the quality of life of the consumer attributable to a service output received (or service intervention) or series of interventions.
ACT (1999). *ACT Budget 99—Budget Paper no. 3*	High-level outcomes 'describe where improvement will be made and value added to the community as a result of Government strategies'.
Tasmanian Department of Treasury and Finance (1996). *The Output Methodology and the Budget Process*.	The effects on the community of the outputs that are purchased by the government.
Tasmania's Service Agreement	The impacts of delivery of any service on the health and wellbeing of clients and/or target group.

services that advance the development and promote the dignity of people with intellectual, physical and/or sensory disabilities' (Victorian Department of Treasury and Finance 1999).

One of the three main goals of the 1999 Australian Capital Territory Strategic Plan for Disability Services is:

> To ensure that people with disabilities are able to access support services which complement the support they receive from their families, communities and mainstream services to enable them to live as valued members of the community.

A number of program-level 'performance outcomes' are set out, corresponding to three key issues identified during the development of the Plan—unmet need, service quality and

consumer outcomes, and systemic improvement (Table 3.8). Strategies are identified against each outcome.

Under the Western Australian DSC's Creating Accessible Communities initiative there are five key outcomes that provide a framework for planning and assessing the Disability Services Plans which must be developed by each State and local government agency. The outcomes are as follows:

- Existing services are adapted to ensure they meet the needs of people with disabilities.

- Access to buildings and facilities is improved.

- Information about services is provided in formats that meet the communication requirements of people with disabilities.

- Advice and services are delivered by staff who are aware of and understand the needs of people with disabilities.

- Opportunities are provided for people with disabilities to participate in public consultations, grievance mechanisms and decision-making processes.

(DSC n.d.)

Service-level outcomes

The New South Wales Supported Accommodation Program: Assessment Checklist is a guide to factors that agencies may address in their application for funding. It lists five outcomes: (1) each resident is safe and secure; (2) each resident keeps as healthy as possible; (3) each resident has opportunities and choices; (4) each resident has his/her rights respected and meets his/her responsibilities; (5) each resident is connected with other people and the community. For each outcome there are indicators which are essentially statements about how the service is provided (e.g. 'each resident has his/her own bedroom', 'the service has effective grievance procedures'). The achievement of these outcomes could be expected to contribute positively to the quality of life of individual service users. Thus the indicators are proxy measures of service-level outcome.

Purchasing agreements used for non-government providers in Western Australia specify 'outcomes of purchased activity' for different service type categories (hostel residential accommodation, respite, etc.). For example, for community residential accommodation services the following outcomes are listed:

- people with disabilities have a living environment which is age and culturally appropriate;

- people with disabilities receive appropriate care and support to be emotionally and physically well;

- people with disabilities are supported to have positive friendships and family relationships;

- people with disabilities receive services which are designed to meet their individual needs, circumstances and wishes; and

- people with disabilities are satisfied with the services provided.

In the Commonwealth's 1999-2000 Service Agreement for Employment Assistance, 'employment outcomes' are targets expressed in terms of numbers of clients (new job seekers, new job seekers aged 15–24, new workers, re-placement workers, continuing workers, continuing worker part year, independent workers and number of wage subsidies

Table 3.8: Performance outcomes identified in the *Strategic Plan for Disability Services in the ACT* **relating to two of the 'key issues' identified in the Plan—unmet need, and service quality and consumer outcomes**

Unmet need

Access by people with disabilities to mainstream services, including ACT Government services, is promoted and improved.

Information is acquired, analysed and used to advise Government of unmet need for disability services (current and projected) and recommend the most effective ways to address this need.

Consumer access is improved through the targeting and prioritising of services.

Funds and other resources from all potential sources are maximised.

Service gaps are addressed and continuity of services improved through enhanced coordination and communication between Commonwealth Departments and ACT Government agencies.

Consumer self-management and independence is promoted by service providers, including encouragement of flexibility and innovation to address individual needs.

Families and communities are assisted in their roles as carers and supporters of people with disabilities.

Service quality and consumer outcomes

A quality framework is developed and implemented to achieve consumer outcomes as determined (primarily) by consumers; and meet standards of management and service in line with the Disability Services Act and Standards.

Alternative support models are established to efficiently and effectively address consumer needs and preferences.

Consumer involvement in service planning and monitoring is enhanced.

Appropriate advocacy is available for people with disabilities if and when it is required.

Source: ACT DHCC 1999.

required). These targets seem to relate more to output or throughput than to outcomes as such.

In some jurisdictions outcome goals are not detailed on the standard service contract form. Thus, the way outcomes are framed is likely to vary from contract to contract, and data on outcome achievement may not be comparable between providers.

Individual outcomes

In its response to AIHW, the New South Wales ADD stated that 'consumer outcomes do not lend themselves to easy measurements, given that no single intervention/agency can be credited with their achievement'. 'Program proxies' can substitute for consumer outcome measures in some circumstances. A combination of approaches may be necessary, e.g. measures of client satisfaction, service content quality (whether service meets client needs), service delivery quality (whether service is timely and flexible) and longitudinal studies of the impact of services on clients. Consumer outcome indicator frameworks have not yet been developed in New South Wales because of the complexity of measuring outcomes.

Under the Commonwealth's proposed case-based funding model, payments to service providers will be based on the achievement of employment outcomes for individuals. 'Employment outcome' is defined as work which is for an average of at least 8 hours or greater per week and at a wage which is either award-based or part of a legal industrial agreement. Payments are linked to the amount of time an individual has been in employment. Thus, client outcomes are defined very narrowly to relate to one area of participation (i.e. paid work). Taking this approach, achievement of outcomes can be assessed readily, and fairly confidently attributed to the service intervention.

With the rise of consumer-based funding models there is a trend towards individuals specifying their own outcome goals, against which service outputs are purchased. For

instance, in Queensland, the Adult Lifestyle Support program uses a registration form which allows for detailed description of the person's disability, needs and current situation. There is also a goal statement—the applicant should record their most important goals that relate to changing or improving their current situation. However, it seems there is no formal process for assessing outcomes against these goals. Similarly, under Individual Service Plans in the Australian Capital Territory, individuals and their families are expected to decide on the outcomes they wish to achieve and 'assess the quality and effectiveness of the services in improving their lives'. The development of outcome measures has been identified as an 'area for action' (Department of Health and Community Care 1998).

Tasmania is establishing a Post School Options program under which individual needs will be identified and met collaboratively, involving planning between agencies and across service types. Outcomes for individuals will probably be measured in terms of successful completion of agreed courses/activities and/or the success of activities in securing long-term options for clients.

Efficiency and effectiveness

The concepts of efficiency and effectiveness are central to performance measurement frameworks. From a performance measurement perspective, it could be said that the main purpose of identifying and measuring inputs, outputs and outcomes is to provide the raw materials for producing indicators of efficiency and effectiveness. Because efficiency and effectiveness are higher order performance concepts than those discussed above, they tend to be more difficult to define and measure in a practical context.

Efficiency

In the *Report on Government Services 2000* (SCRCSSP 2000), efficiency is defined as 'a reflection of how well organisations use their resources to produce services'.

As defined in Figure 2.3, efficiency is a measure of the translation of inputs into outputs—inputs consumed per unit output. In practice, 'efficiency' is more commonly understood to mean cost per unit output, that is, 'cost-efficiency'. Unit costs are used as indicators of efficiency in the *Report on Government Services 2000*.

Under output-based purchasing, governments are primarily concerned with cost-efficiency—how many outputs they get for their dollar. Theoretically, the purchaser is not interested in what goes on in the middle (i.e. what inputs the organisation purchases or how well inputs translate into outputs). In a competitive environment, organisations that demonstrate greater cost-efficiency will win contracts to provide services.

From a management perspective, service provider organisations should be interested in efficiency: how well they are using the inputs they have purchased. Organisations should also be interested in how well they are choosing the inputs they purchase with their funds; for instance, when are more highly qualified staff necessary, and when is it a better use of funds to hire less qualified staff.

Indicators of efficiency (i.e. cost-efficiency) in the *Report on Government 2000 Services* are shown in Table 3.9. There are two groups: cost or contribution per output unit, and administrative cost as a proportion of total budget. The first is restricted to accommodation services at this stage. The measure of efficiency used is government funding per place. Therefore it is not possible to make comparisons between government and non-government provided accommodation services.

Efficiency indicators, reported in the Western Australian DSC's Annual Report 1997–98 (DSC 1998a) under the three program areas, are as follows:

- **Accommodation and community home support program:** cost per person for accommodation and community home support program;

- **Individual and family support program:** cost per person for individual and family support program; and

- **Community development and services improvement program:** cost of program per person in Western Australia with a disability.

Effectiveness

The concept of effectiveness can be more difficult to pin down than the concept of efficiency. In Figure 2.3, effectiveness is a measure of the translation of outputs into outcomes. Cost-effectiveness is a measure of cost per unit outcome. However, it is difficult to put this definition into a practical context, particularly in view of the difficulties associated with defining outcomes and assessing outcome achievement.

In the *Report on Government Services 2000* (SCRCSSP 2000), effectiveness is defined as 'a reflection of how well the outputs of a service achieve the stated objectives of that service' or 'how well a service achieves desired outcomes'. There are three groups of effectiveness indicators in the framework of performance indicators for disability services: 'participation outcomes', 'quality' and 'access and equity' (Table 3.9).

In the *Third National Report on Health Sector Performance Indicators*, the 'effectiveness' branch of the framework of indicators for public acute care hospitals is composed of quality, appropriateness, and accessibility and equity of care (National Health Ministers' Benchmarking Working Group 1999). 'Quality' comprises hospital service outcomes, patient satisfaction, hospital misadventures and process (including facility accreditation).

Outcomes are placed at different levels in the two frameworks. In the performance indicators framework for disability services, 'participation outcomes' is one of the three components of effectiveness. 'Client perceptions' is a subset of the quality component. In the framework of indicators for public acute care hospitals, 'hospital service outcomes' and 'patient satisfaction' are both part of the quality component of effectiveness. There are also differences between the two frameworks in terms of where 'appropriateness' is represented. For disability services, 'access to appropriate services' comes under the 'access and equity' component of effectiveness.

For public acute hospitals, 'appropriateness' is represented at a higher level of the framework, as one of the three components of effectiveness. These differences perhaps illustrate that effectiveness is not yet a concrete concept in the community services field.

In the disability services field, 'effectiveness' tends to be used loosely to mean a measure or assessment of the extent to which outcomes are achieved. It is seldom defined in more specific terms, probably because this would require identifying clear criteria for assessing outcome achievement, something that is generally acknowledged as very difficult in the context of disability services.

For instance, in service purchasing agreements used in Western Australia, effectiveness is the 'extent to which outcomes have been achieved'. No means of measuring effectiveness is described; rather the process for assessing effectiveness of the service is to be developed by the service provider in the first 12 months of the contract, with assistance from DSC funding and support officers.

Table 3.9: Effectiveness and efficiency indicators relating to disability services, from the *Report on Government Services 2000*

Effectiveness		
Participation outcomes	Community participation	*Proportion receiving community care or support:* Percentage of clients who received accommodation services on the snapshot day who received community-based accommodation or in-home support (1999 CSDA MDS).
		Labour force participation and employment: Labour force participation rate and employment rate for people with a disability (1998 ABS survey).
		Social participation: Participation in social events (1998 ABS survey; 1999 client satisfaction survey).
	Other	*Representation in users of general community services:* See performance indicators for other service areas, e.g. housing.
Quality	Client perceptions	*Quality assurance processes:* No data.
		Client satisfaction: Client satisfaction with services and specific aspects of services (1999 client satisfaction survey).
	Other	*Carer satisfaction:* Client family satisfaction with services and specific aspects of services (1999 client satisfaction survey).
Access and equity	Access to appropriate services on the basis of relative need	*Users of accommodation relative to estimated potential population:* Percentage of people aged <65 with profound or severe core activity restriction using accommodation services on the snapshot day (1998 ABS survey and 1999 CSDA MDS).
		Users of employment relative to estimated potential population: Percentage of potential labour force using employment services on the snapshot day (1998 ABS survey and 1999 CSDA MDS).
		Users of day activities relative to estimated potential population: Percentage of people aged <65 with profound or severe core activity restriction who received an employment place or day activity place (1998 ABS survey and 1999 CSDA MDS).
		Use by severity of disability: Percentage of accommodation and employment service users (as counted on snapshot day) who had no to moderate core activity restriction, severe core activity restriction and profound core activity restriction (1999 CSDA MDS).
		Use by special needs groups: Indigenous people accessing accommodation and employment services as a proportion of the total Indigenous and population, compared with proportion of general population using accommodation and employment services (1999 CSDA MDS and 1998 ABS population survey). Equivalent indicator calculated for people from non-English-speaking backgrounds.
		Client satisfaction with appropriateness: 1999 client satisfaction survey.
Efficiency		
	Cost/contribution per output unit	*Cost per government provided place:* Real unit cost per government delivered institutional/residential place, and government delivered community accommodation and care place (1999 CSDA MDS and administrative data).
		Contribution per non-government provided place: Government funding per non-government-delivered institutional/residential place, and non-government-delivered community accommodation and care place. (1999 CSDA MDS and administrative data).
	Administrative cost	*Administration as a proportion of total budget:* Administration as percentage of total government expenditure.

Note: shaded cells signify indicators for which data are not available or not readily comparable between jurisdictions.

Source: SCRCSSP 2000.

Need and demand

In the materials provided by jurisdictions to AIHW for this project there is little discussion of the concepts of 'need' and 'demand'. In the market economy context, demand refers to the volume of consumer purchases that can be expected for a given commodity at a given price (Encyclopaedia Britannica 1973). Demand for a particular product is therefore expected to rise as its price falls.

In AIHW reports examining demand for disability support services in Australia (Madden et al. 1996, AIHW 1997b), demand is defined as 'expressed need'. Demand for publicly provided resources is regulated through a system of eligibility criteria and supporting administrative processes, rather than relying on price as a rationing mechanism.

In the context of disability services a distinction is made between 'met demand', 'unmet demand' and 'potential need'.

'Met demand' describes the situation in which people receive services and assistance appropriate to their needs. 'Unmet demand' is where people's expressed needs are not being met. This may be indicated by numbers on waiting lists and registers, or by people expressing unmet needs (e.g. through surveys or letters to service providers or programs). (While the AIHW study discussed these indicators of unmet demand, it used a more narrow approach to prepare national estimates of unmet demand, based on people who had not only reported unmet need but who also indicated unsuccessful efforts to obtain formal services to meet those needs.) The concept of unmet demand also encompasses people who are receiving services that are not appropriate to their needs. Not all people who express unmet demand for services are necessarily eligible for services.

'Potential need' is that which is not expressed. It is a combination of inferred and future need and may be indicated in terms of:

- individuals or groups who appear disadvantaged in comparison with others;
- people apparently meeting service eligibility criteria but not demanding services;
- societies goals or norms not being met (e.g. 'normal' physical or social functioning);
- people likely to need services in the near future (e.g. due to ageing).

(AIHW 1997b:10)

3.3 Data

This section reviews performance-related data currently collected in different jurisdictions. The material is arranged under subheadings corresponding to those used in the previous section on performance-related concepts. The aim is to cover what data are collected, where they are collected (in relation to service funding models), whether they are aggregated and how they are used.

For ease of reference, data items in the CSDA MDS 2000 data collection are listed in Box 3.3 at the end of this chapter.

Data on inputs and costs

There is not currently a great emphasis on collecting information on inputs. As stated previously, under output-based purchasing arrangements, purchasers are theoretically not interested in what inputs service providers purchase with their funding. However, in some

jurisdictions general information on inputs purchased with funds is gathered (e.g. the proportion of funding spent on salaries). The current CSDA service form also collects information on staff hours (paid, unpaid and contract staff, engaged in direct or indirect support), which is a measure of input.

There is much more interest in collecting data on dollars consumed in producing service outputs, as costing of outputs is central to implementing output-based funding. In many jurisdictions documents have been produced, often by Treasuries, to explain basic concepts (e.g. direct and indirect costs, relationship between cost and price, etc.) and provide a guide to costing service outputs.

Currently, financial data collected via the CSDA MDS are limited. On each service form, the funding department provides information on 'total CSDA funds' and 'capital grants over $200,000' allocated to the particular outlet during the relevant financial year. Some jurisdictions do not include these items on their service forms. Rather, this financial data is obtained from administrative data sources.

Data on the cost of government-provided accommodation services and the contribution of government funds to non-government-provided accommodation services are presented in the *Report on Government Services 2000* (SCRCSSP 2000). They are used as indicators of efficiency. As these figures do not reflect the contribution of non-government funding sources, they show non-government-provided services to be less costly to government than government-provided services (Table 3.10). In the absence of funding formulae, Tasmania uses these national average costs as a crude guide to upper limits for service costing. Where Tasmania differs markedly from the national average, Tasmanian average costs are sometimes used.

Table 3.10: Data on cost of services, *Report on Government Services 2000*

Service type	Cost per government-provided place	Contribution per non-government-provided place
Institutional/large residential	$69,076	$28,681
Community accommodation and care	$62,451	$34,654

Source: SCRCSSP (2000:1093)

Data on the contribution of non-CSDA funds to services provided by non-government agencies are difficult to obtain. This information was collected through the CSDA MDS in the past, using a question on 'income source' that asked providers to detail income received from 'Commonwealth Government', 'State Government', 'Local government' and 'All other income'. However, this question was dropped from the MDS service form, due to concerns that the data were not reliable. Non-government providers tend to be reluctant to provide information on non-government revenue sources and, even if this were not the case, it would be difficult to confidently allocate non-CSDA funds to specific service outputs, particularly for large agencies which might provide a range of services.

In Western Australia, the standard service agreement states that the basis on which the contract price is to be determined 'will take into account all cash and accrued costs of providing the Purchased Activities'. However, it then states that:

> Fundraising income is excluded from such determinations in recognition that it is a key means for the Organisation to raise capital funds and to raise funds for its other services and activities. However, some Organisations do use proceeds from fundraising to supplement Purchased Activities and where this occurs the amount is also to be specified in Schedule B.

The AIHW has collected data on revenue sources for non-government agencies, based on annual reports and financial statements of individual organisations. Major revenue sources, other than government funding, were fundraising, client fees and commercial income. The proportion of total revenue accounted for by government funding varied between agencies. For the 57 largest non-government organisations that provided disability services in 1997–98, government funds accounted for, on average, 50% of total funds. On average, fundraising income accounted for 19%, client fees for 11% and commercial income for 8% (AIHW unpublished data).

Volunteer labour also contributes to the provision of services provided by non-government organisations, but is difficult to factor into calculations of the 'cost' of services. The 1996 Australian Bureau of Statistics (ABS) survey of community services activity in Australia provided information on paid and voluntary workers in non-government community services organisations. In the category 'other residential care' (including for people with disabilities), approximately 56% of total hours were worked by volunteers. For 'other non-residential care' (including for people with disabilities) approximately 34% of total hours were worked by volunteers (ABS 1998).

Most jurisdictions collect some financial data from non-government service providers, primarily for accountability purposes and solely relating to CSDA funds. These data are usually collected via service contract reporting requirements.

In Victoria, service outputs provided by non-government agencies can be costed on the basis of information contained the Service Agreement Management System database which records, for each activity, the amount paid to the agency to deliver that service. This information is considered to reflect, reasonably accurately, the true cost of service provision and is comparable with information derived from costing work previously undertaken on the basis of inputs. For government services, the true costs of service delivery can be determined through existing financial systems.

In the Australian Capital Territory, the 'purchase price' paid by the government to the non-government provider is recorded in the service purchasing contract, and funded agencies are required to provide quarterly financial reports. Information on expenditure is collated into cumulative annual reports by the Community Services Purchasing Unit. Funding figures for CSDA services are provided in the Strategic Plan (ACT DHCC 1999), broken down by service type and sector (government or non-government provider). Funding for Individual Support Packages is identified separately.

In Queensland, quarterly financial returns are completed by all funded providers, but these only give known government contribution rather than the full cost of services. Under the consumer-based Moving Ahead Program, service providers receive funds in respect of an individual directly from Central Office, and details of funds allocated and services to be provided are recorded in a Grant Agreement. Also, aspects of individual budget and total support hours provided are reported quarterly. However, these data are not aggregated to program level.

In South Australia, budget information against output classes is collected and reported to the Department of Human Services. However, data on expenditure is not obtained, as it is difficult for agencies to attribute certain costs against different service types. Non-government providers generally contribute towards the provision of the services (the funding split between Government and non-government is estimated at 60:40), but fund-raising income is not generally attributed to particular service types. The 'cost' performance measures for the two disability services output classes reflect the efficiency indicators in the *Report on Government Services 2000*: cost/contribution per place for the

Accommodation and Support output class, and administration expenditure as a percentage of total expenditure for the Community Based Care output class.

In Tasmania, service providers are required to provide quarterly cash flow reports, which detail actual against projected expenditure.

As part of the Commonwealth's case-based funding trial, detailed data on cost will be obtained from some service providers and appropriate methodology will be developed to attribute service provider cost at the individual job seeker level.

Under the Commonwealth's Service Agreement currently used for 'block grant' funding, funded organisations must submit a 'Funding income and expenditure statement' annually. Income is broken into 'funding' and 'income generated from funding'. Expenditure is broken down into various uses including salaries, rent, repairs and maintenance and administration costs.

Some jurisdictions have conducted one-off studies to look at service costing. In Queensland a study was conducted to look at the operating costs (including funding and expenditure breakdown) at individual service level, in relation to service type, number of clients and level of support needs of clients (based on CSDA MDS data collections). One major conclusion was that, in the allocation of government funds to service providers, there should be a clear separation between funding for support costs of individuals and operating costs required to ensure service viability.

In 1994–95 a survey was undertaken to cost service outputs for CSDA services, as part of the CSDA evaluation (Australian Healthcare Associates 1996). Data on actual direct and indirect expenditure were obtained from 57 disability service provider organisations (25 government and 130 non-government). The unit of output costed was 'hours of service' — i.e. staff hours engaged in direct service provision. 'Cost per client per annum' was not considered to be a useful basis for costing service outputs, because of the enormous variation in the measure (e.g. ranging from $3,095 to $97,354 for accommodation services).

The report on the study presents average costs per hour of direct service for different service types (focusing on accommodation, community access and respite services). Factors found to influence costs were: service type; sector (government/non-government); state in which service operates; whether service provided on-site or at the client's home; number of clients; direct staff hours of service provision per client; and accounting standards and policies applied. Data concerning the influence of some other important factors (e.g. nature or extent of disability of clients) were inconclusive.

The comment was made that, at that time of the study, most service providers were unaware of the cost of providing a service. Also, jurisdictions were 'independently searching for a unique solution rather than cooperatively working to a standardised Australia-wide approach that could assist in ensuring equity between service users in all States'. The study noted that, in the absence of information on quality and the needs of service users, cost data cannot be used to indicate the relative efficiency of service providers.

Data on outputs

Information gathered from jurisdictions about data on outputs currently collected is now briefly reviewed. The primary source of data on outputs in most jurisdictions is service contract reporting requirements.

In the Australian Capital Territory, service purchasing contracts require service providers to report on outputs quarterly. These data are monitored and collated into cumulative annual reports. The data are also reported to the Australian Capital Territory Legislative

Assembly as part of the Department's output report. However, the units of service used depend on the service type, and there is little information on what is provided in one unit of service (e.g. what constitutes an hour of community access).

In New South Wales, non-government providers must report information on the total number of people who received a service during the year, by age group, sex, Aboriginal/Torres Strait Islander origin and non-English-speaking background. Depending on the type of service, providers must also report:

- permanent funded bed capacity (for residential supported accommodation services);

- hours of support provided per week (for other accommodation support services);

- designated planned and crisis respite bed capacity, and average occupancy rate for planned and crisis beds; number of service users being provided with long term respite (centre-based respite services); and

- any periods during the year for which the outlet is closed.

In South Australia, for services purchased using 'block grants', the number of individuals to be supported is specified in the Funding and Services Agreement. Data on the number of clients provided with services through Options Co-ordination are also collected. However, CSDA MDS data on number of clients receiving a service on the snapshot day are used for Departmental reporting against output classes.

In Tasmania, data on client numbers are provided in Service Agreements. In its response for Project 3.1, Tasmania stated that data on hours of service provision are also collected for CSDA services, although service providers do not seem to be required to report output data to this level of detail under the standard Service Agreement. Data collected from providers via service agreements are not aggregated at program level. In Budget Paper 2, 'activity data' for disability services are presented (Tasmanian Department of Treasury and Finance 1999). They show client numbers in different service categories (community integration programs, residential places and support places, by government/non-government, community based support), although the source of these data is not stated.

The Disability Services Victoria Regional Reporting Framework 1999–2000 sets out the data reporting requirements specified in Service Agreements for each of the 18 service activities under the Disability Services output group. Data are usually snapshot, i.e. all consumers who are receiving a service at the end of each reporting period (although counting rules allow for inclusion of clients who are temporarily absent, e.g. due to illness). For each activity, quantity and quality performance measures are specified (Table 3.11). Quantity measures are most commonly the number of consumers receiving a service, but for some services number of hours of service is also collected. Instructions on how data are to be collected (counting rules) are given, so it is likely that measures are reasonably comparable between service providers. Data reported under service agreements are aggregated by agencies and reported to regional office. Summary data are forwarded by the region to the program. However, aside from the CSDA MDS, all data are presented at output level or lower and are not aggregated across the different outputs to form program-level performance indicators.

Psychiatric disability services and early intervention services in Victoria are not funded under the Disability Services Program. Early intervention services are funded through the Youth and Family Services Division, and providers are required to report on client numbers, demographic details of clients, service activity details (number of clients and number of hours against each of a list of activities, including 'writing of case notes, reports, case discussions'), and non-direct service provision (e.g. management, administrative, etc.) (Early Intervention Data Collection Form for Regional Teams and Funded Agencies).

Psychiatric disability services are funded by the Mental Health Branch. Reporting requirements for provider agencies are quite detailed and include service activity information—capacity (e.g. number of beds/places), type of service offered, number of clients, number of contacts during reporting period, etc.—and client information—demographic information, living arrangements, primary diagnosis, other disability, whether clients have individual program plans, etc. These data are collected electronically by agencies, using software provided by the Mental Health Branch. Summary data are kept in a central database and reported on by Victorian Department of Human Services.

In Western Australia, non-government providers are required to report on hours of service provided and number of people provided with a service per annum, through the Annual Client Data Collection (ACDC). Hours of service are being compiled for funded services for the first time this year as part of acquittal of purchasing agreements. Hours of service for the 'snapshot week' and for the whole year were collected for the first time in the 1999 ACDC. These data are only used for acquittal of Purchasing Agreements and it is not likely that they will be aggregated to program level at this stage.

For Activ Transport Western Australia, 'supplementary performance measures' are specified in addition to the performance indicators common to all service types. These include:

- **Quantity:** total number of people provided with a transport service; total number of facilities offered a transport service; total number of people offered a transport service.

- **Quality:** extent of consumer satisfaction (person with a disability and their carer) with transport service.

- **Timeliness:** number of transport trips the person with a disability arrives at the destination within ten minutes of the designated time.

- **Cost:** average cost of providing the transport service per user.

A set of supplementary performance measures is also supplied for Activ library services.

Currently, organisations funded by the Commonwealth to provide employment services to people with disabilities only report client numbers—there is no requirement to report hours of assistance provided or any other measure. Under the Service Agreement client numbers are broken into categories (new job seekers, aged 15–24, workers, etc.). During the trial of the case-based funding model, data collected will include job seeker personal details (disability type, Job Seeker Classification Instrument (JSCI) score, etc.), service details, and information on assistance provided, employment obtained and training undertaken.

Consumer-based funding models

Under some consumer-based funding models, information on outputs purchased is recorded as part of the normal administrative processes, though there is little evidence currently of those data being aggregated.

In Western Australia, for the service type 'alternative to employment—post school options', agencies are funded in respect of specific individuals. Individuals are named in the agency's funding contract, and for each individual details of support level, the minimum number of equivalent days per week of service to be provided, and amount of funding is specified.

In Queensland under the Moving Ahead Program, service providers are contracted to provide specific services to the funded individual, and each provider signs a grant agreement. An individual program report form is used to record aspects of individual budget and total support hours (one-on-one and group) provided in each quarter.

Table 3.11: Quantity and quality performance measures for disability services in Victoria

Activity	Quantity performance measure	Quality performance measure
Training centres	Total number of consumers in Training Centres.	Percentage of consumers with appropriate Day Programs.
Shared Supported Accommodation	Total number of consumers in Shared Supported Accommodation.	Percentage of consumers successfully achieving the majority of objectives in their Program Plan.
Accommodation Outreach Support	Total number of consumers receiving a service.	Percentage of consumers successfully achieving the majority of objectives in their Program Plan.
		Timeliness: Percentage of consumers for whom a Program Plan is completed within one month of service commencement.
In-Home Accommodation Support	Total number of consumers receiving a service.	Percentage of consumers successfully achieving the majority of objectives in their Support/Care Plan.
		Timeliness: Percentage of consumers for whom a Support/Care Plan is completed within 1 month of service commencement.
Family Options	Total number of consumers in Family Options.	Percentage of consumers with a Care Plan which is agreed to by all stakeholders within three months of placement.
	Total number of consumers placed with carers within current financial year.	Timeliness: percentage of consumers placed within 12 months of entering the program.
Day Programs	Total number of consumers with Day Programs.	Percentage of consumers successfully achieving the majority of objectives in their Program Plan.
	Number of equivalent full-time places in Day Programs on the snapshot day.	
Therapy	Number of consumers receiving Therapy Services.	Percentage of consumers' therapy plans reviewed by therapists in the last 6 months.
	Number of new consumers receiving Therapy Services.	
Recreation	Number of people with disabilities assisted to participate in sport and recreation activities.	
Advocacy Services	Number of consumers receiving individual advocacy support.	Number of occasions on which consumer population is canvassed for views.
	Number of consumers receiving short-term advocacy support.	

(Continued)

Table 3.11 (continued): Quantity and quality performance measures for disability services in Victoria

Activity	Quantity performance measure	Quality performance measure
Information Services	Number of methods through which information is provided.	Percentage of web pages compliant with appropriate guidelines for accessibility.
	Number of training and/or education sessions.	
Flexible Care Packages	Number of consumers receiving a service.	Percentage of consumers achieving the majority of objectives specified in the care plan
		Timeliness: Percentage of eligible consumers receiving contact within 2 weeks of referral.
Client Services Teams	(Performance measures will be negotiated during 1999–2000.)	(Performance measures will be negotiated during 1999–2000.)
Case Management	Total number of consumers receiving case management	Percentage of consumers successfully achieving the majority of objectives in their Program Plan.
	Number of hours of case management delivered.	
	Number of new consumers receiving a service.	Timeliness: Percentage of consumers who received contact within 2 weeks of referral.
		Timeliness: Percentage of consumers waiting less than 3 months for service.
Aids and Equipment	Number of aids and equipment items supplied.	Timeliness: Percentage of written acknowledgments to consumers within 10 working days of receipt of Program of Aids for Disabled People applications.
	Number of people receiving aids.	
Behaviour Intervention Support Teams	Total number of consumers receiving Behaviour Intervention Support.	Percentage of consumers successfully achieving the majority of objectives in their Program Plan.
		Timeliness: Percentage of consumers waiting less than 3 months for service.
Criminal Justice	Total number of consumers receiving Criminal Justice services.	Percentage of consumers receiving a service in a community setting.
	Percentage of consumers accessing services from outside host region.	Percentage of consumers successfully achieving the majority of objectives in their Program Plan.
		Timeliness: Percentage of consumers responded to within 6 weeks of referral.
Respite	Number of carer households provided with a break through respite services.	
Respite Coordination	Number of coordination hours provided.	Timeliness: Percentage of information provided to consumers within 3 working days of request.

Source: Disability Services Victoria Regional Reporting Framework 1999–2000

Consumer-based funding models may provide scope to collect more detailed data on the outputs purchased. This type of data might be particularly valuable in that it would provide information on the mix of services accessed by individuals.

Data on outcomes

It is widely recognised that, while achieving outcomes for consumers and the community is a primary focus of disability services and government funded services generally, information about outcomes is difficult to obtain (e.g. ACT DHCC 1999). However, in some situations proxy measures or indicators of outcome are available. It is not always essential to establish causal links between service outputs and outcomes. Where it is reasonable to believe that a particular service or program has contributed to outcomes, indicators of outcome are likely to be useful for assessment and planning purposes.

At a national level, AIHW has used the Participation dimension of the draft ICIDH–2 as a basis for analysing ABS survey data to look at participation of people with a disability in four key areas: living arrangements and self-care; education, work, leisure, and spirituality; economic life; and mobility and social relationships (AIHW 1999).

The *Report on Government Services 2000* presents data on three community participation outcome indicators:

- proportion of accommodation clients receiving community care or support;
- labour force participation and employment; and
- participation in social events.

These indicators are presented or each jurisdiction. The data sources used are the 1998 ABS disability survey, the 1999 CSDA MDS and the 1999 national client satisfaction survey (SCRCSSP 2000; Table 3.9).

In Western Australia, community-level 'access outcomes' for people with disabilities resulting from activities carried out by public authorities under Disability Services Plans are monitored and reported by the DSC (DSC n.d.). For example, in 1996–97, 75% of State Government agencies and 82% of local governments reported that they had made changes to improve accessibility to and within buildings and facilities. Also, 70% of State Government agencies and 57% of local governments reported that they had provided training or information about awareness of disability and/or access issues for people with disabilities in 1996–97.

In New South Wales State Government agencies are required to report to the ADD on their 'Disability Action Plans'. Each agency must address six designated priority areas: physical access; promoting positive community attitudes; training of staff; information about services; employment in the public sector; and complaint procedures. The Minister for Ageing and Disability and the Minister for Health will jointly report on implementation to the Social Justice Committee of Cabinet and to Parliament. Individual agencies will also document in their annual reports their progress against the targets in their Disability Action Plan.

Some data of relevance to service-level outcomes (i.e. aggregations of individual outcomes at service agency level) and individual outcomes are collected currently. Examples are reviewed briefly below.

In New South Wales, self-report packages for non-government providers include a service user evaluation form that includes questions such as:

- Are you happy about the way your service provides support to you?

- Did you have any problems with your service last year? (with tick-box options for identifying aspects of the service which problems related to—staff, rules, privacy, safety, etc.)

- If you had any problems, how many have been looked into (or fixed)?

- What do you think your service could do to make things better for you?

There are guidelines as to how service user feedback should be obtained (e.g. when evaluation is completed by service users as a group, an independent facilitator must be supplied by the service provider). The stated purpose of service user feedback is 'to assist ADD become more responsive to the needs of Service Users both individually and as a group'.

In Western Australia, non-government providers are required to report on the extent to which outcomes are achieved. Outcomes for each service type are listed in the service agreement form, and are standard for funded agencies within each service type. However, a standard approach for assessing outcome achievement ('effectiveness of services') is not detailed in the agreement. Rather, it is to be developed during the first 12 months of the contract, by the provider agency, with the DSC's assistance.

In some jurisdictions, standard outcome goals are not detailed in service contracts. For instance, in Tasmania annual Service Agreements include a section on 'objectives and outcomes of service', with directions to provide 'statements of the actual goals of the service and list expected consumer outcomes, ie what the consumers are expected to gain from the service'. Under 'consumer/participant outcomes information and evaluation' the form states that 'the service's outcome targets are based on the participants' individual plans and a commitment to achieving the…Standards for Services for People with Disabilities'. It seems that approaches to assessing and reporting outcome achievement may vary between service providers.

The Commonwealth's case-based funding trial for employment services will collect data on individual outcomes, which have been quite tightly defined in terms of period of time in employment. These data will be used as a basis for comparing the effectiveness of case-based funding and block grant funding, in terms of securing employment outcomes for consumers.

In 1998, Disability Services in Tasmania began a pilot project to trial the Personal Outcomes Assessment Tool, based on an instrument developed by the Council on Quality and Leadership in Supports for People with Disabilities (USA). The purpose of the tool is to assess service providers purely in terms of quality outcomes for individuals. It incorporates client perceptions of service provision quality. Measures focus on the whole person across different agencies and programs that are providing supports and services.

Consumer satisfaction surveys are beginning to be explored as instruments for gathering data relating to outcomes, effectiveness and service quality. These are discussed further below.

Quality

Many jurisdictions collect information on quality relating to the Disability Services Standards, as a part of service contract reporting requirements. Often this information is collected as part of agency-level continuous quality improvement strategies.

In Victoria, information on service quality is collected under the Quality Framework for Disability Services through a provider self-assessment process. Client feedback on service

Table 3.12: Program efficiency and effectiveness indicators reported in WA DSC's Annual Report, 1998–99

Output	Indicators of efficiency and effectiveness
Key output group: Client Services	
Hostel residential	Efficiency: Cost per resident.
	Effectiveness: Decrease in number of hostel residents.
	Effectiveness: Take-up rate per 1,000 people in receipt of disability-related pensions and benefits.
Community Residential	Efficiency: Cost per resident.
	Effectiveness: Increase in number of residents in community residential options.
	Effectiveness: Take-up rate per 1,000 people in receipt of disability-related pensions and benefits.
Community Based Support	Efficiency: Cost per service user.
	Effectiveness: Increase in number of people supported.
	Effectiveness: Take-up rate per 1,000 people in receipt of disability-related pensions and benefits.
Day Options	Efficiency: Cost per service user.
	Effectiveness: Increase in number of people in Day Options.
	Effectiveness: Take-up rate per 1,000 people in receipt of disability-related pensions and benefits.
Health and Individual Development	Efficiency: Cost per service user.
	Effectiveness: Increase in number of people supported.
	Effectiveness: Therapy services take-up rate per 1,000 people in receipt of disability-related pensions and benefits.
Key output group: Individual Coordination	
Local Area Coordination	Efficiency: Cost per service user.
	Effectiveness: Percentage coverage of Local Area Coordination Scheme.
	Effectiveness: Take-up rate per 1,000 people in receipt of disability-related pensions and benefits.
Key output group: Strategic Coordination	
Strategic Development	Efficiency: Cost per person with a disability.
	Effectiveness: Consumer satisfaction with the Disability Services Commission.
	Effectiveness: Take-up rate (across service types) per 1,000 people in receipt of disability-related pensions and benefits.
Access Improvement	Efficiency: Cost per person with a disability.
	Effectiveness: Percentage of public authorities with Disability Service Plans.
	Effectiveness: Percentage of public authorities showing access improvements.
Quality Assurance	Efficiency: Cost per service user.
	Effectiveness: Proportion of agencies that required no action following a standards monitoring assessment.
Community Education	Efficiency: Cost per person with a disability.
	Effectiveness: Yet to be developed.

Source: DSC 1999.

quality and appropriateness is part of the self-assessment process. The data received from service providers are worked into a report which is distributed to all service providers. The report includes information relating to service providers' performance against the Victorian Standards for Disability Services, by service type. Data are aggregated and reported at a state-wide level, to avoid direct comparisons being made between individual agencies.

In New South Wales, self-assessment packages require non-government service providers to report whether the Disability Service Standards have been met and to outline any additional policies, practices and quality assurance mechanisms the agency has in place. Against each Standard, providers must tick 'yes' or 'no' for three questions: Does this service outlet meet the minimum practice standards? Does this service outlet meet the enhanced standards? Have service users reviewed your policies/practices within the past 12 months? Services that comply with the New South Wales *Disability Services Act 1993* report progress and set new challenges for the next 12 months in a continuous improvement plan. The Plan then forms part of the service's Performance Agreement with the Department for the next 12 months and is reviewed at the next self-assessment. 'Non-conforming services' are required to implement an approved 'transition plan' to move towards compliance, and must report any transition plan outcomes not fully met.

Non-government providers in Western Australia are also required to report on the extent to which the National Disability Service Standards are met, based on self-assessment (though this may no longer be compulsory). In Tasmania the standard Service Agreement states that funded agencies will be 'assessed at least annually against the Standards for Services for People with Disabilities'.

Other information bearing on service quality is collected in some jurisdictions. For instance, self-assessment packages in New South Wales require providers to state whether the service has a training or development plan for staff, and to report the number of staff who attended nationally accredited training courses during the year. Providers must also state the total number of service users who required interpreting services, the number who accessed formal services and the number who accessed informal services.

In Western Australia the Periodic Service Review (PSR) system for residential accommodation services, when fully established, is expected to provide data that can be aggregated to provide quality performance indicators for residential services. The PSR 'draft menu' lists items to be assessed under six headings: house routines; individual behaviour support plans; critical incident procedures; health and safety procedures; finance and budgeting procedures; and staff.

Satisfaction surveys

In 1999 the Steering Committee for the Review of Commonwealth/State Service Provision conducted a national satisfaction survey of clients of disability services. In researching the design of the survey, it was recommended that the Core Indicators Project, developed in the United States, should be used as a model (see Box 3.2). The Australian survey collected views from people with disabilities, and their families and carers, on the quality and appropriateness of the disability services they were accessing.

Results from the survey have been used in the *Report on Government Services 2000* to report against effectiveness indicators of social participation and client perceptions of quality (SCRCSSP 2000; Table 3.9). Results reported cover various aspects of services, including whether services meet client needs, whether staff turnover is a problem for clients and their families, extent of client choice, and waiting times. Data are given for each jurisdiction and for different service types.

In 1997 the DSC in Western Australia used a telephone-based consumer satisfaction survey, conducted by an independent market research company, to record levels of satisfaction with services provided directly by DSC. Findings were reported in DSC's 1997–98 Annual Report (DSC 1998a). In 1999 the DSC used data relating to Western Australia from the National Client Satisfaction Survey (DSC 1999). It is intended that satisfaction survey findings will be used as a basis for implementing service improvements.

Victoria has conducted a consumer satisfaction survey for its Aids and Equipment program to inform future development of services. The survey is part of a proactive strategy of continuous quality improvement. A consumer satisfaction survey is presently being conducted in relation to respite services, in response to expressed concerns. The Victorian Mental Health Branch has also conducted a pilot of a Consumer and Carer Satisfaction Survey, with the aim of full implementation for the 2000–2001 financial year.

Consumer satisfaction surveys are useful vehicles for gathering information on service quality and effectiveness from the perspective of clients. However, client satisfaction is dependent on the levels of expectation held by clients, and therefore has the potential to give a distorted measure of service quality. Clients of community services may have low expectations of service quality, so that even a poor service may receive relatively high consumer satisfaction ratings (La Trobe University & Flinders University 1999).

A review of the literature on obtaining consumer feedback from clients of home based care services emphasised that rates of satisfaction can be inflated by the presence of biases such as acquiescent, fear of reprisal, gratitude and loyalty to carers (Cooper & Jenkins 1998). For this reason, results often show artificially high levels of satisfaction. Surveying an unrepresentative sample of users can also bias results and undermine the credibility of survey findings. Some groups of clients may be less likely to respond to a client satisfaction survey (e.g. clients from non-English-speaking backgrounds, or clients who have communication restrictions). It is therefore necessary to ensure that the survey is designed and conducted in such a way that the views of all client groups are represented.

Efficiency and effectiveness

Effectiveness

In Figure 2.3 effectiveness is a measure of the translation of outputs into outcomes. However, as stated in Section 3.2, the concept of effectiveness tends to be broader than this in practice, encompassing measures of outcome achievement and service quality.

This is reflected in the effectiveness indicators for disability services reported in the *Report on Government Services 2000* (SCRCSSP 2000). Effectiveness indicators are grouped into three categories: participation outcomes, quality, and access and equity (Table 3.9). The data sources used to calculate the indicators were the 1999 CSDA MDS, the 1998 ABS Survey of Disability, Ageing and Carers, the 1999 national client satisfaction survey and additional data provided by the Commonwealth, State and Territory Governments.

Access indicators were arrived at by expressing the number of people who accessed CSDA services on the snapshot day as a proportion of number of people in the appropriate age group (depending on service type) with a severe or profound core activity restriction.

Indicators of effectiveness reported in the *1998–99 Annual Report* of the DSC in Western Australia are outlined in Table 3.12. Data against each indicator are presented in the Report, showing trends over time where data are available. Effectiveness indicators in the output groups 'Client Services' and 'Individual Coordination' are essentially based on client counts.

Box 3.2: The Core Indicators Project, USA

The Core Indicators Project (CIP) began in 1997. The aim of the project is to 'support state developmental disabilities authorities (SDDAs) in developing and implementing performance/outcome indicators and related data collection strategies'. It is envisaged that the set of indicators developed through the project will be established as a nationwide framework (in the USA) for measuring service delivery system performance and outcomes. CIP performance measurement is intended to complement ongoing quality assurance, enhancement and monitoring systems in place in different states. Phase I, completed in September 1998, included identifying an initial set of 61 performance indicators, and conducting field tests to assess the utility of the indicators and the feasibility of data collection strategies. Phase II is currently under way, and includes revising the set of indicators based on findings from Phase I, improving the data collection tools. Phase II results are expected to be available by May 2000.

Performance measurement is focused around four broad performance domains: Consumer outcomes; Health, welfare and rights; System performance; Service delivery system strength and stability. Within each domain there is a number of 'subdomains', each reflecting goals and values related to system performance as expressed by state developmental disability authorities. Indicators are identified within subdomains. Under the 'consumer outcomes' domain there are seven subdomains: work, community inclusion, choice and decision making, supporting families, family involvement, relationships, and satisfaction.

The data source for 29 of the 60 Phase II indicators (including most of the consumer outcomes indicators) is the standardised consumer survey/interview instrument. The survey addresses consumer satisfaction with services, quality of life, consumer choice/decision making and other topics. Each state participating in the trial randomly selects a sample of individual service recipients. The survey is administered by a disinterested third party (i.e. someone without a direct relationship with the consumer or service provider organisation) and the instrument includes consistency checks, to make sure that the person responding understands the questions and is not simply giving a response that he/she thinks is expected.

Other sources of data are questionnaires that seek feedback from families of people with developmental disabilities, and 'system data', covering data obtained from state developmental disabilities authorities and service provider agencies. During Phase I of the project, collecting system data proved more challenging than collecting survey data. This was largely because of substantial variation among states in terms of the information routinely collected and differing use of terminology and data element definitions. Consequently, 'data collection protocols' have been developed to define precisely the information that is sought, and to set out uniform reporting formats.

(Center on Managed Long Term Supports for People with Disabilities 1999)

Indicators focusing on increases or decreases in the number of clients in certain accommodation and community support service types are designed to measure the shift from institutional to community-based accommodation services, which may be expected to be associated with increased quality of life and more positive outcomes for clients.

In Victoria, unit cost information is currently collected about CSDA services to evaluate cost-effectiveness. Unit cost is determined by dividing the total cost of providing the service (across multiple agencies) by the number of units of service provided. Detailed estimates of costs components are only able to be calculated for government-provided services. 'Take-up rate' indicates the proportion of people with a disability accessing various services.

Efficiency

As discussed in Section 3.2, indicators of cost-efficiency (cost per unit output) seem generally to be of more interest than indicators of efficiency per se (e.g. staff hours per unit output).

Table 3.9 outlines the efficiency indicators for disability services from the *Report on Government Services 2000*. Unit cost is used as a proxy indicator of efficiency. Data are provided for government- and non-government-provided institutional /large residential accommodation support services (including hostels) and community accommodation support services (including smaller group homes and in-home support). Unit cost is only calculated for accommodation services.

Significant efforts have been made to improve the counting rules for efficiency indicators. However, some concerns remain about comparability of data between jurisdictions, due to variation in the way cost is calculated (SCRCSSP 2000:1053–4).

Because full cost data are only available for services provided directly by government, the efficiency indicators are 'cost per place' for government-provided services, and 'government funding per place' for non-government-provided services. Frequently, government funding does not cover the whole cost of services provided by non-government organisations. Therefore, comparisons of efficiency between sectors are not possible. These indicators may nonetheless be useful to governments in comparing between jurisdictions within sectors, or making decisions about what proportion of services to purchase from non-government providers.

The 'administrative cost' efficiency indicator is problematic because jurisdictions use different methods to apportion administration costs. Thus, the indicator is useful for showing trends within jurisdictions over time, but not for comparing between jurisdictions. Presumably this indicator does not include information on the proportion of funds allocated to non-government providers that are spent on administration (i.e. only includes information on departmental administrative costs).

In its response to AIHW, the Commonwealth Department of Family and Community Services made the comment that the efficiency indicators presented in the *Report on Government Services 2000* would be more meaningful if data on full-time equivalent (or other unit of measure) places available/funded over a year were available.

DSC's efficiency indicators published in its 1998–99 Annual Report are set out in Table 3.12 against each of 10 program-level outputs. Efficiency indicators are cost per service user or cost per person with a disability in Western Australia, depending on whether outputs are services delivered to individuals, or directed at community level (e.g. the Access Improvement output).

Need and demand

Several jurisdictions reported that they used AIHW and ABS figures as a guide to demand for disability services (e.g. Australian Capital Territory, Queensland). The report on demand for disability services, produced by AIHW in 1997, provided estimates of the level of unmet demand for accommodation and support, respite and day programs, the cost to governments of meeting this unmet demand, and projected growth in demand (AIHW 1997b). The 1993 ABS disability survey data were used as a basis for estimating the size of the target group for CSDA services—people aged 5–64 years with a severe or profound handicap. Of the 368,300 people in the target group, it was estimated that 13,400 had an unmet demand for accommodation support and respite services in 1996. There was also unmet demand for an estimated 12,000 full-time equivalent day program places.

Disability Services in Victoria operates a state-wide Vacancy Coordination system which is operationalised through the Service Needs Register (SNR), a module of the government Disability Client Information system. The system is used for prioritising urgency of need and ensuring that people are placed in appropriate services when vacancies arise. At the regional level, it is used to manage the allocation of funded accommodation and support to people with a disability, fine-tune the service system to the needs of clients, ensure that resources are directed where they are most needed, and redevelop the service system as a service gap or oversupply is identified. In some regions a formal review of all people with a registered need on the SNR is undertaken annually.

Presently there are 3,602 individuals on the SNR waiting for a range of services, including shared supported accommodation, day programs, in-home accommodation support, or respite. Not all activities are presently incorporated into the SNR, the main exceptions being outreach, short-term, specialist services (e.g. training centres) and some state-wide support services.

New South Wales is using a 'population group planning' (PGP) approach which involves defining the relevant population groups and combining information gathered centrally and at local level to make better and more equitable resource allocation decisions. The population groups used for planning are people with disabilities acquired before age 65 (age 45 for Aboriginal and Torres Strait Islanders) and people aged 65 or over (45 or over for Aboriginal and Torres Strait Islanders).

The PGP approach attempts to quantify the service needs of a population irrespective of the program or programs through which those services are delivered. For example, the population of young adults with acquired brain injury may be receiving therapy, personal care, employment support, home modifications and respite for their carers. The services might be obtained from a variety of Commonwealth, State and local government funded programs. PGP pools data from all these sources to calculate total service need.

Wherever possible, PGP counts services in direct client hours. Data sources include existing collections (e.g. HACC) together with new surveys, especially for health care. The product will indicate the number of service hours being received by each population and the contributions of the respective agencies. The project will also deliver a resource allocation model under which a population of equal need should have access to an equal share of the available resources. The model will project a resource share based on a range of variables likely to include age, living arrangements, ethnicity, and socioeconomic status. The final output of PGP will help agencies to evaluate their respective contributions to the needs of a particular population and identify the best ways to address unmet needs in particular situations.

In the Australian Capital Territory, a current exercise in assessing applications for individual support is expected to provide anecdotal information on needs as perceived by service providers and self-referred people with disabilities. There is also a HACC project aimed at developing profiles of aged people with disabilities in the ACT. The profiles are expected to be available in 1999, and will be used to inform policy, planning and purchasing.

In the Northern Territory data provided by ACROD (the National Industry Association for Disability Services) are used to indicate demand—numbers of clients receiving various types of service and numbers on waiting lists. It is acknowledged that these data have shortcomings (e.g. double-counting of people on more than one waiting list). Some ad hoc studies have been done on the level of unmet need. A survey in which service providers and Territory Health Services personnel were asked to identify people with profound or severe disability with critical unmet needs for support or who were receiving services inappropriate to their needs found that 130 people had critical unmet needs across the Territory. The study also showed that waiting list information is unreliable as an indicator

of unmet need—of the 130 people with unmet needs only 19 were on a waiting list for a service.

In Queensland, a needs registration process to prioritise applicants for Adult Lifestyle Support Packages provides some information on need. The registration form asks questions about support needs and the length of time the person has been waiting for funding. This information has been used as an indicator of demand for services for adults.

Results of two disability surveys conducted in South Australia, The Disability Support Needs Project (1994) and the SERCIS Survey of Disability Prevalence (1996–97) have been published in *A Disability Chartbook of South Australia* (Chapman 1998). These studies have provided information on the prevalence of different disability types, demographics, attitudes and feelings, supports, health and services, transport, income and employment. It is not clear whether these data have been used specifically to look at demand for services.

The South Australian Options Co-ordination Planning Process records assessed need, but this information is not yet collected electronically and cannot be provided in aggregate form. An Epidemiology and Service Implications Project was undertaken to project demand for services from three Options Co-ordination Agencies: Adults with Physical and Neurological, Brain Injury Options Co-ordination and Crippled Children's Association. The project drew on a number of data sources, including ABS population data, AIHW demand projections, South Australian survey data, Options Co-ordination client registers and hospital separation data. Results indicated that the percentage of the total estimated client population known to Options Co-ordination agencies was 11% for Adults with Physical and Neurological, 54% for Brain Injury and 55% for Crippled Children's Association (20%, averaged over the three agencies) (Dissinger 1999).

In Victoria, distribution of resources for disability services is, in part, guided by the use of a formula which incorporates estimates of the number of people with severe and profound disability resident within the region together with weightings for specific factors such as socioeconomic disadvantage, rurality and Aboriginality.

Waiting lists and other indicators of demand and relative need such as the Service Needs Register are also maintained. Needs assessments and related survey processes are undertaken annually by regions with regard to Psychiatric Disability Support Services.

In Western Australia ABS and ACDC data are used for forecasting long-term trends in service demand and cost implications. Department of Social Security statistics (recipients of Disability Support Pensions and Child Disability Allowances) are used for calculating take-up rates and national benchmarks for different types of services.

Information needs identified

The review above shows that the amount and detail of data currently collected varies between jurisdictions, between service types, and between different service funding models. Even where reasonably detailed data are collected, they are often collected primarily for accountability purposes, and may not be aggregated to provide measures or indicators of input, output, outcome, etc., at program level.

In AIHW's initial request for information for the Indicators project, jurisdictions were asked what information senior disability administrators would need to satisfy the requirements of Part 7 of the CSDA:

(a) Governments with responsibilities for administering services under this Agreement will report against agreed nationally consistent performance indicators of efficiency

and effectiveness related to those services. Indicators will be informed by the Review of Government Service Provision being undertaken by the Productivity Commission at the behest of the Council of Australian Governments;

(b) Governments will participate in the collection of nationally consistent data on services and service users under this Agreement as the basis for the agreed performance indicators.

Responses to this question indicated that better information is needed about the following:

- **People with a disability**
  - Demographic information on people with a disability in the population
  - Information on nature and severity of disability
- **Service recipients**
  - Number of service recipients
  - Demographic information on people with a disability receiving services
  - Informal support received by service users
- **Services provided**
  - Number of services provided
  - Quality indicators
  - Location of services (i.e. urban, rural and remote)
- **Outcomes**
  - Service level outcomes (e.g. employment status of employment service recipients)
- **Need and demand**
  - Waiting list information
  - Whether services received adequately meet the needs of consumers.
  - Estimates of the 'potential population' in need of disability services
- **Costs**
  - Cost of running services (both government and non-government)
  - Administration costs
  - Costs relating to support of individuals
- **Efficiency and effectiveness**
  - Cost per service output
  - Cost per client
  - Administrative costs as a percentage of total program costs

Each information need identified raises questions about defining the data items required to meet that need. For example, how should the number of services provided be counted (hours of service, occasions of service, etc.)? In answering these questions it is necessary to keep a clear focus on why the information is needed and how it will be used.

Developments in data collection

In some jurisdictions developments are currently under way to improve the amount, scope, reliability and/or comparability of data collected. Examples include:

- The CASPER database, currently being developed in the Australian Capital Territory, which will allow the analysis of quarterly service data at program level.

- The Community Care Information System being developed for the whole of the Northern Territory Health Services.

- The Client Management System being developed for the Disability Program in Queensland; this will include information on all Disability Program clients, regardless of source of funds.

- In Western Australia, the DSC's ACDC collects and analyses data from more than 700 service outlets providing a means of identifying emerging client trends across the entire disability sector.

A project currently under way in Victoria, the Disability Services Information Strategy, is aimed at developing a plan for an integrated system across the Disability Services Program, that meets information needs at all levels. The project will involve a comprehensive assessment of what data are collected presently and how they are used (including identifying unmet information needs), information management infrastructure needed for client-focused funding, and information needed to reflect evolving output groups and performance measures. The final stage of the project will produce a technological solution to the information needs identified.

In addition to these major data projects, there is much developmental work surrounding reporting requirements in service purchasing contracts, methods of service quality assessment, approaches to defining units of service for output-based funding, and ways of ensuring accountability under consumer-based funding models.

In this context, developing national indicators and the data that must underpin them should not occur in isolation from developmental work currently under way in different jurisdictions.

Box 3.3: List of data items in the CSDA MDS 2000 data collection

Service Form

Provided by funding departments

Service ID number
Geographic location
State
   Statistical Local Area
   postcode (this may be collected on the Service Form or the Consumer Form)
Service type
Auspicing organisation
Total CSDA funds (1999–2000 financial year)
Capital grants over $200,000 (in 1999–2000)
Service outlet and funded service type

Provided by services

Staff hours (week ending)
   paid staff
   unpaid staff (including volunteers)
Service operation
   full financial year

Continued

Box 3.3 (continued): List of data items in the CSDA MDS 2000 data collection

    hours of operation per day
    days of operation per week
    weeks of operation per year
Consumer numbers
    on the 'snapshot' day
    on a typical operating day (estimated)
    over the week prior to the 'snapshot' day (estimated)
    over the 12 months of the current financial year

Consumer Form

Service ID number
Form number
First name and Last name (selected letters of)
Date of birth
Sex
Country of birth
Indigenous origin
Method of communication
Main language spoken at home
Primary disability group

Other significant disability group(s) – whether present
Other significant disability group(s) – which present
Need for support or assistance
    self-care
    mobility
    communication
    home living
    social skills
    self-direction
    managing emotions and behaviour
    learning
    working
    other day activity
Carer Allowance (Child) (formerly Child Disability Allowance)
Main source if income
Living arrangements/accommodation type

4. Conclusion

The previous two chapters have reviewed theoretical literature relevant to performance measurement and the development of indicators, and have described the current state of play in the Australian disability services field, in terms of structures, concepts and the development and availability of relevant data.

Chapter 3 showed that approaches to service delivery and funding are currently in a state of flux, with new models emerging in response to a range of social and economic forces, while old models continue to persist in many jurisdictions. The field is grappling with performance-related concepts that have been quickly gaining currency in the government sector over recent years. There is considerable diversity in how concepts such as 'output', 'outcome', 'efficiency' and 'effectiveness' are understood and operationalised in the context of disability services. However, there is a great deal of data development activity occurring in various jurisdictions, which is likely to provide a valuable basis for developing national-level indicators.

This chapter will identify opportunities for integrating practical and theoretical approaches, in so far as such integration could contribute to improved data collection and/or service planning, delivery, funding, monitoring and/or management, and suggest some practical options for the development of indicators in the disability field. In particular, it will focus on implications for the future development of the CSDA MDS and other DSSC work on performance indicators.

4.1 Why do we want 'indicators'?

Indicators are a form of information. It is not proposed to make a case for the collection and analysis of information in general, except to note that a national program such as the CSDA, involving public expenditure of some $2 billion per year and reaching over 60,000 people on a single day, is expected to produce data about what is provided, to whom and with what effect.

Indicators may differ from more straightforward statistics in that they are developed both to summarise complex material and to 'indicate' concepts whose measurement is difficult. As the name suggests, they should point the way to issues of importance.

The CSDA as the context for information gathering

In the context of this project we are essentially looking at performance information and indicators relevant to disability administrators in State, Territory and Commonwealth Governments. While this means a focus on jurisdiction-level and national-level performance information, the information identified as useful at these high levels will generally be dependent on data collected at lower levels (e.g. service provider agencies), and should therefore also be meaningful at lower levels.

In considering what performance information will be used for, it is relevant to refer to the CSDA. Clause 4(1) of the 1998 CSDA states:

> The Commonwealth and the States strive to enhance the quality of life experienced by people with a disability through assisting them to live as valued and participating members of the community.

Under Part 6 of the CSDA it is stated that the parties to the Agreement have continuing responsibilities under the Agreement for:

(c) transparency and accountability to Parliaments, funders and citizens concerning the equitable, efficient and effective provision of specialist disability services.

In clause 6(5) it is acknowledged that the Disability Administrators of the Commonwealth and the States will be responsible for:

(c) promoting the exchange of information concerning best practice in specialist disability services; and

(d) reporting in a publicly accessible format on progress and achievements in relation to the national framework.

It is agreed in clauses 6(3) and 6(4) that the parties are to ensure that 'agreed national quality standards are upheld and monitored'.

Of particular relevance to performance information is Part 7 of the CSDA:

(a) Governments with responsibilities for administering services under this Agreement will report against agreed nationally consistent performance indicators of efficiency and effectiveness related to those services. Indicators will be informed by the Review of Government Service Provision being undertaken by the Productivity Commission at the behest of the Council of Australian Governments;

(b) Governments will participate in the collection of nationally consistent data on services and service users under this Agreement as the basis for the agreed performance indicators.

Currently, national-level information on disability services is disseminated through reports on the annual CSDA MDS data collection, and through the *Report on Government Services*. Jurisdiction-specific information relating to CSDA-funded services is also published by disability authorities in most jurisdictions.

Possible broad uses of performance information at jurisdiction level and national level are thus likely to include:

- accountability to parliaments, funders, consumers and the community;
- information sharing and learning from others;
- national benchmarks for service efficiency and effectiveness;
- service planning and monitoring;
- comparing different approaches to service delivery and funding; and
- monitoring trends over time.

What information do disability administrators want?

In the course of this project and the CSDA MDS redevelopment project, disability administrators have expressed a wide range of needs for information, in line with their responsibilities under the CSDA. These information needs cover many areas of the

frameworks presented in Chapter 2—client profiles, services (for instance, the nature and quantity of services delivered), access, unmet demand, and efficiency and effectiveness.

Perhaps reflecting the current pressures on costs and efficiency, there was a more direct emphasis on process indicators than outcome indicators, although outcome indicators were referred to more indirectly, through references to 'effectiveness'. Other material supplied to AIHW, and discussion with the Reference Group, confirmed the importance of outcomes, particularly in view of administrators' involvement in outcome-focused policies and the need for responsiveness to whole-of-government trends towards outcome accountability.

Administrators' information needs can be readily mapped to the figures presented in Chapter 2, confirming their usefulness in providing a framework in which to discuss the current availability and state of development of indicators and information more generally.

4.2 Information-rich and information-poor areas

Drawing on the review in Chapter 3 and using the conceptual models presented in Figures 2.1, 2.2 and 2.3, current areas of relative information richness and poorness can be identified. The summary below looks at each area in each of the figures and comments broadly on the extent to which relevant information is available. There is a particular emphasis on whether the current CSDA MDS provides data on each area, but other relevant data sources are also mentioned.

Figure 2.1: Major players and structures in the Australian disability services field.

Currently, areas of relative information richness are:

- **Personal characteristics.** The current CSDA MDS collects some demographic data on service recipients (age, sex, country of birth, indigenous origin, main language spoken, source of income and living arrangements). The ABS disability surveys and other occasional population-based surveys (e.g. South Australian Disability Services survey) provide information on demographic characteristics of people with disabilities in the community.

- **Functioning and disability.** The current CSDA MDS collects information on service recipients concerning 'primary' and 'other significant' disability groups. The ABS disability survey and other population-based surveys provide some information on prevalence and nature of disability. This information maps primarily to the Body Functions and Structure, and Activities dimensions of disability as conceptualised in the ICIDH–2.

- **Need and demand.** The current CSDA MDS collects information on frequency of need for support in a range of areas. The ABS disability surveys (e.g. ABS 1999) provide information on difficulty and need for assistance with a range of activities, and whether those needs are fully met. At an aggregate level, the ABS disability survey is used to estimate the number of people potentially in need of disability services, and has been used in the Institute's two demand studies commissioned by the DSSC. Several sources of information on need and demand are available at jurisdiction level (e.g. the Service Needs Register in Vicoria).

- **Family and Carer response.** The CSDA MDS does not currently provide information on the presence or nature of family or carer support/assistance for service recipients.

The ABS disability survey provides some information on the provision of support and assistance by informal carers.

- **Government funding.** Information on government funding of CSDA services is available through the *Report on Government Services*, and other sources including ABS government financial statistics. There is also administrative data on income security payments for people with disabilities. All government departments, of course, publish financial and funding information on their programs.

- **Services provided.** National-level information on formal services provided, funded through the CSDA, is available through the CSDA MDS. Information relating to certain service programs (e.g. direct consumer-funding programs) is available at jurisdiction level.

Data-poor areas of Figure 2.1 are:

- **Environment.** The new draft ICIDH–2 recognises the fundamental importance of environment in affecting the experience of people with disability. Environmental factors relate particularly to the Activities and Participation dimensions of disability. There is currently very little information on environmental factors relating to disability.

- **Community response.** There is little information on community response, other than government-funded services provided by non-government organisations. Relevant information might include the role of community support groups and peak bodies. There is a lack of collated data on the contribution of non-government funds to services provided by non-government organisations.

- **Generic services.** Some basic data on access of generic services by people with disabilities are available through administrative records (e.g. numbers of people with disabilities in residential aged care services; number of children with disabilities in schools). Such data may not be readily comparable at national level, and definitions of disability used tend to vary. The National Community Services Data Dictionary (NCSDD) disability data elements (see Appendix) will play a role in improving data on use of generic services by people with disabilities.

- **Consumer outcomes.** As discussed in section 3.2, there is relatively little comparable data on consumer outcomes. The national consumer satisfaction survey provides some data relating to consumer outcomes (SCRCSSP 2000), although low response rates mean that the data need care in interpretation. Some relevant information is being collected in connection with service programs in different jurisdictions, but data are generally not readily available.

- **Community outcomes.** Very little information on community outcomes is available.

Figure 2.2: Service funding and delivery models

General information on how funds are allocated by Treasuries against output groups articulated at whole-of-government level is now available in Budget publications in most jurisdictions. Some high-level data on outputs are also provided, via Treasury reporting requirements, in some jurisdictions.

There is some information on the funding models being used by disability programs in various jurisdictions, but little information on the relative amounts of funding channelled through different models. Information gathered suggests that most models can be grouped broadly as purchaser–provider arrangements or consumer-based funding, but there are

many variations on these two themes, with a great diversity in terms of administrative arrangements and reporting requirements.

Descriptive, and some quantitative, information is available on services provided under purchaser–provider arrangements. However, there is little information on services purchased with funds allocated directly to consumers. Currently, the CSDA MDS does not record whether non-government service providers are non-profit or for-profit organisations.

There is also little information concerning generic services—either levels of use of generic services by people with disabilities, or purchase of generic services via direct consumer funding. Information on revenue sources other than government funds is also limited.

Figure 2.3: Performance indicator framework

Drawing on the review in section 3.3 of data currently collected, areas of relative information richness are:

- **Outcome goals and output objectives.** These are generally articulated at government, department or program level.

- **Cost of inputs.** Information on government funds allocated to providers is generally available, at least at a broad level.

Areas that are relatively information-poor:

- **Consumer demand.**

- **Inputs; service capability.**

- **Outputs.** Some jurisdictions collect data on outputs through their administrative systems. However, there is a recognised need to develop nationally consistent data on service outputs.

- **Outcomes.** The ABS disability surveys provide some data on participation of people with disabilities in key areas of life (AIHW 1999). Indicators of community participation are published in the *Report on Government Services*. There is a recognised need to develop better data on outcomes.

- **Quality standards.** Information on quality standards is not available at national level, although information on compliance with the National Standards for Disability Services, and other service quality standards, is collected in some jurisdictions, often via self-assessment by service providers.

- **Efficiency/cost-efficiency.** Some broad data are presented against indicators of efficiency in the *Report on Government Services*. Some jurisdictions are able to cost service outputs via information contained in their administrative systems. However, nationally comparable data on cost at the output level are not currently available.

- **Effectiveness/cost-effectiveness.** Some data are presented against indicators of effectiveness in the *Report on Government Services*.

Clearly, areas have been designated as information-rich or information-poor relative to other areas, rather than in an absolute sense. In many of the areas classified as relatively information-rich, it could be argued that they are not 'rich' enough, given the importance of the area. Nonetheless, it is useful to plot where currently available information is concentrated, and this summary will be drawn upon in the following discussion which looks at priority areas for indicator development.

4.3 Identification of priority areas for indicator development

This section begins to draw out implications for indicator development in the disability services field. Suggestions are made along the way for issues to consider and possible initiatives to be undertaken.

In identifying priority areas for indicator development, it is relevant to consider the following criteria:

(a) policy-relevance and currency of the area;

(b) importance of the area as reflected by the disability administrators' stated information needs;

(c) the degree to which the topic is information-poor; and

(d) the suitability of indicator development to meet information needs (i.e. indicator development may not be the most appropriate approach in some areas).

Below, major areas for possible indicator development are reviewed briefly, focusing on areas identified as relatively information-poor. Priority areas identified are then discussed in greater detail.

Efficiency and effectiveness

Clause 7(a) of the CSDA states that governments are to report against 'agreed nationally consistent performance indicators of efficiency and effectiveness'. These are two areas of Figure 2.3 that were identified as relatively information-poor in the previous section, and were raised as information needs by disability administrators.

'Efficiency' is a measure of the translation of inputs into outputs. However, with shifts towards output-based funding there has been reduced government interest in inputs—it is not the business of government what inputs a funded organisation purchases in order to provide the outputs contracted, or how those inputs are used. Efficiency is thus likely to be of more interest to service managers, because their aim would be to use funding to purchase the most appropriate inputs, and to institute processes that ensure inputs are used to their best advantage to produce outputs.

The term 'efficiency' is commonly used to mean 'cost-efficiency'—a measure of cost per unit of service output. Indicators of cost-efficiency are of interest to governments to answer the important question: Can outputs (of comparable quality and specifications) be provided more cheaply? To develop cost-efficiency indicators it is necessary to collect data on cost that can be related to identifiable service outputs.

'Effectiveness' is a measure of the translation of outputs into outcomes. Cost-effectiveness is a measure of cost per outcome. Both are of central interest to governments, which aim to deliver outcomes to consumers within the constraints of limited budgets.

The question to be addressed by cost-effectiveness indicators is: Can outcomes be provided more cheaply? The related question, to be addressed by effectiveness indicators, is: Can alternative outputs be purchased which will produce more or better outcomes? In other words, Which service types are most effective in achieving desired outcomes? This bears on issues of service or output 'substitutability'—i.e. whether some outputs are better at achieving outcomes, or whether some outputs achieve the same outcomes at less cost.

To indicate effectiveness, it is necessary to (a) define and collect data on outputs; (b) identify a causal relationship between outputs and outcomes; and (c) develop a way of assessing outcome achievement. To indicate cost-effectiveness, information on cost is needed, and there must be some way of relating costs to particular outcomes.

Cost-efficiency, effectiveness and cost-effectiveness are composite or secondary measures in that they are derived from information on cost, output and outcome (see Figure 2.3). Thus, determining ways of measuring or indicating cost, output and outcome is fundamental to the improvement of these over-arching indicators.

Cost, output and outcome

'Outcomes' are a priority area for development. Outcomes are highly policy-relevant, administrators want more information, and our review suggests that further development in this area is needed. Development of indicators is likely to be a particularly useful approach, as the concept of outcomes is complex and high level, making direct measurement problematic.

'Costs' and 'outputs' are also identified as priority areas for development. They are currently receiving much policy attention and are identified by administrators as areas where more information is required. It may be possible to harness data development work currently under way in various jurisdictions to advance the development of national indicators.

Quality

'Quality' is an area of high policy-relevance and currency that is relatively information-poor and has been identified among administrators' stated information needs. In clauses 6(3) and 6(4) of the CSDA it is agreed that the parties are to ensure that 'agreed national quality standards are upheld and monitored'. Some approaches for improving information on service quality can be identified and are discussed in the following section. However, national indicator development is not seen as the best approach in this area currently, for reasons discussed below.

Other areas

Little information is available on 'Generic services' in relation to people with disabilities. However, this is not considered to be a priority area for indicator development. It is envisaged that the NCSDD disability data elements will be used to develop 'disability identifiers' for administrative data collections of generic services (see Appendix; AIHW in press). This would provide a means of gathering information on the use of generic services by people with a disability that would be relatable to information on the use of specialist disability services.

'Environment' is another information-poor area, but does not currently appear to be high on the policy agenda for disability administrators. Again, new national data elements in the NCSDD may facilitate the collection of data on environmental factors relevant to disability. Their incorporation into disability-related data collections should be encouraged, but (as for 'generic services' above) indicator development is not justified in this area at present.

'Consumer needs' is an area identified as information-poor in Figure 2.3. Approaches to assessing support needs of people with disabilities is a major focus of the AIHW–DSSC project on the redevelopment of the CSDA MDS. Thus, considerable conceptual

development work has occurred in this area, and further data development will occur (including the planned development of a set of data elements for inclusion in the NCSDD). Therefore it is not identified as a priority area for indicator development in the context of this project.

4.4 Options and issues relating to priority areas identified

Outcomes

Clause 4(1) of the 1998 CSDA states:

> The Commonwealth and the States strive to enhance the quality of life experienced by people with a disability through assisting them to live as valued and participating members of the community.

High-level government outcome goals in relevant policy areas tend to sit fairly well with this objective, in that they are often built around ideas of quality of life, participation and empowerment. For instance, participation is one of the key outcome areas for the Department of Family and Community Services. Their disability program—both income support and ongoing support services—is located under the outcome area of 'social and economic participation'.

The concept of participation is central to individual outcomes. The draft ICIDH–2 defines Participation as:

> the nature and extent of a person's involvement in life situations in relation to impairments, activities, health conditions and contextual factors.

The Participation dimension focuses in positive terms on the person in society, and the person's rights and needs. It is grounded in the philosophy that people with a disability are entitled to the same opportunities and choices as the rest of the community, and generally desire participation in all areas of human and social life. This is in line with the UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities (Madden & Sykes 1999).

The Participation dimension provides a useful framework for analysing outcomes for people with disabilities (AIHW 1999). AIHW has used it as a basis for analysing ABS survey data to look at participation of people with a disability in four key areas: living arrangements and self-care; education, work, leisure, and spirituality; economic life; and mobility and social relationships.

Broadly defined outcomes

These involve looking at the whole person, across life domains. While it is difficult to attribute such 'holistic' outcomes to a specific service intervention, information on them may be very useful at program level to ask questions about whether the range of services being provided is achieving improvements in quality of life for people with disabilities.

The NCSDD Participation data elements are likely to be relevant, for making subjective (against own goals) and objective (against social norms) assessments of participation (AIHW in press).

The participation disability data elements, to be included in Version II of the NCSDD are:

- Area of participation

- Extent of participation

- Satisfaction with participation.

(See Appendix.)

Consumer-based funding models are a potential source of data on outcomes. Under several models currently in use, the individual has a role in identifying their own goals and objectives, and deciding what services are most likely to help them achieve those goals and objectives. However, approaches to assessing outcome achievement for individuals have not yet been developed in most cases. Information on outcome achievement for individuals could be used for accountability purposes, program evaluation, and as a basis for outcome indicators. Parallel policy and data development could yield good results in this area.

Consumer satisfaction surveys can play a useful complementary role in providing high-level information on consumer outcomes.

Narrowly defined outcomes

Outcomes can be defined much more narrowly, relating to a single facet of quality of life, or a single Participation 'domain'. These types of outcomes are likely to be easier to measure, and more readily attributed to a particular service intervention.

For example, the 'outcomes' used as a basis for funding service providers under the case-based funding model being trialed by the Commonwealth Department of Family and Community Services are employment outcomes, defined in terms of length of time in a job. It could reasonably be expected that a person's quality of life would be enhanced by achieving an 'employment outcome', although this may not always be the case (e.g. the work environment may be stressful). Thus an 'employment outcome' may be an 'indicator' of outcome defined in more holistic terms. The development of narrowly defined, readily measurable 'outcomes' may only be appropriate for certain service types.

Suggestion

- Coordinated development of consumer-based funding arrangements as a vehicle for assessing individual outcomes: this would involve jurisdictions working together to develop appropriate ways of assessing individual outcome achievement, drawing on the NCSDD Participation data elements. Information on outcome achievement could be used to generate outcome indicators relating to the consumer-based funding component of a jurisdiction's disability program. Such information could also be used to assess effectiveness — i.e. the effectiveness of the particular combination of service outputs purchased in securing outcomes for the individual.

Cost

Data on the cost of service outputs are essential for implementing output-based funding arrangements, and for generating indicators of cost-efficiency and cost-effectiveness.

The review of data currently collected (Section 3.3) suggests that service contract reporting requirements in most jurisdictions are likely at least to provide information on funds allocated to individual service providers, and possibly also more detailed data on expenditure. In some jurisdictions, more detailed cost data, relatable to service outputs, are available from administrative systems.

A limitation of cost data currently collected is that the contribution of non-government funds to the cost of providing services cannot generally be quantified. Implications of this data limitation are outlined briefly below.

From a performance-monitoring perspective, measures of cost-efficiency and cost-effectiveness cannot be properly constructed without full information on cost. The efficiency indicators presented in the *Report on Government Services 2000* focus on cost to government only. This approach does not allow proper comparison of cost-efficiency between government and non-government sectors, and does not allow comparison of non-government-provided services between jurisdictions.

Another consideration is that, as the proportion of services provided by non-government agencies increases, governments may not be able to rely on maintenance of the current level of non-government contribution to the cost of services (i.e. there may be a limit to the amount of money available from 'other sources'). Thus, the cost to government of existing non-government-provided services may not provide a good guide to the cost to government of new or expanded services (AIHW 1997b).

If cost and efficiency measures that do not take into account non-government funds are used as a basis for making decisions about allocation of funds to providers, large non-government providers may be advantaged over smaller providers. This is because large providers may be able to contribute a larger proportion of the cost of outputs from their non-government income, and thus seem to produce outputs more efficiently. From a government perspective, these providers are perhaps more attractive, because the cost to government of providing service outputs through them is lower. However, this is a factor to consider in coming to a balanced conclusion about the desirable level of provider diversity.

Suggestions

- Financial data should remain part of the CSDSA MDS, though it may be more appropriate to obtain through program-level administrative systems rather than through the annual collection. Further work on financial data in the context of the CSDA MDS is warranted.

- Jurisdictions should work towards aggregating data relating to cost collected through service contract reporting requirements. Where possible, these data should be related to some measure of the quantity of service provided.

- Consumer-based funding models that use brokerage arrangements might be a valuable source of data on the 'market price' of service outputs, if the cost of services purchased is recorded in basic administrative records. Consistent ways of collecting and aggregating such data would need to be established. Information sharing and perhaps a coordinated approach at national level is warranted. It would also be useful to know how well the prices charged by agencies for service outputs reflected the real costs of those outputs (this might be the subject of a one-off, in-depth study).

Outputs

Some data on service outputs are collected currently, mainly through service contract reporting requirements. These data are aggregated and reported regularly in some jurisdictions (e.g. Victoria, New South Wales).

Data on client numbers over a particular period (e.g. one year) or on a snapshot day are commonly collected. However, for most service types client counts are probably more accurately considered a measure of 'throughput' than of 'output'. Nonetheless, client

counts, in combination with some additional information, might be indicative of output. Such information might include:

- weighting of clients according to intensity or frequency of support;
- information on client turnover, or length of time 'on the books'.

Data on hours of service provided are collected in some jurisdictions (e.g. New South Wales). This might potentially be a more informative indicator of service output. However, to be informative, and to provide a basis for making comparisons between providers, detailed counting rules are needed. Calculating hours of service provided should entail more than tallying staff hours at work. There should ideally be a clear understanding of what is provided in one hour of service. It may be necessary to specify different types of 'hours of service' (e.g. on the basis of type of service being provided, or staff–client ratio). Data specification should be aligned with policy developments in the various jurisdictions, including those related to unit costs and output-based funding.

Standard and comparable units of output are necessary for the purpose of properly implementing output-based funding arrangements and for calculating measures of efficiency and effectiveness.

Suggestions

- Introduce a measure of output into the CSDA MDS. Appropriate units of output may vary with service type. Options identified in the course of the CDA MDS redevelopment project included: 'cases on the books' (at a point in time or over a specified period); episodes/periods of service; hours of service; items/instances of service.

- Develop standard units of output for broad service types, to be used in service funding/purchasing contracts. Several jurisdictions are exploring approaches to defining units of output, for the purpose of implementing output-based funding. Communication and information sharing between jurisdictions should be encouraged, with the expectation that more meaningful approaches to measuring output will be able to be adopted at national level in future.

- Develop standard means of collecting data on outputs purchased under direct consumer funding models.

Quality

Clauses 6(3) and 6(4) of the 1998 CSDA state that the parties are to ensure that 'agreed national quality standards are upheld and monitored'. The National Standards for Disability Services have been adopted by all jurisdictions, and processes for assessing compliance with the standards have been implemented in several jurisdictions. Standardised mechanisms for ensuring service quality are clearly essential to protect clients from poor service, and the standards are designed to ensure that services are delivered in a way that is conducive to good client outcomes.

Several jurisdictions have expressed the view that the main aim of assessing compliance with service standards is to encourage a general environment of quality improvement. Supporting material, designed to assist providers in meeting standards, gives examples of 'good' and 'poor' practice against each standard as a general guide. However, what constitutes good practice in any given situation will vary. Thus, tailored quality improvement strategies, which allow individual agencies to contribute to goal setting, may be the best way of maintaining and improving service quality.

However, information on quality reported by one agency may not be readily comparable with information reported by other agencies. In addition, current approaches to quality vary substantially between jurisdictions. This makes it difficult, and of dubious value, to develop simple measures of quality that can be aggregated to produce high-level indicators. Thus, developing meaningful, comparable indicators at national level is likely to be very difficult at this stage, and it may be more profitable to allow developments to continue at jurisdiction level and revisit this area in a couple of years.

That having been said, valid and meaningful comparison of outputs and efficiency between service providers and between jurisdictions can only be made if service outputs are of comparable quality. This point is particularly important in the context of output-based funding. An increase in the quantity of outputs produced, or a decrease in cost per output, may be achieved at the expense of service quality.

From this perspective, the development of comparable information on quality, at least at jurisdiction level, is an important goal. The national client satisfaction survey, conducted by the Steering Committee for the Review of Commonwealth State Service Provision, provides some nationally consistent data on service quality from a client perspective.

Issues concerning data on certain aspects of quality may be addressed individually. For example, 'service access' is the focus of the first of the National Disability Services Standards. Several jurisdictions identified data on 'location' as an information need. Information on location is relevant for assessing issues of equitable access. Relevant information might include where a service is provided, relative to the consumer's residence, and/or relative to the service outlet—i.e. how far the consumer and/or provider need to travel. Information on location is also clearly relevant to resource questions associated with meeting demand for services. Options identified in the course of the CSDA MDS redevelopment project—to collect data on the location of the client, the service event and the agency—may address this information need.

In light of the foregoing discussion, these suggestions relate to developments that could be undertaken within jurisdictions, rather than at national level.

Suggestions

- Investigate opportunities for standardising approaches to quality assessment currently used within each jurisdiction (e.g. service provider self-assessment against National Standards), so that data collected for administrative purposes can be aggregated at program level. Summary information could then be reported annually. (Note: this work is well under way in Victoria).

- Explore the possibility of using an agency data linkage key to link quality-related data gathered through administrative processes (e.g. service contract reporting requirements) to CSDA MDS data (this is possible now in some jurisdictions).

4.4 The way forward

The primary aims of this project were to identify areas for the further development of indicators in the disability field and, in particular, implications for the CSDA MDS data collection and redevelopment.

It is concluded that there is a need for data and conceptual development to support the development of indicators of outcomes, outputs and costs. The preceding sections of this concluding chapter have looked at some of the issues to be considered and suggested some potentially fruitful directions such development could take.

Immediate implications for the CSDA MDS

Implications for the CSDA MDS redevelopment include proposals (reported elsewhere) to incorporate data elements to support the indication of outcomes and outputs, and to suggest a way forward on costs.

Outcomes: In the report on the CSDA redevelopment it is suggested that the NCSDD Participation data elements are worthy of consideration for inclusion in the CSDA MDS as the basis for outcome monitoring and effectiveness indication. This is seen as important, given the focus of the CSDA on increasing participation as a means of improving quality of life. The Participation data elements have a strong conceptual relationship to quality of life measures and have been developed for the specific purpose of monitoring outcomes for people with a disability. Victoria has offered to pilot test questions relating to these elements in May 2000. Results of this pilot should advance the development of suitable national data items relevant to indicating outcomes.

Outputs: The CSDA MDS redevelopment project identified a number of output measures to be considered for pilot testing: 'cases on the books', periods/episodes of service, hours of service and items/instances of services. Thorough pilot testing will be required to decide on the feasibility of those data elements which rely on an ongoing collection. For instance, some options will depend on agencies having a client-based information system that allows service details to be updated periodically, enabling information on periods or instances of service over a year to be produced. The feasibility of different options may also depend on compatibility with output measures used for reporting under service purchasing contracts in different jurisdictions.

Cost: Discussions of financial data in the course of the CSDA MDS redevelopment project concluded that it is necessary to explore alternative methods for obtaining the financial information. Further work in this area should produce recommendations for the National Disability Administrators on minimum financial data items required to meet their information needs, and methods of collecting them conveniently and accurately, preferably by extracting financial data from existing financial data systems within jurisdictions. A unique agency identifier may enable financial data from administrative systems to be linked to client-oriented data gathered via the CSDA MDS collection.

Implications for further development

In the context of indicator development, it is important that conceptual development proceeds with a full awareness of areas in which there is current rapid policy development and change, particularly service funding and delivery models.

The rise of consumer-based funding, involving individual goal setting, is very important from a data collection perspective. As outlined in the 'suggestions' of Section 4.3, such models present a range of possible opportunities for gathering information on outcomes, outputs and costs. The possibility of a trend towards direct consumer funding (as opposed to brokerage) would potentially make it more difficult to obtain information on service outputs purchased with funding.

Approaches to output-based funding, the specification of service outputs and associated reporting requirements are developing rapidly, and are of central relevance to indicators of output and efficiency. Outcome-based funding is an area in which new funding models may begin to emerge. These may provide important opportunities for gathering information on outcomes and effectiveness.

Other service models may also pose particular challenges or opportunities in the context of indicator development. These include models that involve cooperation between service agencies and models that focus on community-level development, rather than delivering services to identifiable individuals. It may be difficult to develop indicators that 'work' in all contexts—Jolley (1999) states that performance indicators are generally better suited to individual-level services than activities aimed at population level. It is therefore important to ensure that certain funding models or program initiatives are not unfairly disadvantaged by the use of indicators that are not designed to adequately reflect their performance.

These areas may be in such a state of flux, and the issues they throw up so complex, that the development of, and agreement on, high-level, nationally collectable data relies more than usually on shared understandings of current and future policy directions.

National efficiency and effectiveness indicators are published annually in the *Report on Government Services*. However, there is currently little national agreement on output measures, outcomes or unit cost approaches, and hence no ready-made springboard for the improvement of data collection. From the material received by the AIHW in the course of this project, it appears that work in separate jurisdictions, on outputs in particular, is proceeding quite quickly but independently.

The current environment of rapid evolution in the disability services field presents both difficulties and opportunities for indicator development. Conceptual development on its own cannot produce good data unless it retains a strong base in reality. Therefore, it is suggested that further work on indicator development should proceed in two broad phases.

Phase One

Outcome, output and cost-related data items for the CSDA MDS will require some further work and pilot testing. This work must occur within the time frame agreed by the National Disability Administrators for the CSDA MDS redevelopment. An appropriate approach may be to convene a working group that would undertake intensive development of data items over one or two workshops. Members of the group should, collectively, have the expertise to put theory, policy, administration and data collection on the table together.

The data items developed should have a strong grounding in current practice 'on the ground', to ensure that data collection is feasible and that the resultant measures or indicators are relevant, not only in the context of high-level policy, but also at program and service level, for planning and management purposes.

Phase Two

There is clearly scope for further work on indicator development, beyond the scope and timeframe of the CSDA MDS redevelopment. Rather than allowing policy innovations to move too far ahead of data in a fast-evolving field, and taking periodic steps to respond with data developments after the fact, a more proactive approach could be taken to the development of outcome, output and cost indicators. This would involve establishing a mechanism for developing some common, meaningful concepts, primarily for use in administration, but also to provide immediate data spin-offs. These key concepts could be used, for instance, as common 'hooks' in service agreements so that nationally consistent data (e.g. on outputs) would emerge from administrative processes. There is thus scope for data development and policy development to occur simultaneously. In particular, work might focus on the opportunities presented by development work currently occurring at jurisdiction level on consumer-based funding models and output-based funding.

The working group established under Phase One could continue this conceptual and data development work over a specified time frame, giving priority to areas that emerge as most pressing, or most potentially rewarding. The conceptual structure of, and information contained in, this report would provide a basis for this further work. The working group would report to the National Disability Administrators, as there will be questions of feasibility and policy overriding all issues.

4.5 Future work

This report, *Integrating Indicators: Theory and Practice in the Disability Services Field*, was presented to the National Disability Administrators for consideration at their meeting on 23 March 2000, and was accepted.

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Appendix: Participation data elements from the draft National Community Services Data Dictionary

Introduction

A set of disability data elements has been developed by the AIHW in consultation with the Disability Data Reference and Advisory Group, a group established by AIHW in 1996 to advise it on data development. These disability data elements are currently contained in the draft National Community Services Data Dictionary, Version 2 (NCSDD) (AIHW in press).

The NCSDD provides a framework and a set of data elements with which a wide range of data can be collected and related. The data elements serve as building blocks with which data items and systems can be constructed for specific services and purposes. The resulting data items and systems, and the data produced, will then be able to be related to other systems and data relevant to disability. Anyone who is compiling a data set—particularly a National Minimum Data Set—is encouraged to use the data elements in the NCSDD. Data collections need not use the full version of each data element selected.

The disability data elements have been developed within the conceptual framework provided by the draft ICIDH–2 (WHO 1999). The data elements are as follows:

- a definition of disability *as a concept*;

together with:

- a suite of related data elements which enable different definitions to be related to each other *via a common framework.*

These related data elements are:

- Body structures; Body functions; Extent of impairment

- Areas of activity; Difficulty with activity; Assistance with activity

- Areas of participation; Extent of participation; Satisfaction with participation

- Environmental factors; Extent of influence of environmental factor

- Disability grouping—Australian national

- Disability grouping—International.

The three draft data elements relating to Participation (as at May 2000) are presented on the following pages.

Areas of participation

Admin. status: TRIAL (WHO field trial) 1/07/2000

Identifying and definitional attributes

Knowledgebase ID:
                        Data item version number: 1

Data element   DATA ELEMENT
type:

Definition: The area of life in which an individual is involved, has access to, has
                      societal opportunities or barriers. Participation is an individual's
                      involvement in life situations, in relation to Health Conditions, Body
                      Functions and Structures, Activities and Contextual Factors.

Context: The areas of participation classification is a neutral list of life
                      situations that can be used to record positive or neutral participation
                      as well as participation restriction. Participation restrictions are
                      problems an individual may have in the manner or extent of
                      involvement in life situations.

                      Participation is one of the three dimensions that define the concept
                      Disability. The other two are 'body function and structure' and
                      'activity'.

                      Involvement refers to the lived experience of people in the actual
                      context in which they live. This context includes the 'Environmental
                      factors' – all aspects of the physical, social and attitudinal world.
                      The individual's degree of involvement, including society's response
                      to the individual's level of functioning can be reflected by this
                      element when combined with the 'Extent of participation' and
                      'Satisfaction with participation' elements.

                      This information may be used to plan interventions to improve
                      extent of or satisfaction with participation.

Relational and representational attributes

Datatype: Numeric   *Representational form:*   CODE

Field size: **Min.** 1 **Max.** 9   *Representational layout:* NNNNNNNNN

Data domain: 1 **Participation in personal maintenance as a function of the**
                         availability and accessibility of resources (includes, for
                         example, personal hygiene, nutrition, organising health care and
                         the prevention of ill health).

                      2 **Participation in mobility as a function of the availability and**
                         accessibility of resources (includes, for example, mobility
                         within the home, within buildings other than home and far from
                         home, the use of private, commercial and public transportation).
                         2.1 Participation in mobility within the home (includes, for

example, having the opportunity for mobility within and at all levels of one's residence; having an accessible or adapted home). 2.2 Participation in mobility outside the home (includes, for example, being able to move around outside, or inside buildings other than home; involvement in any form of private, commercial or public transportation)

3 **Participation in exchange of information as a function of the availability and accessibility of resources** (includes, for example, involvement in the exchange of information about needs, feelings, beliefs, thoughts, by means of spoken, written, or body language, public symbols or communication by means of devices).

4 **Participation in social relationships as a function of the availability and accessibility of resources** (includes, for example, involvement in the creation and maintenance of parent–child, sibling, romantic, spousal, friends, acquaintance or formal relationships).

5 **Participation in home life and assistance to others as a function of the availability and accessibility of resources** (includes, for example, involvement in managing home and possessions, caring for others and the provision of assistance to others).

6 **Participation in education as a function of the availability and accessibility of resources** (includes, for example, involvement in learning in informal settings such as home, and having the opportunity to engage in educational programs in formal settings such as school, vocational and higher education institutions).

7 **Participation in work and employment as a function of the availability and accessibility of resources** (includes, for example, involvement in work preparation programs, self-employment, paid employment and voluntary work).

8 **Participation in economic life as a function of the availability and accessibility of resources** (includes, for example, involvement in economic transactions, such as buying and selling, using money, purchasing goods and services, maintaining a bank account and trading in stocks, bonds and securities. It also includes involvement in economic self-sufficiency, such as access to money, being financially self-sufficient and enjoying economic security).

9 **Participation in community, social and civic life as a function of acceptance by others and the availability and accessibility of resources** (includes, for example, having the opportunity to join and being included in formal associations, ceremonies, recreation and leisure. It also includes human rights and involvement in the social, political and legal role of a citizen).

Guide for use: Participation and Participation restriction are classified in the

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ICIDH-2 Beta-2 draft, 1999. Refer to the Information Annexe - Disability for further details.

When recording participation restrictions the area of restriction is always associated with a health condition. For example, a restriction in the participation in exchange of information may be recorded when the person has had a stroke. Note that the data domain 'participation restriction: communication' is not intended for use where a person is from a non-English-speaking background, who has a participation restriction in communication in English, but has no related health condition.

Where multiple life areas of participation are recorded, the following prioritising system may be useful.

- The first life situation in which participation or participation restriction is recorded is that which has the greatest impact on the individual and his/her current life goals.

- Second and subsequent life situations are of relevance to the individual and his/her current life goals.

- Up to 9 responses may be recorded.

Collection methods:

The area of life in which an individual experiences a participation restriction is indicated in the data element 'Areas of participation'. The extent of and level of satisfaction with participation in a given area are indicated in 'Extent of participation' and 'Satisfaction with participation'.

There are numerous possible methods for collecting participation in life situations. A decision could be made to collect information about every life situation; select only those life situations of particular relevance (e.g. participation in work and employment in relation to employment programs). Or limit to a number of life situations and prioritise according to specified criteria; or even limit to one life situation per person.

Where multiple life situations are recorded, the prioritising system in the guide for use may be useful.

Related data:

An explanation of the disability data elements and their interrelationship is contained in the Information annex, 4.4 Disability.

Is related to the data concept, Disability version 2.
May be used in conjunction with the data elements:
    Extent of participation v.1,
    Satisfaction with participation v.1.
Is related to the data elements:
    Body structures v.1,

Body functions v.1,
Extent of impairment v.1,
Areas of activity v.1,
Difficulty with activity v.1,
Assistance with activity v.1,
Environmental factors v.1,
Extent of influence of environmental factors v.1,
Disability grouping – Australian national v.1,
Disability grouping – International v.1.

NCSI Model Location: Person participation/independence

Administrative attributes

Source document: ICIDH-2 Beta-2 draft, 1999

Source organisation: World Health Organization

Comments: Disability is a multi-dimensional and complex concept, which has been described in three dimensions (WHO 1999): Body Functions and Structure /impairments, Activities/activity limitation and Participation/participation restriction. Environmental factors interact with all dimensions of functioning and disability. All disability is associated with a health condition, disease or injury.

The data elements relating to disability are based on the draft ICIDH-2, Beta-2, 1999, as the best available conceptualisation suitable to the purpose. The Beta-2 draft is subject to systematic field trials and further consultation until 2001. Use of the ICIDH-2 has not been fully endorsed by a resolution or agreement among WHO Member States. Endorsement by the World Health Assembly will be sought in 2001. Further information on the ICIDH-2 can be found on the WHO website: http://www.who.ch/icidh

For further information on disability see the Information Annexe – Disability.

Extent of participation

Identifying and definitional attributes

Knowledgebase ID:
                    Data item version number: 1

Data element type: DATA ELEMENT

Definition: The level of participation in a specified area and the degree of restriction experienced.

Participation is the nature and extent of a person's involvement in life situations in relation to Health Conditions, Body Functions and Structures, Activities and Environmental Factors. Participation restrictions are problems an individual may have in the manner or extent of involvement in life situations.

Context: This data element may be used to describe the extent of participation in life situations for an individual. The standard or norm against which an individual's participation is compared is that of an individual without disability in that particular society. The participation restriction records the discordance between the observed participation and the expected participation of an individual without a similar disability. The definition of 'particular society' is not specified and will inevitably give rise to different interpretations. If limiting the interpretation it will be necessary to state the factors which are taken into account, for example, age, gender, ethnicity, religion, level of education, locality (town, state, rural, remote, urban).

Extent of participation is always associated with a health condition. For example a restriction in participation in exchange of information may be recorded when the person has had a stroke, but not when the person is from a non-English-speaking background, without a related health condition.

A value is attached to restriction of participation (i.e. a participation restriction is a disadvantage). The value is dependent on cultural norms, so that an individual can be disadvantaged in one group or location and not in another place.

As used in ICIDH-2, the notion of participation incorporates as an overarching, international standard formally adopted by the UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities (WHO 1994). The purpose of the Rules is to ensure that people with disabilities, as members of their societies, may exercise the same rights and obligations as others. The equalisation

of opportunities for persons with disabilities is an essential contribution in the general and worldwide effort to mobilise human resources.

This data element contributes to the definition of the concept Disability and gives an indication of the experience of disability for a person.

Relational and representational attributes

Datatype:	Numeric	*Representational form:*	CODE
Field size:	*Min.* 1 *Max.* 1	*Representational layout:*	N

Data domain:
- 0   Not applicable
- 1   Full participation
- 2   Mild participation restriction
- 3   Moderate participation restriction
- 4   Severe participation restriction
- 5   Complete participation restriction
- 9   Not stated/inadequately described

Guide for use: Participation and participation restrictions are classified in the ICIDH-2, 1999. Refer to the Information Annexe – Disability for further details.

This data element gives an external rating of the extent of restriction in participation, in terms of duration, frequency, manner or outcome. The coding is used with specified areas of participation, for example 'mild restriction of participation in mobility'.

Not applicable is recorded when participation in a life area is not relevant, such as military service for an infant.

Full participation is recorded if a person is involved in this life situation to the extent expected of an individual without disability.

Mild participation restriction is recorded where the level of participation of the person is similar but less than the participation of an individual without disability.

Moderate participation restriction is recorded when the level of participation when compared to that of an individual without disability is reasonably restricted.

Severe participation restriction is recorded when the restriction to participation is high or extreme when compared to that of an individual without disability.

Complete participation restriction is recorded when the person does not participate in this life situation.

Not stated/inadequately described is recorded when there is insufficient information to record extent of participation in any other class.

Collection method: This coding is used in conjunction with specified Areas of participation. For example a 'mild restriction in participation in exchange of information'.

The area in which an individual experiences a participation restriction is indicated in the data element 'Areas of participation'. The extent of and level of satisfaction with participation in a given area are indicated in 'Extent of participation' and 'Satisfaction with participation'.

Related data: An explanation of the disability data elements and their interrelationship is contained in the Information annex, 4.4 Disability.
Is related to the data concept, Disability.
Is used in conjunction with the data elements Areas of participation v.1.
May be used in conjunction with the data element Satisfaction with participation v.1.
Is related to the data elements:
  Body structures v.1,
  Body functions v.1,
  Extent of impairment v.1,
  Areas of activity v.1,
  Difficulty with activity v.1,
  Assistance with activity v.1,
  Environmental factors v.1,
  Extent of influence of environmental factors v.1,
  Disability grouping – Australian national v.1,
  Disability grouping – International v.1.

NCSI Model Location: Person participation/independence

Administrative attributes

Source document: ICIDH-2, 1999

Source organisation: World Health Organization

Comments: Disability is a multi-dimensional and complex concept, which has been described in three dimensions (WHO 1999): Body Functions and Structure /impairments, Activities/activity limitation and Participation/participation restriction. Environmental factors interact with all dimensions of functioning and disability. All disability is associated with a health condition, disease or injury.

The data elements relating to disability are based on the draft ICIDH-2, Beta-2, 1999, as the best available conceptualisation suitable to the purpose. The Beta-2 draft is subject to systematic field trials and further consultation until 2001. Use of the ICIDH-2 has not been fully endorsed by a resolution or agreement among WHO Member States. Endorsement by the World Health Assembly will be sought in 2001. Further information on the ICIDH-2 can be found on the WHO website: http://www.who.ch/icidh

For further information on disability see the Information Annexe–Disability.

Satisfaction with participation

Admin. status: TRIAL (WHO field trial) 1/07/2000

Identifying and definitional attributes

Knowledgebase ID:
                     Data item version number: 1

Data element   DATA ELEMENT
type:

Definition: This data element records the level of satisfaction with participation
                     in relation to the person's current life goals. Participation is the
                     nature and extent of a person's involvement in life situations in
                     relation to Health Conditions, Body Functions and Structures,
                     Activities and Environmental Factors. Participation restrictions are
                     problems in the manner or extent of involvement in life situations.

Context: The individual's experience of life situations may be described by this
                     data element in conjunction with 'Areas of participation' and
                     'Extent of participation'.

                     This data element may contribute to the definition of disability and
                     give an indication of the experience of disability from a personal
                     perspective.

Relational and representational attributes

Datatype: Numeric   *Representational form:*   CODE

Field size: *Min.* 1 *Max.* 1 *Representational layout:* N

Data domain: 0 Not applicable

                     1 High satisfaction with participation

                     2 Moderate satisfaction with participation

                     3 Moderate dissatisfaction with participation

                     4 Extreme dissatisfaction with participation

                     5 No participation

                     9 Not stated/inadequately described

Guide for use: Participation and participation restrictions are classified in the
                     ICIDH-2, 1999. Refer to the Information Annexe – Disability for
                     further details.

                     This data element gives a rating of the degree of satisfaction
                     experienced in participation, in relation to a person's current life
                     goals. Choice and autonomy are key aspects of satisfaction and
                     quality of life for all people. Satisfaction with participation may also
                     be affected by duration, frequency, manner or outcome of
                     participation. Duration and frequency may be less than or more

than desired by the individual.

Not applicable is recorded when participation in a life situation is either not relevant, such as military service for an infant, or not desired by the person for fulfilment of life goals.

High satisfaction with participation is recorded if a person is involved in the specified life situation as he or she wishes, to fulfil his or her current life goals in terms of duration, frequency, manner and outcome.

Moderate satisfaction with participation is recorded if the person is reasonably satisfied with their participation in this life situation. This could occur if one of the criteria (duration, frequency, manner or outcome) is not fulfilled and that criterion is not critical to the person's goals. For example, the person does not participate in the specified life situation as frequently as wished, but the other criteria are met and the frequency is not so affected that it is critical to the person's satisfaction.

Moderate dissatisfaction with participation is recorded if two or three criteria (duration, frequency, manner or outcome) are not fulfilled, but are not so badly affected, in relation to the person's goals in that life area, that the person is extremely dissatisfied. For example, a person is able to participate in work, but is placed in supported employment rather than employment in the open labour market. This is not in line with the person's goals, so the manner and outcome of the participation are not fulfilled.

Extreme dissatisfaction with participation is recorded when all criteria (duration, frequency, manner and outcome) are not fulfilled for the specified life situation, or where any of the criteria are so badly affected in relation to the person's goals that they consider themselves to be extremely dissatisfied with this life area. An example of the latter would arise when a person is extremely dissatisfied with participation in interpersonal activities because his/her goal in terms of duration of visits is never fulfilled, although the other three criteria (frequency, manner and outcome) may be fulfilled.

No participation is recorded when the person does not participate in this life situation in line with his or her own goals, i.e. in an area where they wish to participate.

Not stated/inadequately described is recorded when there is insufficient information to record satisfaction with participation in any other category.

Collection methods:	This coding is used in conjunction with specified Areas of participation, for example a person's 'moderate satisfaction with participation in exchange of information'.
	The area in which an individual experiences a participation restriction is indicated in the data element 'Areas of participation'. The extent of and level of satisfaction with participation in a given area are indicated in 'Extent of participation' and 'Satisfaction with participation'.
Related data:	An explanation of the disability data elements and their interrelationship is contained in the Information annex, 4.4 Disability.
	Is related to the data concept, Disability v.1.
	Is used in conjunction with the data elements, Areas of participation v.1, Extent of participation v.1.
	Is related to the data elements:

     Body structures v.1,

     Extent of impairment v.1,

     Areas of activity v.1,

     Difficulty with activity v.1,

     Assistance with activity v.1,

     Environmental factors v.,

     Extent of influence of environmental factors v.1,

     Disability grouping – Australian national v.1,

     Disability grouping – International v.1.

NCSI Model Location:	Person participation/independence

Administrative attributes

Source document:	ICIDH-2, 1999
Source organisation:	World Health Organization
Comments:	Disability is a multi-dimensional and complex concept which, has been described in three dimensions (WHO 1999): Body Functions and Structure /impairments, Activities/activity limitation and Participation/participation restriction. Environmental factors interact with all dimensions of functioning and disability. All disability is associated with a health condition, disease or injury.
	The data elements relating to disability are based on the draft ICIDH-2, Beta-2, 1999, as the best available conceptualisation suitable to the purpose. The Beta-2 draft is subject to systematic field trials and further consultation until 2001. Use of the ICIDH-2 has not been fully endorsed by a resolution or agreement among WHO Member States. Endorsement by the World Health Assembly will be sought in 2001. Further information on the ICIDH-2 can be found

on the WHO website: http://www.who.ch/icidh

For further information on disability see the Information Annexe–Disability