

## 8 Approaches to costing remaining unmet need

As well as the two main objectives of the study, the project brief specified five areas of work to be carried out in the course of the project (see Sections 1.1 and 2.3 of this report). The first four areas of work related directly to the two main objectives – effectiveness and remaining unmet need – and is described in the preceding chapters. This chapter discusses the fifth area of work, namely:

formulation of recommendations regarding appropriate costing models/approaches to assist in determining the cost of any remaining unmet need for disability services.

The study is, thus, required to recommend approaches to the costing task, rather than to provide an estimate of the cost of meeting unmet need nationally.

Section 8.1 of the chapter provides an overview of available information on costing. Section 8.2 suggests a ‘building block’ or unit cost approach to cost estimation, the building blocks being related to the components of the unmet need estimates. Sections 8.3 and 8.4 contain discussion of other costing and planning options. Section 8.5 discusses the possible further development of jurisdictional registers of need, in line with CSDA MDS data standards.

### 8.1 Overview of information

The 1997 AIHW study, after a brief and focused literature review, identified several key factors likely to affect service costs to government. This provided essential underpinning to the national estimation methods then used. This review has been updated for this study. Three key data sources are available, as follows.

#### Cost information from jurisdictions

Information was requested from jurisdictions in the Jurisdiction Survey (Appendix 2). All jurisdictions were asked to provide information about costing models, as well as specific data on costs incurred in providing these services generally and to specific groups (for example, rural and remote communities, Indigenous Australians and people of diverse cultural or language backgrounds). All jurisdictions were also asked to identify any special features of their jurisdiction that should be considered in understanding cost differentials between jurisdictions. Finally, where States and Territories indicated that they provided funding by level of need, they were asked to provide details. Specifically, they were asked to provide the unit for which this funding is paid; the amount of funding per unit; the average hours of support anticipated to be provided with this funding (if unit is not per hour); the percentage of clients expected to receive this funding level; and a description of how the funding levels were determined.

Each jurisdiction is administering the CSDA program somewhat differently, using sub-programs with different profiles (as well as different names). As a result, there are different cost profiles.

Local factors differ among jurisdictions, not only the factors identified in jurisdiction questionnaires (for example, rural and remote disadvantage, cultural and linguistic diversity issues, historical funding levels) but also interrelationships with other State-based service systems including health, transport, local government and so on, and the related charging regimes.

Chapter 3 reports in detail on the information provided by jurisdictions.

### **Government expenditure and cost information from the *Report on Government Services 2002***

The annual reports on government services contain national data on government expenditure on services provided under the CSDA (SCRCSSP 2002). These data are prepared each year by each jurisdiction, in line with nationally agreed definitions and in accord with the CSDA MDS data definitions and service categories, and are collated by the Productivity Commission.

Government expenditure and costs to government per place are published for the major CSDA service types (see Tables 1.3 and 1.4 for data from recent years).

These data were used in the 1997 AIHW demand study, combined with supplementary information supplied to AIHW by the jurisdictions, to estimate national average cost components of disability support services (see Appendix 1, AIHW 1997a and Section 8.2 following). The supplementary information from jurisdictions was particularly useful in guarding against the unquestioning use of current average costs to estimate the total national costs of new services. Information on emerging service costing and funding trends, and discussion of marginal costs of new services, were vital information to the estimation process.

### **Cost information from the literature**

A preliminary focused literature search produced material on the costing of services to individuals, including packages of service, and cost comparisons across alternative service approaches, such as institutional, group home or in-home accommodation support.

Knapp (1998: 7-11) defines three different levels at which care costs may be considered:

- micro – the individual user;
- mezzo – the facility level; and
- macro – the system level.

He indicates that historically the most common cost analyses have been at the mezzo level. He also suggests that macro analyses are rare 'and generally less informative because of the problems of aggregation bias and distortions, a mix of very different facilities within the aggregation'. Knapp is referring to both the British and other European experience here.

The UK literature focuses on estimating unit costs both at the micro level, in terms of packages of support, and at the mezzo level, according to different service types and care workers. A key building block in these costing efforts is a census of service users to assist in building up an understanding of service usage for different client characteristics (see, for example, the annual unit cost reports of the Personal Social Services Research Unit). An array of unit costs is reported so that resource needs can be built up from the user level across the country. However it appears a major use of the unit costs is for benchmarking and 'value for money' scrutiny rather than resource allocation.

The 1997 study provided a macro level estimate of costs. Alternative approaches could be considered by the NDA.

## 8.2 The 'building block' approach to costing unmet need in 2001

The previous study of unmet demand (AIHW 1997a) used the following components of cost to transform the estimates of unmet need (in terms of people and day program places) into national estimates of costs to Australian governments. The cost estimates were based on data, provided by jurisdictions, relating to the costs of existing and new services for:

- group homes per place;
- in-home accommodation support and respite per client; and
- day programs per client.

It was not possible, on the basis of available data, simply to prepare weighted averages of new service cost estimates ... It was not the purpose of this study to attempt to explain the inter-jurisdictional and other variations in detail, but rather to combine the various estimates judiciously, with explanation, to arrive at national cost estimates. (AIHW 1997a; see also summary at Appendix 1)

The main cost estimates used related to:

- costs per group home place per year (net cost to government);
- costs per hour per client for in-home accommodation support or respite;
- costs per client per year for day programs; these varied according to whether the support needs of clients were 'low, medium or high'.

These three sets of data were the 'building blocks' of the national costs estimates in 1997. The profile of people estimated to need accommodation or respite, or day program places was analysed to estimate the intensity of service needed, so as to be able to apply the 'building blocks'. For instance, certain people were assumed to need a group home place whereas, at the other end of the spectrum, some people were assumed to need perhaps three hours of support per week (AIHW 1997a; see also summary at Appendix 1).

One option for costing remaining unmet needs in 2001 is to take a similar 'building block' or unit cost approach to national or State-by-State cost estimates.

The steps involved would be as follows.

*Step 1:* Decide on the units for which costs can feasibly be estimated. Based on AIHW experience in 1997 and in discussions of indicators during the CSDA MDS redevelopment, it is considered that, once again, the key components will probably be:

- hours of service for community-based accommodation, respite, and individualised packages; hours of service could well be the right approach for open employment services also; and
- places for residential accommodation and community access; if new clients are being placed in supported employment, places could well be a suitable unit cost component.

Cost data for employment services were not obtained in this study. Those published in SCRCSSP 2002 relate to cost per person 'receiving assistance during the financial year'. It is not clear how these figures relate to the definitions in Box 7.1, and hence how they relate to the estimates of unmet need. Employment services are the responsibility of a single jurisdiction (the Commonwealth) who could carry out the costing of unmet need for these services.

*Step 2:* Decide on measures of service intensity for places – measures that can feasibly be estimated (for example, places in group homes with varying levels of supervision, and community access places for clients with varying levels of support needs).

*Step 3:* Decide how to relate these unit cost components to the unmet needs estimates in Table 7.1. Estimates for accommodation support need to be split into those receiving some support and those receiving none, and assumptions made about how to take this into account. They also need to be split into a spectrum of needs that can be related to hours of support or places in residential settings. Estimates for community access places also need to be split into a spectrum of needs, for instance into ‘high/medium/low’ support needs, where that is the basis for funding places.

*Step 4:* Decide whether the policy and cost variations among the States and Territories are such that costing should be done for each jurisdiction separately, and combined into national totals, or whether national estimates should be attempted from the outset.

*Note:*

- In considering Steps 1 and 2 it is worth noting that this approach is consistent both with discussion during the CSDA MDS redevelopment and the data that will be available from the redeveloped collection. The input and output measures to be available from the new collection, such as hours of service, numbers of clients and duration of support, can be related to funding provided to agencies.
- Flexible packages can combine a number of different service types (for instance, accommodation support and community access). These are costed implicitly with this method, in terms of their components. Should it be desired to cost them explicitly, in terms of the numbers of packages, the estimates of unmet need would need to be modified to reflect this (for instance, to remove some accommodation and some community access numbers from the estimates and add a corresponding number of packages). Then suitable cost estimates for packages (as a cost unit) would need to be assembled, for example, jurisdictions may cost packages in terms of a high/medium/low categorisation.
- The estimation of cost will require (as indicated above) being able to estimate what proportion of the accommodation and respite clients may already receive some services. This figure cannot reliably be estimated from the 1998 ABS confidentialised unit record file but should be able to be estimated from the full file. This is not an issue with the community access estimates, as none of those estimated to need services are receiving them (that is, anyone receiving any level of service was excluded from the estimates).

Tables 8.1a, b and c provide possible templates for such an approach, depending on what is decided in Step 4.

This approach represents a similar approach to the 1997 costing approach, but with opportunities for updating and using possibly different components. For instance, the costing could split the estimates of people needing accommodation services into: residential (high, medium and low) and community (high, medium and low), and then use national cost estimates for each ‘unit’ based on Table 3.9 and some averaging. Data from the *Report on Government Services* (SCRCSSP 2002) could be used in combination with jurisdiction data or information on marginal costs of new services. Community access cost estimates could be undertaken using a less complex approach.

Alternatively, as outlined, costing could be undertaken using the suggested templates but varying the approach among jurisdictions.

**Table 8.1a: Possible template for costing unmet need for accommodation support and respite services<sup>(b)</sup>**

	<b>Support needs (described in survey terms)<sup>(a)</sup></b>	<b>What received now (from survey)</b>	<b>Possible policy approach (can be varied)</b>		<b>Cost</b>
<b>High-level needs for accommodation support</b>	2 or more ADLs 3–5 times per day	Nothing	Group homes for X% of people	In-home accommodation support with high hours for (100 – X) % of people	Use cost per place in group home or cost per hour, together with client numbers, to show total cost for this row.
		Some assistance	–	In-home accommodation support (and/or respite) with lower hours (e.g. half the high hours)	Use cost per hour, together with client numbers, to show total cost for this row.
<b>Middle-level needs for accommodation support and/or respite</b>	1 ADL 3–5 times per day	Nothing		In-home accommodation support (and/or respite) with, for instance half the high hours	Use cost per hour, together with client numbers, to show total cost for this row.
		Some assistance		In-home accommodation support (and/or respite) with, for instance, 10–25% of the high hours	Use cost per hour, together with client numbers, to show total cost for this row.

(a) More detailed spectrums of needs can be calculated using other activities (and the related need for assistance) but the numbers would be small and the estimates less reliable.

(b) The need for respite services is not costed separately using this approach. Rather, it is considered as substitutable, or a complementary service to lower the need, for accommodation services. It is assumed that the hourly costs are similar to the hourly costs for accommodation.

**Table 8.1b: Possible template for costing unmet need for community access services**

	<b>Support needs (described in survey terms)</b>	<b>Cost of place to support these needs</b>	<b>Total cost of these places</b>
<b>High-level support needs</b>	No. of people who need (say) at least twice-daily assistance for all 3 ADLs	As estimated (nationally or for jurisdiction)	Calculated by multiplication
<b>Middle-level support needs</b>	No. of people who need (say) at least twice-daily assistance for 2 or more ADLs	As estimated (nationally or for jurisdiction)	Calculated by multiplication
<b>'Low'-level support needs</b>	No. of people who need (say) at least once-daily assistance for 2 or more ADLs	As estimated (nationally or for jurisdiction)	Calculated by multiplication

**Table 8.1c: Possible template for costing unmet need for employment services**

	<b>Support needs (described in survey terms)</b>	<b>Hours of support needed (policy decision) or no. of places</b>	<b>Cost per hour or place</b>	<b>Total cost</b>
<b>High-level support needs</b>	No. of people who need (say) at least daily support with 2 or more ADLs plus guidance	Hours per person or no. of places for this level	Cost per hour or place for this level	Calculated by multiplication
<b>Middle-level support needs</b>	No. of people who need (say) at least daily support with 1 or more ADLs plus guidance	Hours per person or no. of places for this level	Cost per hour or place for this level	Calculated by multiplication
<b>'Low'-level support needs</b>	No. of people who need (say) at least daily support with 1 ADL	Hours per person or no. of places for this level	Cost per hour or place for this level	Calculated by multiplication

Where appropriate, reference can also be made, in the course of costing, to the recommendations of the concurrent NDA-commissioned project 'Methods to Address Requirements for Changes in Funding Disability Services Brought About by External Change'.

### **8.3 Considering differing policy scenarios**

Given the wider policy and service context in which the CSDA operates, it could be useful to undertake costing according to different scenarios.

For instance, varying policy assumptions could be made about:

**The service spectrum**, for example:

- respite models, for example, centre-based respite;
- assumptions about future supply of residential accommodation and de-institutionalisation;
- assumptions about younger people in nursing homes;
- other aged care/disability interface scenarios;
- various employment or day activity scenarios, varying by age;
- CSDA/HACC scenarios;
- equipment scenarios; and
- transport scenarios.

**The population or eligibility criteria**, for example:

- assumptions about 'every carer should have a two-week break every year'; and
- assumptions about older carers, for example, an assumption that, by a certain age, a very high proportion of carers prefer minimal responsibilities for caring.

**The cost spectrum**, for example, limits on the size of individual packages.

### **8.4 The possibility of adopting a population 'benchmark' approach**

The previous sections relate to approaches to costing the unmet needs estimates provided in Chapter 7. This and the following section provide some further thought about planning, costing and data collection approaches.

A number of jurisdictions use population data for promoting equity in resource distribution (see Chapter 5). In the aged care field this is taken one step further, by using population data not only to promote equity (say, between regions) but also to establish benchmarks or planning ratios that allow resource provision over time to be monitored and targets to be set. These planning ratios (relating to residential care and care packages) make it explicit that only a proportion of the older population will require formal assistance from these government programs at any particular point in time; this point is particularly true of residential aged care provision.

Population change is one factor that suggests that there will be continuing growth in demand for disability support services, as new consumers move from the potential need category into the unmet demand category, until such time as entries balance exits. However,

the duration of this period of growth is not known. The HACC and aged care fields, also faced with growing demand, may suggest some options about alternative approaches to planning and resource allocation, when the total size of unmet demand is not known but is believed to be growing (for example, because of population growth and ageing).

The HACC and aged care sector use two different strategies to allocate resources to a growing number of clients:

- A geographic benchmark system was adopted for residential aged care and care packages in 1985. This system sets a target of 100 places per 1,000 people aged 70 and over (DHAC 2001). The benchmark was developed by considering both client needs and the number of places available in aged care. Currently, the balance of places is set at 40 high-care places to 50 low-care places to 10 community aged care places. This system therefore links resource allocation to growth in the target population, a broad categorisation of client need and desired shifts in service delivery options. Quality is considered via standards and accreditation.
- An incremental resourcing system was developed by the Home and Community Care (HACC) program in some States, in the form of its service provision targets system (Alt Statis & Associates 1994). This system was premised on an understanding that:
  - demand exceeded supply;
  - demand was expected to grow with the ageing of the Australian population and the growth in younger people with a disability living in the community; and
  - service may not reflect current and predicted distributions of the HACC target population, leading to inequities.

Under this system the current provision of HACC service types is compared to the target population of an area, according to three ratios:

- *a service provision ratio*: this is the number of units of each service type delivered in an area compared to each 1,000 of the area's HACC target population;
- *a service coverage ratio*: this is the number of clients supported by each service type in an area compared to each 1,000 of the area's HACC target population; and
- *a service intensity ratio*: this is the number of units of each service type provided in an area divided by the number of clients supported in that area.

Under this system, new resources are allocated to allow areas with lower than average service ratios to achieve average provision levels, and then for additional resources to be allocated incrementally and equitably thereafter. Thus new resource allocations are spread in a horizontally equitable way to move provision closer to meeting unmet demand. Matching resources to the needs of individuals is done at a local agency level.

The system was premised on additional work being done concurrently to determine optimum service provision ratios in relation to need and demand. While horizontal equity is assisted, the system does not consider quality or vertical equity factors, which need separate indicators.

Approaches such as the HACC approach could promote horizontal equity but adjustments would need to be made for particular population groups (for example, to adjust for the Aboriginal and Torres Strait Islander population as is done in the CSDA 'potential population' figures – see AIHW 1997b).

Such approaches are useful for broad-based resource allocation but may not be helpful in deciding exactly what to put on the ground. This requires regional information (such as that available to Aged Care Planning Committees in each aged care planning region) that is not the subject of this report.

## 8.5 Further developing the jurisdictional registers

This section discusses another possible approach that could make data on unmet need more routinely available.

### The current data framework in which the CSDA operates

At the 'front end' of the CSDA system there now exists a number of registers or holistic application processes to describe need and unmet need of applicants.

At the centre of the system (service provision) there will soon exist the redeveloped CSDA MDS, containing the data items articulated by jurisdictions in 18 months of consultation, as meeting the majority of their information needs (in relation to nationally comparable data items). The expenditure data contained in the *Report on Government Services* are similarly negotiated multilaterally among jurisdictions, the Productivity Commission and the AIHW and where appropriate accord with the CSDA MDS definitions, so as to enable the two data sources to be combined.

At the 'back end' of the system are developments in relation to performance indicators for the CSDA program as a whole.

There are benefits in building on existing data frameworks and relying on nationally agreed data standards for community services. As part of the CSDA MDS redevelopment project considerable effort has been put into developing appropriate input and output counts for CSDA services. A number of 'indicators' workshops were conducted (with State, Territory, Commonwealth, and service provider and consumer representation) in addition to the lengthy consultation processes employed as part of the project design (such as jurisdiction field testing with service providers, AIHW field testing with service providers and jurisdictions). The final MDS, agreed by the NDA in December 2001, provides the following measures, depending on service type:

- *number of clients, duration of support, hours received (reference week, typical week)* – for attendant care/personal care; in-home accommodation support; alternative family placement; case management/local coordination and development; learning and life skills development (day activities); other community access; respite services;
- *number of clients; duration of support* – for residential/institutions; hostels; group homes; other accommodation support; therapy services; early childhood intervention; behaviour/specialist intervention; counselling; regional resource and support teams; other community support; employment services;
- *number of clients* – recreation/holiday programs; advocacy, information and print disability services.

The CSDA MDS redevelopment has also invested considerable effort into the collection and collation of improved, comparable funding data – specifically, funding data that are able to be more directly related to service types and client profiles, and can be obtained from jurisdictional information systems. When the agreed approach for the CSDA MDS is fully implemented it will provide jurisdictions and Administrators with more detailed cost data

than is currently available through the Productivity Commission process, meaning cost data that can be related at agency level and to specific groups of clients.

### **The possibility of further developing registers and holistic application approaches to facilitate future costing approaches**

A range of registers and holistic application approaches was discussed in Chapter 5. The CSDA program seems suited to further development of such mechanisms to plan for long-term services for a relatively stable, life-long population.

Signatories to the CSDA could consider agreeing on the use of CSDA MDS items, as Queensland has done, and some basic pooling of data for this purpose. One way to improve the data currently available would be to increase the consistency with which applicants are asked to describe the services they are seeking (for example, using CSDA MDS service types). At some stage in the process, information on support needs would be helpful in indicating possible service levels needed. Additional multilaterally agreed definitions could be developed for additional data items if needed.

This approach is taken in other areas, for instance, in relation to hospital waiting lists, where the population is much more fluid. Some benchmarks and indicators have been nationally agreed. This type of approach may be well suited to the CSDA program.

The relationship of costs to the assessment processes in place in the CSDA sector should also be considered. For example, the CSDA MDS support needs question provides an information grid, based on national and international standard classifications, to which a range of current assessment tools can be mapped, and which also incorporates basic ABS survey concepts<sup>1</sup>. This enables the service data to be related to the population data and to other service data.

If registers were to be used as part of a cost estimation process, consideration may need to be given to further definition and national consistency of eligibility criteria.

Information on these registers may also be useful in terms of addressing the 'life cycle planning' issues raised at peak discussions. That is, with appropriate data collection rules, registers could enable people to express future needs for support (for example, people may want to register their need well in advance to plan for a life transition). Such use of registers would thus facilitate a system that might support and encourage people to plan their own lives. While register data, in combination with population data, may also relate to long-term policy and funding strategies, further discussion of these uses is considered beyond the scope of this study.

### **The balance of measurement**

The use of both types of estimates of people needing services – population based (for equity reasons) and application based (essentially for equity reasons of a different kind, related to empowerment) appears to be an accepted part of the administration and planning of the CSDA program. This study therefore relies on both methods. As discussed in this chapter there would appear to be the possibility of improving data on both fronts, to support future planning and costing initiatives.

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<sup>1</sup> The information available from the HACC sector would be able to be related much more closely to the CSDA sector if the HACC MDS included data items compatible with the CSDA 'disability group' and 'support needs' questions.

The use of registers relates to expressed need and 'demand'. This process makes publicly transparent the outcomes of the application and waiting process. These are intrinsic characteristics of services where receipt is voluntary – there has to be an application process at some stage that provides people with the opportunity to ask for services they need. However, there are also disadvantages in relying solely on data emanating from such processes for estimating unmet need. The disadvantages of submission-based funding models are well documented, and, as indicated by the peak discussions, can be a particular problem for some population groups including Indigenous people.

A crucial aspect of data improvement is to build onto the investments already made, most notably the CSDA MDS.