1   Introduction

1.1   What is the National Community Services Data Dictionary?

Under the National Community Services Information Agreement, the *National Community Services Data Dictionary* is the authoritative source of community services data definitions where national consistency is required or desired.

The Dictionary is designed to improve the comparability of data across the community services field. It is also designed to make data collection activities more efficient, reducing duplication of effort by providing standards for core data items, and more effective, by ensuring that information to be collected is appropriate to its purpose. NCSIMG members have committed their jurisdictions to adopt wherever possible the NCSDD definitions. The Dictionary may also be useful in providing a checklist for those developing data collection tools, such as surveys, to ensure that all possible responses are covered, at least in aggregate form. In essence, the aim is to provide a 'common language' for the various agencies and organisations involved in community services.

The development of the *National Community Services Data Dictionary* is an ongoing process, reliant on the support and professional input of a range of community services data development groups. The National Community Services Information Management Group, the National Community Services Data Committee, the Disability Data Reference and Advisory Group, Home and Community Care Officials, the Supported Accommodation Assistance Program Data and Research Advisory Committee and the Australian Bureau of Statistics have been major contributors to the implementation and development of the dictionary.

The first version of the Dictionary was published by the National Community Services Data Committee in 1998 (AIHW, 1998). It contained definitions for 11 data concepts and 32 data elements, as well as Version 1.0 of the National Community Services Information Model (NCSIM). This model, which constitutes the first step toward establishing an information model for the community services sector, forms the information structure for both the initial and current version of the data dictionary.

This current volume of the *National Community Services Data Dictionary*, Version 2, is a considerable expansion and upgrade of the previous version. Definitions of data elements and concepts contained in Version 1.0 have been revised according to the outcomes of discussions with community services data development groups and the Australian Bureau of Statistics. In addition, Version 2 contains 65 new data elements and concepts, broadening the scope and coverage of the dictionary. It also includes additional Information annexes to assist users to interpret particular data items or groups of data items.

As such, this second version provides a major step in the process of providing a comprehensive and authoritative source of community services data definitions, and a good base for a continuing cycle of consultation and testing. Readers are invited to comment on any aspect of the National Community Services Data Dictionary by completing and returning the lift-out feedback form included at the back of this publication.

Comments and suggestions can also be provided electronically via the Feedback area on the Knowledgebase in the AIHW web site, www.aihw.gov.au.

1.2 Objectives of the National Community Services Data Dictionary

The development of the National Community Services Data Dictionary and the Information model are two of the principal objectives and strategies of the *National Community Services Data Committee.* As outlined in the NCSDC Action Plan for 1999–2000 the objective of the dictionary is to:

> *Communicate a coherent set of data standards that improve the availability and maintenance of high-quality data about the needs of the community, the services provided, and the outcome of these services, including any unmet demand. Give priority to the development of quality performance information that can be reliably compared across jurisdictions and between services through adoption of common terminology, definitions, classifications and code sets.'* (NCSDC, 1999).

The data dictionary aims to:

Set information about Australia's community services sector within a logical framework, which is provided by the National Community Services Information Model:

- provides a structure for further development of community services information;
- more clearly illustrates the relative relationships of detailed community services information, as well as gaps, overlaps and duplications, than does a stand-alone list of elements;
- facilitates understanding of relationships between individual entities and their attributes; and
- aids in implementing compatibility with the existing Knowledgebase and the *National Health Data Dictionary.*

Describe in internationally standardised form:

- data elements commonly applicable in the community services sector for which a reasonable degree of consistency of measurement exists;
- data elements important across the community services sector currently lacking standardisation by cooperatively attempting to describe the common features; and
- 'good practice' items (such as certain Australian Bureau of Statistics {ABS} standards) which have potential for good use locally in data collection.

Promote consideration of opportunities for further development and rationalisation of activities:

- by describing not just the common, but the less common items as well, in order to stimulate thoughts on improvements to existing collections; and
- stimulate thoughts on priorities for future development and utilisation.

These initial objectives and aims should provide a systematic basis for ongoing information development activity in the community service sector plus a clear focus on the need for enhanced comparability, quality and utility of data through the application of consistent, reliable data standards.

The National Community Services Data Committee intends to make pro-active use of the Dictionary in identifying frontiers for future information development initiatives.

2　Version 2 of the Dictionary

2.1　Data elements and concepts in Version 2 of the Dictionary

Version 2 of the dictionary contains revised definitions of elements and concepts contained in Version 1.0 plus a considerable number of new data elements and data concepts. To help ensure that the Dictionary continues to be an authoritative source of nationally agreed data definitions, the decision was made to focus on already developed and tested material as a source of new data items and concepts for inclusion in this Version. Three main collections were identified for this purpose – the Commonwealth and State Disability Agreement Minimum Data Set (CSDA), the Home and Community Care Minimum Data Set (HACC) and the Supported Accommodation and Assistance Program Data Collections (SAAP). Most of the data elements and concepts selected from these three collections required some modification prior to inclusion in the data dictionary. This largely involved changing the relevant information to ensure that the data element is applicable across community services programs, rather than being specific to one program. A list of data elements from these three collections and details regarding their inclusion (or exclusion) from this version of the data dictionary are included in Appendix 1.

It should be noted that while the focus was on the three collections, other data collections and sources were also reviewed for possible data items to be included in Version 2 of the dictionary (for example, the NSW Human Services Data Dictionary which is currently under development).

The development of the dictionary is necessarily an ongoing process, with each version expanding the scope and coverage. As the dictionary becomes more widely used there will be an increased demand for more data items to be included from other community services collections. In addition, each version will result in a review of existing content, based on practical experience of its use, and in relation to changes in the community services sector.

The data concepts and data elements included in the data dictionary have been agreed to by the National Community Services Data Committee (see Appendix 2 for a description of the function of the committee) and endorsed by the National Community Services Information Management Group (NCSIMG). All definitions in this dictionary are also available on the Knowledgebase: Australia's Health and Community Services Data Registry (the Knowledgebase). See Appendix 3 for a description of the Knowledgebase.

2.2　How to use the information on data elements and concepts

Format of the data elements and concepts

The data elements and concepts (or variables or items) contained in the dictionary are described and defined using a standard format or template endorsed by the National Community Services Information Management Group. This standard format is based on ISO/IEC 11179 *Specification and Standardization of Data Elements* – the International Standard for defining data elements issued by the International Organization for Standardization and the International Electrotechnical Commission. For consistency and ease of use, this standard is the same as has been used for the National Health Data Dictionary.

The standard rules applied to each data element definition are designed to ensure that each is clear, concise, unambiguous, comprehensive and provides sufficient information to ensure that all those who collect, provide, analyse and use the data, clearly understand its meaning. These rules describe the data. In technical terms these rules are called metadata – or data about data.

An illustration of how the format is used to define a particular data item in this dictionary is shown in Box 1. A detailed description of each component of the format is given in Appendix 4.

Box 1: The National Community Services Data Dictionary format or template

The data dictionary template is a format for presenting data definitions in a standard, concise and useful manner. It requires a particular process to be followed when defining a discrete piece of information. The process is basically about answering certain key questions about the information:

What is it that you want to know about?	**DEFINITION**
Who wants to know it and why?	**CONTEXT**
Is it the most recent information?	**ADMIN. STATUS**
	DATA ELEMENT VERSION NO.
What is the range of possible answers?	**DATA DOMAIN**
How are the answers coded?	**DATA TYPE**
Which one of the possible answers should I choose?	**GUIDE FOR USE**
How and when should this information be obtained?	**COLLECTION METHODS**
What other information is connected to this information?	**RELATED DATA**
Where did this definition come from?	**SOURCE DOCUMENT**
	SOURCE ORGANISATION
What else do I need to know to understand this definition?	**COMMENTS**

Note: A detailed description of each component of the format is given in Appendix 4.

2.3 Using the data domain

The development of definitions and data domains that are to be useful at the national level can be a considerable challenge. There is often a conflict between being general enough to be applicable to all community services areas while at the same time specific enough to meet the needs of individual data collections. For many data elements, individual collections require more specific information than is appropriate for inclusion in a national data dictionary (as this level of detail is not required by other data collections or may not be appropriate to other collections).

For example, in the children's services area, the categorisation of family type into the 5 categories in the data dictionary may be insufficient. It may be important to know if the children are dependent or independent, or how old they are (requiring further categorisation than in the data dictionary).

For most data elements and concepts the NCSDD provides generic definitions and data domains, that is – applicable across all areas of community services. As a result, the level of detail contained may not be specific enough for individual data collections, and the data domain at too broad a level. In these cases data collectors are encouraged to develop their own more specific sub-categories (and sub-sub categories if required) within the broader categories provided in the dictionary. This means that data collected can still be mapped to the data domains set out in the data dictionary and will still be comparable with other collections. How this would be achieved for the above example, and for a second example from HACC, is shown in Box 2.

The examples in Box 2 are very simple ones. Basically, individual collections can develop their own codes and categories to suit their purposes, but for the benefit of national consistency these should be able to be 'mapped' or 'aggregated' to the data domains within the NCSDD, preferably in a hierarchical way. For national consistency, the NCSDD categories should be the minimum level collected.

In addition, individual collections can use a combination of data elements from the NCSDD to collect information for their own specific purposes. For example, it may be important to collect information about

a carer's age, sex and indigenous status. While there is no specific data items in the dictionary called Carer's age, Carer's sex or Carer's Indigenous status there are definitions for 'Informal carer' and definitions and data domains for 'Age', 'Sex' and 'Indigenous status' that can be combined to provide appropriate data items for collection purposes. Age, Sex and Indigenous status may also be combined with other data items, such as Client. Similarly, Informal carer may be combined with other data elements such as Marital status, First language spoken, Geographic identifier etc. Box 3 provides a further example of combining data elements to provide more specific information.

Box 2: Data domains – mapping from individual collections to the data dictionary

Example 1

The NCSDD element 'Family type' has 5 levels. However in children's services it may be important to collect more detailed information on the types of children – dependent or independent (that is a nested hierarchical classification). Thus a classification that could be used by Children's services that would still map to the data dictionary would be as shown in the second column below:

NCSDD categories	**Example collection (Children's services data domain)**
1. Couple family with children	1. Couple family – dependent children 2. Couple family – independent children
2. Couple family without children	3. Couple family without children
3. One parent family	4. One parent family – dependent children 5. One parent family – independent children
4. Other family	6. Other family
9. Not stated/inadequately described	9. Not stated/inadequately described

Example 2

A second example illustrates the mapping on a data item (Relationship of carer to care recipient) used in the HACC data collection to the NCSDD.

NCSDD categories	**HACC data domain**
1. Spouse/partner	1. Wife/female partner 2. Husband/male partner
2. Parent	3. Mother 4. Father
3. Child	5. Daughter 6. Son
4. Child-in-law	7. Daughter-in-law 8. Son-in-law
5. Other relative	9. Other relative – female 10. Other relative – male
6. Friend/neighbour	11. Friend/neighbour – female 12. Friend/neighbour – male
9. Not stated/inadequately described	99. Not stated/inadequately described

Box 3 Example of combining data elements from the NCSDD

A data element from the NCSDD may be combined with one or more other data elements to obtain information that will suit the individual needs of data collectors. The following illustrates how this could be done for Labour force status and Employment status (full-time/part-time).

NCSDD categories	**Example collection**
Labour Force Status	Labour force and employment status
1 Employed	1 Employed
2 Unemployed	11 Working full time
3 Not in the Labour Force	12 Working part time
	2 Unemployed
Employment status (full-time/part-time)	21 Looking for full-time work
1 Full- time	22 Looking for part-time work
2 Part-time	3 Not in labour force
9 Not stated/inadequately described	9 Not stated/inadequately described

2.4　Additional information on how to use the data dictionary

Each data definition contains the minimum procedural information necessary to achieve national consistency and comparability. However, the Dictionary does not necessarily contain all the details required for the reporting and administration of a national data collection over time. For example, those responsible for the ongoing management of a national data collection may also need to issue additional guidelines or instructions on data validation processes, file structures, data collection methodologies etc, to ensure that information collected meets the required standards of their collection. Additional information may also be required on use and collection methods for specific collections.

2.5　Information annexes

To assist users obtain maximum benefit from the information contained in the dictionary, a series of 'Information annexes', consisting mainly of explanatory notes on particular data elements or groups of elements, has been included in this version. These annexes should aid in the further understanding of both the information presented and the relationships between data elements and information needs. They are located in Chapter 4 and referred to in the text of the relevant data element or data concept.

3 Data concepts and data elements

3.1 Introduction

This Chapter contains definitions of individual data elements and data concepts that were considered by the National Community Services Data Committee in 2000 and subsequently endorsed by the Management Group. These definitions are presented in a standard agreed format (as described in Chapter 2 and detailed in Appendix 4) that is also used in presentation of definitions in the *National Health Data Dictionary*. The scope of the dictionary is also discussed in Chapter 1. The definitions of data elements and concepts included do not by any means provide exhaustive coverage of all relevant definitions in the community services sector, but it is hoped that subsequent versions of the Dictionary will progressively include a more extensive range of agreed upon, widely-applicable, data elements and concepts.

3.2 Organisation of this chapter

To increase ease of use of the dictionary, data items and concepts in Version 2 are presented in order of the National Community Services Information Model, Version 1. A list of data elements and concepts in alphabetical order is provided at the beginning of this report.

A list of data elements and concepts, grouped according to the model entity and sub-entity to which they are an attribute, is also provided, along with a diagram of the entire model. A detailed explanation of the model and model entities is located in Appendix 5.