5 Future directions

This chapter details the expected and potential developments in NMDS reporting for mental health care. The NMDS reporting for mental health care is currently in a developmental phase with only patient-level data being reported for admitted patients in hospitals and only establishment-level data for the community sector. The first year of client-level data is being collected for ambulatory community mental health care services, but has yet to be collated or reported.

Data development priorities for hospital and community data sets have been identified by the National Mental Health Information Strategy Committee (ISC) and are detailed in sections 5.1 and 5.2. Section 5.3 explores the nationally agreed priorities for mental health information and the role the NMDSs could undertake in attaining these priorities.

Admitted patient mental health care

The established NMDS for admitted patient mental health care specifies demographic and clinical information to be collected for individual separations with specialised psychiatric care. These data are collected from all hospitals in Australia to form components of the mainstream National Hospital Morbidity Database at the AIHW. An establishment-level data set describing characteristics and resources of hospital mental health care has yet to be agreed. Potential developments for the patient-level and establishment-level data sets are outlined below.

Establishment-level

Data on the characteristics and mental health care activity of hospitals are currently captured by the National Public Hospital Establishments Database (NPHED) and the National Survey of Mental Health Services (NSMHS), conducted by the National Mental Health Working Group (NMHWG). NPHED data on mental health care in hospitals are limited to public psychiatric hospitals, with a small amount of information on the distribution of psychiatric units in public acute care hospitals.

The NSMHS is an annual survey that collects activity, staff and expenditure data for both hospital and community-based mental health services. It was developed to provide data to monitor the progress of the National Mental Health Strategy. When it commenced, it was planned that the NSMHS would not continue beyond the life of the Strategy, which potentially ends in 2003. Given these limitations of the NPHED data with respect to psychiatric units and the potential conclusion of the NSMHS, the ISC has recommended that future strategies for collecting establishment-level data be reviewed. Options include the enhancement of the existing NPHED collection to include data on specialised psychiatric units in acute care hospitals and additional data for public psychiatric hospitals, to replace data currently collected in the NSMHS.

Patient-level

The NMDS—Admitted Patient Mental Health Care, covering admitted patients treated in specialised mental health hospital services, was agreed for collection from 1 July 1997. The

NMDS includes a range of demographic, administrative and clinical data elements, some of which are unique to the mental health care collection, such as *Type of usual accommodation* and *Referral to further care (psychiatric patients)*. The data elements agreed for inclusion in the NMDS for 2001–02 are listed in Table 5.1.

Table 5.1: Data elements[a] that constitute the NMDS—Admitted Patient Mental Health Care for 2001–02

Data element	Specific to specialised mental health care	Knowledgebase[b] identifier
Identifiers		
Establishment identifier (made up of)		000050
State identifier		000380
Establishment sector		000379
Region code		000378
Establishment number		000377
Person identifier		000127
Sociodemographic items		
Sex		000149
Date of birth		000036
Country of birth		000035
Aboriginal and Torres Strait Islander status		000001
Marital status	✔	000089
Employment status	✔	000317
Area of usual residence		000016
Type of accommodation/Type of usual accommodation	✔	000173
Service and administrative items		
Type of episode of care		000168
Previous specialised care	✔	000139
Admission date		000008
Separation date		000043
Total leave days		000163
Mode of separation		000096
Source of referral	✔	000150
Referral to further care	✔	000143
Total psychiatric care days	✔[c]	000164
Mental health legal status	✔[c]	000092
Clinical items		
Principal diagnosis		000136
Additional diagnosis		000005
Diagnosis Related Group		000042
Major Diagnostic Category		000088
Intended length of stay		000076

(a) All data elements are defined in the *National Health Data Dictionary*, Version 10.0 (NHDC 2001).

(b) The Knowledgebase: Australia's Health, Community Services and Housing Metadata Registry can be accessed through the AIHW web site at www.aihw.gov.au.

(c) Collected for all patients but relevant only to specialised psychiatric care.

Following the release of the first year of NMDS—Admitted Patient Mental Health Care data in *Institutional Mental Health Services in Australia 1997–98* (AIHW: Moore et al. 2000), the AIHW conducted a detailed review of the extent of data provision and the relevance of the data to the National Mental Health Strategy. The review highlighted several key areas where the NMDS required further development to enhance its capacity to provide data for service delivery evaluation, policy and planning. Using this information, the NMDS subcommittee of the ISC identified a number of data development priorities for the NMDS.

Economic disadvantage

The ISC has recognised that the inclusion of a measure of economic disadvantage in the NMDS would have significant policy and planning advantages. For this reason, there have been several attempts to include one or more measures of economic disadvantage in the NMDS. *Pension status—psychiatric patients* was originally included in the NMDS to provide a proxy for information on economic disadvantage. A 1999 review found this data element was difficult to keep up to date with changing pension categories. The data element was subsequently retired from the NMDS, from 1 July 2000.

Employment status is currently included in the NMDS as a basic indicator of socioeconomic status. *Employment status* is currently not reported for the majority of specialised separations. The ISC has also expressed concern with the usefulness of this data element as an indicator of economic disadvantage and has recommended the consideration of a more detailed data element to record the principal source of income of the patient.

Living arrangements

There has been significant interest among jurisdictions in obtaining data on the level of informal support patients receive at home. The *Marital status* data element may measure aspects of the informal support received, but it has been argued this provides an incomplete picture. The ISC has recommended that some form of living arrangements data element should be developed and considered for inclusion in the NMDS. The retention of the *Marital status* data element was also recommended on the basis of being an identified correlate of mental illness, with divorced and separated respondents having higher rates of depressive disorders (ABS 1998).

Type of usual accommodation

Type of usual accommodation provides another type of socioeconomic-related information about patients receiving specialised mental health care, as well as acting as an indicator of the use of some community services. The review of the reporting of *Type of usual accommodation* by jurisdictions for the 1997–98 financial year indicated that only one jurisdiction was using the full range of responses available for this data element. Jurisdictions indicated concern at the limited number and type of data domains available for the data element. *Type of usual accommodation* has seven data domains including house/flat, independent unit as part of retirement village, hostel, psychiatric hospital and acute hospital.

There is an alternative data element called *Type of accommodation* that is available for use in this data set. *Type of accommodation* has fourteen data domains including the *Type of usual accommodation* domains with the exception of acute hospital. It also includes more detailed service-related accommodation domains such as specialised alcohol/drug treatment residences, homeless persons' shelter and specialised mental health community-based residential support service. The NMDS subcommittee will review *Type of accommodation* to

see if it answers the identified concerns, and if it does not, it will proceed with further data development.

Service use patterns

Source of referral to public psychiatric hospital, Referral to further care (psychiatric patients) and *Mode of separation* together provide an indication of service use patterns. The data domains for *Source of referral to public psychiatric hospital* include referral from private psychiatric practice, other private medical practice, other public psychiatric hospital, other health care establishment and law enforcement agency. The data domains for *Referral to further care (psychiatric patients)* include referral to private psychiatrist, other private medical practitioner, mental health/alcohol and drug in-patient facility, mental health/alcohol and drug non-in-patient facility and acute hospital. The data domains for *Mode of separation* include discharge to acute hospital, residential aged care service, psychiatric hospital, other health care accommodation and several non-location-specific discharges such as transfer, death and statistical discharge.

Although these data elements have been implemented, jurisdictional differences suggest that either definitional interpretations or service provision patterns are not uniform across States and Territories. A review of the usefulness of the data domains of these data elements has been recommended by the NMDS subcommittee.

The National Health Data Committee (NHDC) has proposed a system-wide data element development process to provide more broadly applicable definitions for these items. A classification that can be used to report on *Source of referral* (currently *Source of referral to public psychiatric hospitals*), *Referral destination* (currently *Referral to further care (psychiatric patients)*) and *Mode of separation* will be a priority. The ISC has recommended that the unique needs of the mental health care NMDS be catered for in the new definitions being developed for NHDC and NHIMG endorsement.

Community mental health care

There are two NMDSs agreed for the community mental health care: an establishment-level NMDS describing characteristics and resources of community-based mental health care services, and a client-level NMDS providing demographic and clinical information on individual service contacts.

The establishment-level NMDS data have been collated and presented for the first time in this publication, but the client-level community mental health care data are not yet available. Details of the potential data development for both the establishment-level and client-level data sets are given below.

Establishment-level

The collection of the NMDS—Community Mental Health Establishments data by the States and Territories commenced in July 1998. The data elements are presented in Table 1.3 (p.9).

The establishment-level community data set currently excludes services operated by non-government organisations and residential care services that are staffed for less than 24 hours per day. It needs to be determined whether the scope of the NMDS should be extended to include these services. Such a change would be well regarded by those jurisdictions with proportionally more invested in service types currently outside the NMDS.

There is an issue with the variation in the level at which establishments data are reported. Several jurisdictions identify their community mental health establishments at a regional level, which can include numerous individual service units. This contrasts with other jurisdictions that identify individual service units as their establishments. This variation limits the capacity to link and interpret establishment-level expenditure with client-level activity data. As multiple service unit establishments can include both ambulatory and residential services, the variation could also limit the extent to which the staffing and expenditure data for the two service types can be distinguished and reported on. To rectify this, attention needs to be directed at the level at which States and Territories identify their community mental health establishments.

Different approaches to including or excluding indirect expenditure and depreciation may have been taken by jurisdictions. The reporting of indirect expenditure and depreciation to the NCMHED needs to be standardised.

Unlike hospital establishment data sets, the NMDS—Community Mental Health Establishments currently does not require the jurisdictional reporting of subcategories of the *Total salaries and wages*, *Total non-salary operating costs* and *Total full-time-equivalent staff* data elements, only the totals. More detailed comparisons between community and admitted patient service delivery and between service types would be possible if the capacity to report subcategories was developed. At present, there are three jurisdictions where the reporting of these subcategories is not possible.

Client-level

The client-level data elements collected for each service contact in ambulatory community mental health care were agreed for collection from 1 July 2000 (see Table 5.2 below). The coverage of the client-level NMDS—Community Mental Health Care is confined to those services that are classified as 'ambulatory', i.e. non-admitted services (including hospital-based) and non-residential care services in community settings.

The NMDS subcommittee identified a need to align the sociodemographic data elements collected in the admitted patient and community mental health care data sets. This will allow some analysis of the population using community mental health care and comparison between the two service type categories. In the 2000–01 collection, the admitted patient data set includes eight sociodemographic data elements and the community data set includes three.

From 1 July 2001, the NMDS will include *Marital status*, *Area of usual residence* and *Country of birth* data elements. The remaining two admitted patient mental health care sociodemographic data elements not found in the community data set (*Employment status, Type of usual accommodation*) were assessed as too difficult to implement for the 2001–02 collection period. In addition, these data elements are under some review as components of the admitted patients NMDS.

The NMDS subcommittee's review of the implementation of the 2000–01 community mental health care data set highlighted a number of data development priorities, as detailed below. The recent implementation of the client-level community data set and the DHAC-funded Information Development Plans has meant that the need for a consolidation period for jurisdiction mental health information providers remains high. Therefore, these data development priorities have been targeted for the 2002–03 collection. Work is expected to be undertaken in 2001 to identify and implement the most appropriate strategy for these priority data developments.

Table 5.2: Data elements[a] that constitute the NMDS—Community Mental Health Care for 2001–02

Data element	Knowledgebase[b] identifier
Establishment identifier (made up of)	000050
State identifier	000380
Establishment sector	000379
Region code	000378
Establishment number	000377
Person identifier	000127
Sex	000149
Date of birth	000036
Aboriginal and Torres Strait Islander status	000001
Marital status[c]	000089
Area of usual residence[c]	000016
Country of birth[c]	000035
Mental health legal status	000092
Principal diagnosis	000136
Service contact date	000402

(a) All data elements are defined in the *National Health Data Dictionary*, Version 10.0 (NHDC 2001).

(b) The Knowledgebase: Australia's Health, Community Services and Housing Metadata registry can be accessed through the AIHW web site at www.aihw.gov.au.

(c) First collection from 1 July 2001.

Establishment identifier

The *Establishment identifier* data definition does not currently reflect the community mental health care capacity for mobile service delivery; instead, it identifies the establishment as the location of the service event. This is an issue for a number of data sets where the service can be delivered in a mobile fashion (e.g. community nursing, alcohol and other drug treatment services), and will need to be considered in consultation with the relevant expert groups.

Alignment with NMDS—Admitted Patient Mental Health Care

As mentioned above, the NMDS subcommittee has identified a need to broadly align the data elements collected in the admitted patient and community mental health care data sets. For this reason, consideration from the perspective of the community mental health care data set will be given to data developments occurring in the admitted patient collection, including *Type of usual accommodation, Principal source of income*, *Living arrangements, Source of referral* and *Referral destination.* Details of these developments can be found in section 5.1.

Residential services

Further work is required to identify the most appropriate strategy for client-level data to be collected from community-based specialised mental health residential services. It may be possible a census of clients in these services conducted at 30 June each year will be sufficient for providing information regarding service delivery.

Service characteristics

At present, there are no data elements in the data set that describe the character of the service provided. This has been identified by most jurisdictions as a major concern and a priority for further development. Potentially, the service provided could be characterised by the setting, the duration, the type of health care worker involved, whether it is a group or individual session, and the service or intervention type.

A critical consideration for describing the service character is to define the period of time to be characterised. The current NMDS involves a unit record for every service contact. Should the collection remain solely a service contact-based data set, then each service contact would need to be characterised in some way. The alternative is to develop an episode concept, which would allow the service character data elements to be attached to the episode. The difficulty with developing an episode concept is agreeing on a definition that bundles related service contacts together. Resolution of these service characteristic issues is likely to form a major part of the NMDS subcommittee's data development activities in the future.

Principal diagnosis

The ISC has agreed that the data element *Principal diagnosis* requires future development for use in community mental health care. The NMDS specifies that the principal diagnosis is reported using ICD-10-AM codes but many jurisdictions have identified concerns with the level of ICD-10-AM coding experience and resources for coding within the community mental health care sector. For this reason, the National Centre for Classification in Health (NCCH) has been contracted by the DHAC to develop a simplified ICD-10-AM mental health subset for use in community-based mental health services. The subset will provide a specific set of codes for mental health-related diagnoses (including diagnostic criteria) and mental health-related interventions. The aim of the initiative is to develop a portable and accessible subset of the ICD-10-AM that is acceptable to the community-based mental health services sector but still allows mapping between data reported for community and admitted patient care.

The core classifications to be used to develop the subset are the ICD-10-AM, the ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines (WHO 1992) and the ICD-10 Classification of Mental and Behavioural Disorders: Diagnostic Criteria for Research (WHO 1993). The subset will be aligned with ICD-10-AM, 3rd edition, scheduled for implementation in July 2002. As an interim measure, the NCCH has produced mapping tables which provide the ICD-10-AM code which best matches the codes in the *Pocket Guide to the ICD-10 Classification of Mental and Behavioural Disorders*. This pocket guide is currently being used in a number of jurisdictions until the Australian subset becomes available.

The project will also provide a national training program for mental health professionals in the application of the ICD-10-AM subset both in terms of the diagnostic criteria and the coding process itself. The mapping tables and additional information on the subset are available on the NCCH web site (www.cchs.usyd.edu.au/ncch).

Future roles for NMDSs

The previous two sections outlined immediate data development priorities identified by the ISC for admitted patient and community components of the NMDSs—Mental Health Care. This section takes a longer term perspective and explores the nationally agreed priorities for mental health information and the manner in which the NMDSs—Mental Health Care could

support these priorities. Four priorities were agreed by Commonwealth, State and Territory governments to guide information developments under the second plan of the National Mental Health Strategy (DHAC 1999). These four priority areas were:

- to strengthen the focus on consumer outcomes
- to support improvements in service quality
- to shift the focus of concern from cost to value for money
- to improve understanding of population needs.

The development of the NMDSs—Mental Health Care under the National Health Information Agreement has established a consistency of data standards that is essential for national collection and reporting. As the scope of these nationally agreed data sets expands and the level of data provision improves, the capacity for the NMDSs to contribute to the national mental health care information priorities will be further enhanced. Below are a number of ways in which the NMDSs—Mental Health Care may support the four priority areas.

Consumer outcomes

The focus on measuring consumer outcomes in the Second National Mental Health Plan has generated extensive information development activities. The DHAC has made substantial funds available, in the form of Commonwealth Information Development Grants, to State and Territory health authorities to fund relevant research and system development activities. These include the trial implementation of consumer outcome instruments such as the Health of the Nation Outcome Scales (HoNOS) and the Life Skills Profile (LSP).

The introduction of routine outcome measures on a national basis alone would not fully inform the debate about treatment outcomes. Mental health care in admitted patient health care settings can be of short duration and outcome measures may have limited ability to provide useful information on outcomes. Other indicators from the NMDSs such as source of referral and referral to further care could provide context for outcome information by enabling service utilisation patterns to be better understood.

Casemix

Like the consumer outcome measurement process, the focus on implementing a casemix system in the Second National Mental Health Plan has also generated extensive information development activities. The Mental Health Classification and Service Costs (MH-CASC) Project was undertaken between 1995 and 1998 to develop the first version of a national casemix classification, with associated cost weights, for specialist mental health services (Buckingham et al. 1998). The Commonwealth Information Development Grants are supporting further casemix implementation activities within States and Territories. Data collected through the NMDS—Admitted Patient Health Care assists the development of casemix classification for the hospital sector and there is potential for the NMDS—Admitted Patient Mental Health Care and NMDSs—Community Mental Health Care to do likewise for specialist mental health services.

Performance indicators

Under the First Plan of the Strategy, objectives were set that required the collection of data for monitoring service mix reforms (Australian Health Ministers 1992). Emphasis was placed on measuring the shifts from admitted patient care to community-based services and, within

admitted patient care, the closure of psychiatric hospitals and provision of specialised psychiatric services provided by acute care hospitals. The lack of available mainstream health service data during the first period of the Strategy has been a major driver in the development of the mental health information development activities to date.

Performance indicators for mental health services required under the Australian Health Care Agreements have not yet been developed. However the ISC has undertaken to identify a range of indicators that will monitor service delivery in accordance with the objectives of the Second Plan of the National Mental Health Strategy. Depending on which performance indicators are selected, the NMDSs—Mental Health Care may be able to assist in the collection, collation and reporting of the components of the indicator set.

Understanding of population needs

Historically, the NMDSs—Mental Health Care were based on the requirement to provide information to answer the five-part question 'Who receives what services, from whom, at what cost, and to what effect?' Currently, the NMDSs have the capacity to provide detailed information for the first three parts of this question. The NMDSs can readily provide information on client characteristics and service utilisation for admitted patient and community-based services. The current demographic information could be further developed to enhance our understanding of social and cultural correlates of mental health service utilisation. Alternatively, information from the NMDSs may be able to be combined with relevant population measures of need to provide an indication of unmet need.

In summary, the NMDSs have the potential to support many of the national information priorities under the Second National Mental Health Plan. However, there is a need for ongoing development if the NMDSs are to undertake these roles.