5 Future directions

This chapter outlines the expected developments in NMDS reporting for mental health care. Data presented in this publication represents only a portion of the full collection which is anticipated for reporting in a complete form in 2002. At this stage only patient level data collected in hospitals is available for NMDS reporting and, as previously discussed, these data are presented as a first release in Chapter 2. Other data presented in this report has been provided to offer a context for the data that are agreed for collection at present (that is for admitted patients in hospital). Data presented in Chapter 3, for example, provides information on institutions and has been extracted from the National Public Hospital Establishments Database (NPHED). However, these data on mental health services in hospitals are mostly limited to public psychiatric hospitals with a small amount of information on the distribution of psychiatric units in public acute care hospitals. The lack of detailed information for these specialised units constitutes a substantial gap in the broader NMDS collection. As indicated in Chapter 4, data are not yet available on patients or service delivery in the community, however information on services will be included in the 1998–99 report and information on the clients of community mental health services will be collected from July 2000.

Ongoing work will be undertaken on the NMDS—mental health care during the 2000 annual cycle of data development activities under the National Health Information Agreement. Several data elements collected for the NMDS—institutional mental health care will be reviewed. Data on services reported at the establishment level for the NMDS—community mental health care will be released in the latter months of 2000 and in the process of publication these data will also be reviewed. Information on clients of community services will not be available until 2002, as implementation of the collection in jurisdictions is not to occur until July 2000.

5.1 Institutional services data development

The National Mental Health Information Strategy Committee (NMHISC) has guided the development and data standards for the NMDS—institutional mental health care. The work has included developing a strategy to identify patients in specialised psychiatric services in hospitals, recommending NMDS data element amendments and collection implementation to the National Health Data Committee, and working with data providers in States and Territories to validate and approve the NMDS data that are presented in the current report.

Background

The first step toward the collection of NMDS data was the agreement in 1995 to include *total psychiatric care days* and *mental health legal status* in the *National Health Data Dictionary* and implementation of the two data elements in the broader NMDS—institutional health care from 1 July 1996. The full NMDS—institutional mental health care, covering admitted patients treated in specialised mental health public hospital services, was agreed for collection from 1 July 1997.

The full NMDS—institutional mental health care includes *total psychiatric care days* and *mental health legal status* and a range of demographic, administrative and clinical data elements, some of which are unique to the mental health care collection, for example *type of usual accommodation*, *previous specialised treatment* and *referral to further care (psychiatric patients)*. All data elements included in the NMDS are listed in Table 1.1.1. Data that were collected for the 1997–98 year were reported to AIHW by State and Territory central health

authority data providers and were collated within the NMDS—institutional health care dataset.

Future developments

The NMDS—institutional mental health care requires further development based on the results from the first year of its collection and on requirements to improve the data standards for better use as strategic information for evaluating and monitoring service delivery, and to inform policy and planning.

Total psychiatric care days

The usefulness of the data element *total psychiatric care days* has been reviewed during 1999 and problems in analysis have been identified where data cannot be directly attributed to the financial year in which it is reported. This occurs in cases where a patient episode includes both psychiatric and non-psychiatric care and crosses over reporting periods; in such cases analysis cannot discern the financial reporting period in which the psychiatric care occurred. The usefulness of the data for strategic purposes under the National Mental Health Strategy will need to be reviewed and new or improved data standards put into place.

Collection development

Data development is required to improve information standards. A classification that can be used to report on *source of referral* (currently *source of referral to public psychiatric hospitals*) and *referral destination* (currently *referral to further care (psychiatric patients)*) will be a priority during 2000. The NMHISC has recommended that an improved code be developed for National Health Data Committee (NHDC) and National Health Information Management Group (NHIMG) endorsement, and the work will progress during 2000.

A new data element is needed to replace *Pension status—psychiatric patients* which, following review during 1999, is not adequate to provide information about the extent to which admitted patients are in receipt of government benefits. The data element was originally included in the NMDS in order to provide a proxy for information on economic disadvantage. In this case, the NMHISC has recommended that a data element *principal source of income* be developed and trialled during 2000 for inclusion in the NMDS in future years.

5.2 Community services data development

There are two components planned for the NMDS—community mental health care: establishment-level data describing characteristics and resources of community-based services and patient-level data providing demographic and clinical information.

Background

The collection of the NMDS—community mental health care, establishment-level data, was agreed by the NHDC in October 1997, and endorsed by NHIMG in November 1997. States and Territories commenced collecting establishment level data from 1 July 1998. The data elements that form this component of the NMDS are presented in Table 5.2.1.

Patient-level community mental health data are agreed for collection from 1 July 2000. The data elements requested are presented in Table 5.2.1.

The coverage of the patient level NMDS—community mental health care is to be confined to those services that are classified as 'ambulatory', that is non-admitted/non-residential care,

and will be identified by States and Territories.

Table 5.2.1: Endorsed National Minimum Data Set—community mental health care, establishment-level data elements agreed for collection from 1 July 1998

Agreed for collection in NMDS—community mental health care	Knowledgebase identifier	Ambulatory services	Residential services
Establishment identifier	000050	Required	Required
Separations	000205	n.a.	Required
Geographic location	000260	Required	Required
Number of available beds	000255	n.a.	Required
Total full-time equivalent staff	000252	Required	Required
Salaries and wages	000254	Required	Required
Payments to visiting medical officers	000236	Required	Required
Non-salary operating costs[(a)]	000360	Required	Required

(a) This data item is derived from data elements E10-E20, and replicates an equivalent data item currently reported to the National Survey of Mental Health Services.

n.a. Not available.

Table 5.2.2: Proposed National Minimum Data Set—community mental health care, showing data elements that are agreed for collection at the patient level by States and Territories

Data element[(a)]	NHDD item code
Establishment identifier	000050
Person identifier	000127
Sex	000149
Date of birth	000036
Aboriginal/Torres Strait Islander status	000035
Mental health legal status	000092
Principal diagnosis	000136
Service contact date	000141

(a) The data elements *total psychiatric care days*, *additional diagnosis*, *number of contacts (psychiatric outpatient clinic/day program)* and *number of service contact dates*, previously agreed for collection from July 2000, are now retired.

Future developments

Further work will be undertaken in 2000 to identify the most appropriate strategy for patient-level data to be collected from community-based specialised mental health residential services. It is likely that a census of patients in these services conducted at 30 June each year will be sufficient for the purposes of informing service delivery and other data requirements.

Mental health legal status

The data element *mental health legal status* has been amended for collection from 1 July 2000. The amendment is required because the data element cannot be collected for the community-level NMDS in Queensland and Western Australia, and the structural/system difficulties in these jurisdictions are not likely to be resolved in the foreseeable future. The data element is considered essential in describing community mental health care, so an additional code is to be used by Queensland and Western Australia, where it is not possible to provide mental health legal status under legislative arrangements.

Service event information

The NMDS will include a unit record with a person identifier for every contact and report the eight elements required for the NMDS—community mental health care. The NMDS for patient level data includes *service contact date*. All service contacts should be reported for each patient, date stamped. Where more than one contact occurs on the same date, multiple records will be provided. The data will be collated into a relational database at AIHW. In addition to this data element, a service type classification is planned as a future data development.

The two data elements *number of contacts (psychiatric outpatient clinic/day program)* and *number of service contact dates* have been retired from the initial NMDS agreement and replaced by s*ervice contact date* as described above.

Principal diagnosis

The data element p*rincipal diagnosis* requires future development for use in community mental health. However, the process for developing an appropriate alternative classification to ICD-10 AM may take some time and is not likely to be available for implementation in administrative systems for several years. A working group of NMHISC is undertaking a project to identify a simplified reporting procedure in community settings and a recommendation will be taken forwarded to NHDC at a later date. This work would be undertaken in consultation with other community health data developments.

In addition to the work to be undertaken regarding information on diagnosis in the community, the development of data elements that describe a broader range of 'issues' or 'reasons for client contacts' with mental health services will progress during 2000. The additional classification has been identified as an essential component of a comprehensive dataset that will describe mental health consumers and the activities of service providers. In many instances, providers assist clients in areas such as the development of social skills, or in financial management, as well as treating the symptoms of diagnosed disorders.

5.3 Potential uses of the NMDS data

A standard dataset is required to monitor the delivery of specialised mental health services. The data are required for comparison across jurisdictions and over time. The NMDS—mental health care is being developed under the National Health Information Agreement in order to ensure the reliability and consistency of data standards for collection and reporting.

In addition to the standard reports of the annual NMDS collection, the datasets have the potential for broader use in the future.

National Information Priorities and Strategies

The development of the NMDS—mental health care to date has been based on the requirement to provide information against the question 'Who receives what services, from whom, at what cost and to what effect?'. The current data requests have been modified to accommodate feasibility of collection, and also to include data on ad hoc issues such as the usual accommodation of clients/patients of mental health services. The data have been developed to provide:

- a description of client characteristics;
- the capacity to monitor service utilisation; and
- the capacity to identify the direct cost of services.

The proposed, updated information request satisfies the range of requirements listed above to the best ability of current information systems, and provides a basis for future developments that will support the requirements of the Second National Mental Health Strategy. The range of new requirements have been identified by the AHMAC Mental Health Working Group. Broad information is required for development in order to report against the principles of the Second Strategy, which are to:

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

There is a recognised need to further develop the NMDS dataset as discussed above; however, the range and detail of data, and the information framework now in place to collect information on community-based services, has the capacity to provide the mechanism for a range of data requirements that underpin the National Information Priorities and Strategies under the Second National Mental Health Plan 1998–2003 (CDHAC 1999). Future developments will include recommendations to extend or amend the current framework.

Development of outcomes measurements

A newly developed objective under the Second Plan of the National Mental Health Strategy is to strengthen the focus on consumer outcomes. There is a need to develop mechanisms for the regular review and reporting of outcomes for clients where serious mental health problems and the symptoms of mental disorder are the central component of clinical care and case management.

Outcomes of mental health services can be described at the level of whole populations (e.g. suicide rates), for service systems (e.g. percent of discharges to homeless shelters) or at the level of the individual consumer. The latter may be assessed directly, such as by the use of special scales that measure change in health status, or indirectly through the use of one or more proxy indicators (e.g. hospital readmission rates).

Instruments for measuring consumer outcomes are not routinely used, nor are such data collected for reporting to central health authorities. In response to the need to monitor consumer outcomes, information developments have been initiated by the Commonwealth Department of Health and Aged Care to identify suitable measures that would be available for use in routine clinical practice for monitoring the progress of the individual patient, and would also be suitable for monitoring outcomes at the broader service level.

A range of instruments have been assessed by the Commonwealth Department of Health and Aged Care that have the capacity to deliver information against these requirements. These instruments have included the Health of the Nation Outcome Scales (HoNOS), the Role Functioning Scale (RFS), the Life Skills Profile (LSP), the Behaviour and Symptom Identification Scale (BASIS), the Mental Health Inventory (MHI) and the Medical Outcomes Study Short Form 36 (SF-36).

While some of these instruments are to be trialed in service delivery settings, there are no plans at present to introduce such data requirements into NMDS reporting. However, the structure of the patient-level component of the NMDS that has been agreed for implementation in community-based services provides an information framework that could be utilised for collecting these measures.

Record linkage

Record linkage offers an opportunity to overcome limitations in existing national datasets, such as the National Hospital Morbidity Database which is separation-based and not patient-based, and from which the NMDS—institutional mental health care is extracted. In the future, record linkage may also be used to link data that are obtained from community-based services with data from hospital-based collections.

There is increasing work being undertaken in the area of record linkage, or data linkage, to provide information on the range of services accessed by an individual, to estimate the number of individuals being served by a service or a group of services, and to better describe client profiles. Record linkage is the matching of data records relating to a particular individual within a database or between databases. In Australia, these techniques have been used to link a number of datasets in Western Australia (described in Holman et al. 1999) to explore issues such as hospitalisation patterns over the last year of life, estimation of the incidence of hospital admissions for illicit drug problems and to investigate suicide rates among admitted psychiatric patients (Brameld et al. 1998; Lawrence et al. 1999; Patterson et al. 1999). Data linkage has also been explored in relation to Home and Community Care (HACC) services, national labour force databases, and assessment of integrated service delivery models, and is being considered for use in linking Medicare and Pharmaceutical Benefits Scheme data with other datasets (Bentley et al. 1998).

Data linkage undertaken for statistical or research purposes differs from linkage undertaken for clinical or administrative purposes as it does not attempt to identify the individual but makes use of a derived linkage key to undertake probabilistic matching of records that are likely to belong to the same individual. It should be noted that statistical record linkage tolerates some degree of error in matching records that would not be acceptable if linkage was for administrative or clinical purposes, as a small proportion of errors should not greatly affect the value of the linked information for statistical purposes.

In mental health service delivery, record linkage has significant potential in evaluating and monitoring service delivery. Clients frequently receive care from more than one agency or facility—particularly where both admitted patient and non-admitted patient services are provided or the patient has multiple admissions to a service that is not able to report linked separations. Record linkage may provide the means of generating a profile of patients receiving mental health services in terms of the number of individuals receiving care and the number (and type) of services received. Record linkage is of particular relevance in mental health service delivery, which has a substantial potential to be more efficiently managed across a continuum of care. In particular, the identification of costs and outcomes of clinical pathways relies on a record linkage capacity.

The success of record linkage activities, however, is dependent on the identification of a suitable data linkage key with an acceptable error and duplication rate. Privacy considerations must also be addressed and decisions to use record linkage must balance

mental health service provider and policy requirements for data in this area against the rights to privacy of the individuals being treated.

Reporting against performance indicators

Under the First Plan of the Strategy, objectives were set by Health Ministers that directed the collection of data for monitoring service reforms, in particular the shifts from institutionalised care to community-based services, and within institutionalised care the closure of psychiatric hospitals and maintenance of specialised psychiatric services provided by acute hospitals (Australian Health Ministers 1992). There were no mainstream health service data available during the first period of the Strategy to inform these processes, and the information gap was a major driver in the development of the NMDS data released in the current report and in the future data developments described above.

Performance indicators are not yet developed for mental health services. However, these are required under the Australian Health Care Agreements and the NMHISC 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. Future developments in NMDS data standards and reporting are expected to provide a large part of the strategic information requirements of the Australian Health Care Agreement (AHCA) process as well as those of the Second Plan of the Strategy.