

4 Development of a NMDS for alcohol and other drug treatment services

Efforts to develop an agreed NMDS for alcohol and other drug treatment services have occurred within the processes established by the National Health Information Agreement (NHIA). Under the NHIA, the Commonwealth, States and Territories are committed to working with the Australian Institute of Health and Welfare (AIHW), the Australian Bureau of Statistics (ABS) and others to develop, collate and report on national health information. The Agreement establishes mechanisms for developing and collecting national data (see Appendix A). The National Health Information Management Group (NHIMG), which oversees the National Health Information Work Program, manages the Agreement. Data development work undertaken within this framework must first be agreed at a conceptual level by the National Health Data Committee (NHDC) and may then be agreed for collection by the NHIMG.

4.1 Initial development of the NMDS

The first phase of the current NMDS project was a joint feasibility study conducted by the National Drug and Alcohol Research Centre (NDARC) and the Alcohol and Other Drugs Council of Australia. The feasibility study reviewed existing data collection practices and procedures in all States and Territories and concluded that although there were national and regional disparities, the data collected by agencies generally contained the same basic client and service delivery data (Rankin & Copeland 1997). The study also proposed a set of data elements for collection in alcohol and other drug treatment services, based on a framework from the National Health Information Model (AIHW 1996) and data definitions provided in the *National Health Data Dictionary Version 6.0* (NHDC 1997).

On completion of the feasibility study, the National Drug Strategy Unit in the Commonwealth Department of Health and Aged Care took responsibility to oversee carriage of phase two—the development of the NMDS for alcohol and other drug treatment services. In September 1998, the Intergovernmental Committee on Drugs (IGCD) recommended the establishment of an interim working group to implement phase two, comprising representatives from interested jurisdictions (initially New South Wales, Victoria, Queensland and South Australia), the AIHW, the NDARC and the Commonwealth Department of Health and Aged Care. Under a Memorandum of Understanding with the Department of Health and Aged Care, the AIHW is responsible for the management of definitional developments and collection strategies for the NMDS under the provisions of the NHIA.

Development of the NMDS for alcohol and other drug treatment services has been undertaken in consultation with other relevant health information data development activities (e.g. the national data sets developed for admitted patients mental health care, community mental health care, and palliative care). This is to ensure and promote uniformity and consistency of data items across these related collections.

During 1998, a process for integrating data developments in health and community services at the AIHW was established as a means of promoting consistent data standards across different sectors. The development of the NMDS for alcohol and other drug treatment services thus takes into consideration developmental work and collection practices of a wide range of stakeholders represented in the AIHW collections.

Consultation with other peak bodies, for example the National Centre for Research into the Prevention of Drug Abuse, and the Alcohol and Other Drugs Council of Australia has also been undertaken. A comprehensive list of organisations for inclusion in the national consultation process was developed on advice from representatives of the Intergovernmental Committee on Drugs NMDS Working Group and is attached in Appendix B.

In March 1998, NDARC conducted a survey of approximately 100 alcohol and other drug treatment services across all jurisdictions to assess the likely response at the agency level to the project. The majority of respondents (92%) supported the development of a national data set. Also, as part of the developmental work, consultative forums (conducted by NDARC) have been held in the States and Territories to provide alcohol and other drug treatment agencies the opportunity to participate in the development of the NMDS. Following this research, a proposed set of data elements was developed.

4.2 Pilot study

The National Drug and Alcohol Research Centre conducted a pilot study of the proposed set of data elements for the NMDS with 19 agencies nationally, over a six-week period between June and August 1998. The purpose of the pilot study was to test the data set content and definitions that had been developed in workshops with service providers, and to test the ability of agencies to collect this data consistently. The type of support and systems that were in place was also identified (Conroy 1998). Analysis of the pilot study data has been reported in the publication *National Minimum Data Set Project for Alcohol and Other Drug Treatment Services: Report on the Pilot Study and Recommended Set of Data Definitions* (Conroy & Copeland 1998). The information in this report, including feedback from staff of participating agencies, has been used to inform further development of the NMDS.

The pilot study collected information on the following data elements:

- establishment identifier
- date episode commenced
- person identifier
- client status
- date of birth
- sex
- country of birth
- indigenous status
- source of income
- type of usual accommodation
- living situation
- previous treatment for alcohol and other drug problems
- source of referral

- presenting problem drug
- secondary problem drug
- method of use for presenting problem drug
- method of use for secondary problem drug
- agency program type
- main type of service provided
- other type of service provided
- reason for treatment termination
- referral to further care
- problem drug treated
- methadone dose
- date episode terminated.

4.2.1 Summary of pilot study data

A total of 1,388 clients were recorded over the six-week period, and 95% of clients were in treatment for their own substance use (see Table 4.1). The mean age was 32 years for substance users, with the majority of users male (70%) and born in Australia (84%). Alcohol use was the most common presenting problem, followed by heroin use, although opiates as a combined group (including heroin, methadone and other opiates) exceeded alcohol in prevalence.

From this information, the proposed data elements were examined and evaluated and a revised data set was developed.

Table 4.1: Characteristics of clients of treatment services, pilot study, 1998

Client characteristics	1998
Total number of clients	1,388
Client type	
Substance users (%)	95
Relative/friend (%)	5
Mean age (years)	32
Male (%)	70
Born in Australia (%)	84
Most prevalent presenting problem drugs	
Alcohol (%)	36
Heroin (%)	29
Cannabis (%)	11

Source: Conroy & Copeland (1998).

4.3 NMDS development during 1999

The NMDS for alcohol and other drug treatment services has since become a national project. In January 1999, it was agreed to expand the IGCD NMDS Working Group to include at least one health representative from each jurisdiction and representatives from the ABS were also invited. Throughout 1999, development work on the NMDS was conducted by the AIHW with the assistance of the IGCD NMDS Working Group. The AIHW convened the Working Group during this period, taking responsibility for the role of secretariat as well as chairing the meetings.

4.3.1 Statement of purpose and NMDS objectives

The IGCD NMDS Working Group developed the following statement of purpose, which has been endorsed by the IGCD to provide the basis for data development work:

There is an urgent requirement for data development and collection implementation which will provide timely and accurate data to support the delivery of alcohol and other drug treatment services in Australia. The information strategy will be developed under the National Health Information Agreement and will be designed to monitor and evaluate the key objectives of the National Drug Strategic Framework, and to assist States and Territories in the planning, management and quality improvement of services.

In addition to the statement of purpose, the IGCD NMDS Working Group identified the following objectives of the NMDS. The aim of the NMDS is to:

- monitor broad patterns of service utilisation by clients;
- monitor access to services for specific population groups;
- inform planning and development of service delivery strategies; and
- support the development of strategies for benchmarking.

In addition, a number of specific issues that require client-level information have been identified, including:

- number of clients and contacts per treatment type;
- client utilisation of services (e.g. a community-based equivalent of 'average length of stay', and including an indication of 'completion' rates);
- client characteristics in terms of demographic factors;
- reasons for clients to seek services and treatment;
- the types of services received by clients; and
- client referral patterns (e.g. source of referral).

4.3.2 Content of the NMDS

The IGCD NMDS Working Group developed the content of the NMDS using the pilot study list as a starting point for data elements to be collected nationally. Proposed data elements were assessed by the Working Group in terms of the need and suitability for national collection and the likelihood of collection occurring in all jurisdictions. For each proposed data element, the Working Group devised a standard definition and a guide for use. Data elements were only included in the NMDS when the following criteria had been satisfied:

- there had been consensus reached by the Working Group with regard to the need for collection of the data element at the national level;

- it had been established that collection of the data element in all jurisdictions was achievable; and
- a standard definition and guide for use had been agreed upon by the Working Group.

As a result of these requirements, a number of the data elements included in the pilot study conducted by NDARC were excluded from the initial content of the NMDS (e.g. source of income, type of usual accommodation, and living situation). This does not mean however, that these data elements will not be considered for future inclusion.

Data elements included in the NMDS were mapped to the National Health Information Model, which is a high-level framework for national information development and management, providing the broad categories of information required within the health sector. Table 4.2 identifies the entities in the National Health Information Model to which data elements of the NMDS for alcohol and other drug treatment services relate.

Table 4.2: Mapping of data elements for the National Minimum Data Set—alcohol and other drug treatment services to National Health Information Model entities

Entities	Data elements
Organisation characteristic	Establishment identifier Establishment type
Person role Recipient role	Client type Person identifier
Person characteristic Demographic characteristic Social characteristic	Sex Date of birth Country of birth Indigenous status Preferred language
Health and welfare service event Request for/entry into service event	Source of referral to alcohol and other drug treatment service Date of commencement of treatment
Person event Other life event	Method of use for principal drug of concern Injecting drug use
Need/Issue	Principal drug of concern Other drugs of concern
Location Address	Geographic location of establishment

The NMDS was endorsed by the IGCD in July 1999 and received in-principle support from the National Health Data Committee in September 1999, subject to some minor alterations. In December 1999, the Commonwealth and State and Territory Governments, through the NHIMG, endorsed the NMDS for alcohol and other drug treatment services for collection to commence on 1 July 2000.

Establishment-level and client-level data were requested for collection from 1 July 2000. Both pre-existing *National Health Data Dictionary* Version 8 (AIHW 1999c) data elements and new data elements were included in the data set. Table 4.3 presents the data elements endorsed by the IGCD, the NHDC, and the NHIMG for collection from 1 July 2000. Table 4.3 also indicates the items that were pre-existing data elements in the *National Health Data Dictionary* (NHDD) and those that were new items in version 9. Full details of each data element as included in the *NHDD Version 9.0* (AIHW 2000a) are provided in Appendix C. Three additional data elements, *Cessation of treatment*, *Reason for cessation of treatment* and *Date of cessation of treatment*, were included in the *NHDD Version 9.0*, but were not proposed for collection at 1 July 2000.

Table 4.3: Data elements for the NMDS—alcohol and other drug treatment services, endorsed for collection from 1 July 2000

Data element	NHDD Code	Existing NHDD data elements	New data elements
Establishment-level data elements			
Establishment identifier (comprised of)	000050	✓	
— State identifier	000380	✓	
— Establishment sector	000379	✓	
— Region code	000378	✓	
— Establishment number	000377	✓	
Establishment type	000327	✓	
Geographic location of establishment	000260	✓	
Client-level data elements			
Establishment identifier	000050	✓	
Person identifier	000127	✓	
Sex	000149	✓	
Date of birth	000036	✓	
Country of birth	000035	✓	
Indigenous status	000001	✓	
Preferred language	000132	✓	
Client type	000426		✓
Date of commencement of treatment	000430		✓
Source of referral to alcohol and other drug treatment service	000444		✓
Principal drug of concern	000443		✓
Other drugs of concern	000442		✓
Method of use for principal drug of concern	000433		✓
Injecting drug use	000432		✓

4.3.3 Scope of collection

Alcohol and other drug treatment service providers included within the scope of the NMDS comprise all publicly funded (at State and/or Commonwealth level) government and non-government agencies that provide one or more specialist treatment services to clients with alcohol and/or other drug problems.

The following are *not* within scope of the collection:

- alcohol and other drug treatment services based in prisons and other correctional institutions;
- agencies that provide primarily accommodation or overnight stays such as ‘halfway houses’ or ‘sobering-up shelters’;
- agencies that provide services primarily concerned with a preventative or educational emphasis such as needle and syringe exchanges;
- admitted patients in psychiatric hospitals or general hospital wards; and
- methadone treatment services.

Methadone treatment services are excluded because of the complexity of the service delivery structure and the range of agencies and practitioners involved. A separate collection for methadone clients will be collated directly from State and Territory registers.

4.3.4 Supply of data to AIHW

The data will be forwarded to the AIHW annually by each State and Territory. The data will be requested for each financial year reference period (1 July to 30 June). In collating the data into a national database, a formal validation process will be followed to maximise data quality. A report will then be prepared which will include results at both the national and at the State/Territory level. No individual service provider or individual client will be identified in the report.

The *Australian Institute of Health and Welfare Act 1987* prescribes strict conditions to ensure the security of the data held and managed by the Institute. The AIHW Act provides for strict penalties (including imprisonment) for breaches of confidentiality. AIHW staff—including those in collaborating units—cannot be forced to reveal confidential AIHW data, even in a court of law.

4.4 Profile survey of alcohol and other drug treatment services

Also during 1999, the AIHW and the IGCD NMDS Working Group developed a survey to establish a profile of agencies in each State and Territory and to assess the capacity of jurisdictions to collect the NMDS. More specifically, the survey aimed to provide information about the type of alcohol and drug treatment services provided by agencies, the location of clients for which services are provided, the reporting activity of agencies, and the number of agencies that collect agreed NMDS data items.

All NMDS items agreed for collection from 1 July 2000 were included in the survey. Information was also collected for items identified as potential data elements for future use.

Within each State or Territory, a nominated Working Group member coordinated the distribution and collection of surveys. Publicly funded government and non-government agencies were included in the survey sample. Completed surveys were sent to AIHW for data entry and analysis.

It should be noted that the survey was not intended for research purposes but rather was intended to provide information regarding the readiness of service providers to begin collection of the NMDS. See Appendix D for a copy of the survey form.

4.4.1 Sample

Survey responses from 425 agencies were included for analysis. Estimates of agency numbers obtained from States and Territories indicated that approximately 600 agencies would be included in the sample (i.e. have a survey form mailed to them). Alcohol and other drug treatment services not included in the coverage of the NMDS collection (e.g. prisons, 'sobering-up shelters', and 'half-way houses') were excluded from the analysed survey sample. Likewise, agencies identified exclusively as methadone treatment services were not included. Note that agencies providing services in addition to methadone treatment, and agencies for which it could not be established that methadone treatment was the only service provided, were included in the sample.

4.4.2 Findings for national data

The findings as reported here are for national data only.

Table 4.4 shows that approximately 50% of agencies classed their service type as 'general community', comprised primarily of community health centres that provide an alcohol and drug treatment service as a component of the overall health centre program. Approximately 43% of agencies provide 'non-residential centre-based care', comprised primarily of units engaged in the provision of acute or rehabilitative ambulatory or home-care services for patients with alcohol or other drug dependencies. Approximately 26% of agencies provide 'residential centre-based care', comprised primarily of alcohol and other drug residential treatment centres engaged in the treatment, rehabilitation or harm reduction of alcohol and other drug dependence on a residential basis. Approximately 18% of agencies provide services to 'admitted patients', comprised primarily of specialist detoxification and/or rehabilitation units that are located in a hospital.

Table 4.4: Number of agencies by type of alcohol and other drug treatment services, national data 2000

Service type ^(a)	Number	Per cent of services (N=425) ^(b)
Admitted patient	76	17.9
Residential centre-based care	111	26.1
Non-residential centre-based care	184	43.3
General community	213	50.1

(a) Note that classifications of service type were self-identified and agencies may have selected more than one.

(b) The total number of agencies for which surveys were returned and data entered.

Table 4.5 presents the number of agencies by the area of service (metropolitan, rural or remote). Approximately one-third of agencies indicated that they provide services to clients in metropolitan areas only. Likewise, one-third provide services to clients in both rural and metropolitan areas. Approximately one-quarter of agencies provide services in rural areas only. A high number of agencies (39%) indicated that they provide services to clients living in remote locations. Note that classifications of areas were self identified by agencies and therefore subject to inconsistency as to how 'remote' locations are defined.

Table 4.5: Number of agencies by location to which services are provided (metro, rural and remote), national data 2000

Area of service ^(a)	Number	Per cent of services (N=425) ^(b)
Metro areas only	137	32.2
Rural and metro areas	137	32.2
Rural areas only	108	25.4
Total	382	89.9
Remote locations	167	39.3

(a) Note that classifications of area of service were self-identified and agencies may have selected remote locations in addition to rural and metro areas, and rural areas only.

(b) The total number of agencies for which surveys were returned and the data entered.

Table 4.6 shows that approximately 72% of agencies in the sample indicated that they were required under a funding service agreement to supply data related to treatment services (excluding methadone) to a State or Territory health department. For those agencies that do supply data, the majority (67%) report on a regular basis (at least quarterly). Approximately 91% of all agencies indicated that they routinely collected information on clients accessing their treatment services.

Table 4.6: Number of agencies by reporting requirements, national data 2000

Reporting Requirements	Number	Percent of services (N=425)(a)
Required to supply data to State or Territory health department	305	71.8
How often report: quarterly (includes monthly)	205	48.2
six-monthly	45	10.6
annually	54	12.7
Collect info on clients accessing types of treatment services provided	388	91.3

(a) The total number of agencies for which surveys were returned and the data entered.

Information was also gathered on the data items that agencies routinely collect, with the aim of finding the extent to which NMDS items were collected. Table 4.7 presents the number of agencies that collect each data item, and shows that the item *Sex* was collected by the most agencies (95%), followed by the item *Date of birth* (94%). The item *Method of use for principal drug of concern* was collected by the fewest number of agencies (61%) closely followed by the item *Preferred language* (64%). The majority of items are collected by approximately 80% of agencies, with an average collection rate of 82.5% recorded across all data items. Most importantly, a total of 189 agencies (45%) indicated that they collect all NMDS items.

As indicated in Table 4.7, 61% of agencies reported that they collect additional information. Additional information commonly collected by agencies included *Marital status*, *Accommodation*, *Employment status*, *Source of income*, *Current medication*, *Period of substance abuse*, *Previous treatment* and *Legal history*.

Table 4.7: Number of agencies that collect information on clients who access treatment services, by data items and how data is recorded, national data 2000

Data elements	Agreed to collect 1 July 2000	Number	Per cent of services (N=425) ^(a)
Person identifier	✓	344	81.0
Socio-demographic items			
Sex	✓	402	94.6
Date of birth	✓	398	93.6
Country of birth	✓	374	88.0
Indigenous status	✓	371	87.3
Preferred language	✓	274	64.5
Client type	✓	340	80.0
Service and administrative items			
Source of referral	✓	390	91.8
Service type		363	85.4
Service contact date		385	90.6
Other services provided		284	66.8
Date of entry into treatment	✓	380	89.4
Reason for cessation of treatment		332	78.1
Date of cessation treatment		348	81.9
Clinical item			
Principal drug of concern	✓	383	90.1
Other drugs of concern	✓	372	87.5
Method of use for principal drug of concern	✓	260	61.2
Injecting drug use	✓	303	71.3
None of these collected		14	3.3
Other items collected		258	60.7
Items recorded			
Paper records		341	80.2
Electronic records		262	61.6
Collect all NMDS data elements		189	44.5

(a) The total number of agencies for which surveys have been returned and the data entered.

4.4.3 Issues of quality

- The self-report style of the survey means that the validity of the reported data is questionable, as some inconsistency was present in the interpretation of questions and the classification of service types and areas of service provision.