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# **Report on the evaluation of the National Minimum Data Set for Public Hospital Establishments**

Australian Institute of Health and Welfare  
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# Abbreviations

ABS	Australian Bureau of Statistics
ACHS	Australian Council on Healthcare Standards
ACT	Australian Capital Territory
AHCA	Australian Health Care Agreement
AHMAC	Australian Health Ministers' Advisory Council
AHSAC	Australian Hospital Statistics Advisory Committee
AIHW	Australian Institute of Health and Welfare
ASCO	Australian Standard Classification of Occupations
ATC	Anatomic Therapeutic Chemical
DRG	Diagnosis Related Group
DVA	Department of Veterans' Affairs
HDSC	Health Data Standards Committee
HEAC	Health Expenditure Advisory Committee
HSA	Health Service Agreements
IFRACS	Admitted patient fraction
LGA	Local Government Area
NHCDC	National Hospital Cost Data Collection
NHDC	National Health Data Committee
NHDD	<i>National health data dictionary</i>
NHIG	National Health Information Group
NHIMPC	National Health Information Management Principal Committee
NMDS	National Minimum Data Set
NPHEd	National Public Hospital Establishments Database
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Cooperation and Development
PHEC	Australian Bureau of Statistics' Private Health Establishments Collection
Qld	Queensland
SA	South Australia
SIMC	Statistical Information Management Committee
SLA	Statistical Local Area
Tas	Tasmania
Vic	Victoria
WA	Western Australia
WHO	World Health Organization

# Summary and recommendations

The evaluation of the National Minimum Data Set (NMDS) for Public Hospital Establishments was conducted by the Australian Institute of Health and Welfare (AIHW) for the Australian Health Ministers' Advisory Council (AHMAC). Funding for the evaluation was provided by AHMAC through the Statistical Information Management Committee (SIMC).

The quality, usefulness and appropriateness of the NMDS were assessed. Recommendations have been made for future data development to improve the quality and comparability of the data collected.

The evaluation involved reviews of:

- compliance, that is, the extent to which data for 2003–04 were provided by states and territories in accordance with the specifications in the *National health data dictionary* (NHDD 2003).
- utility. Data collectors and users were surveyed using a tool similar to that designed for the evaluation of the Admitted Patient Care NMDS (AIHW 2003). An additional questionnaire addressed state and territory reporting practices for expenditure and revenue.

The recommendations for new or modified data elements (together with priorities for data development) are summarised below. Any proposals arising from these recommendations will be submitted for approval to the Health Data Standards Committee (HDSC), the SIMC and then to the National Health Information Management Principal Committee (NHIMPC, formerly the National Health Information Group).

The recommendations are discussed in Chapters 3 to 6 of this report.

## Overall findings

The respondents to the survey undertaken as part of the evaluation consider the NMDS to be both important and useful.

The scope of the collection is currently limited to hospital services provided by public hospitals. There was broad support to encompass other public hospital services within the scope of the collection. This could include services funded by state and territory health authorities including those provided by private hospitals under contract arrangements (subject to commercial-in-confidence arrangements).

A more comprehensive picture of public hospital services would thus be obtained.

Comparisons could be made with data collected by the AIHW for the reporting of state and territory governments' expenditure and funding for health, as well as data published by the ABS based on the Private Health Establishment Collection (PHEC).

## Overall recommendations

It is recommended that options to extend the scope of the NMDS from public hospitals to public hospital services be examined. A possible model similar to that adopted for the new

Mental Health Establishments NMDS involves hierarchical reporting. Data would be collected at establishment (and possibly campus) level. Additional data would be collected at state, regional, network/area level, reflecting the organisation of hospital services within each state and territory. These arrangements would encompass the provision of public hospital services through contracting with privately operated entities (subject to any commercial-in-confidence arrangements). Such a structure would allow the double counting associated with inter-hospital transactions to be reconciled at the higher levels of the organisational hierarchies. As with the NMDS for Mental Health Establishments, data collection relating to private hospitals would not be as detailed as for public hospitals.

Establishment identifiers could be developed to indicate relationships between individual hospital service units and higher levels of the organisational hierarchy. These enhanced identifiers would enable data to be reported against the different reporting entities depending on the nature of the data element and aggregated to higher levels as appropriate.

There is a need to revise the current description of the scope of the NMDS as it includes a reference to Department of Veterans' Affairs hospitals which no longer exists. This revision would not change the scope of the NMDS as it would bring the current description up to date. If the scope of the NMDS is to expand to encompass Government health services the description will require additional amendments.

Recommendation: Consider restructuring the NMDS to extend its scope to encompass public hospital services, rather than public hospitals, and incorporation of hierarchical structuring and establishment identifiers.

Recommendation: Revise the description of the scope of the NMDS for Public Hospital establishments.

Priority: High

## **Recommendations relating to data elements**

### **System level expenditure elements**

#### **Capital expenditure, version 1**

This data element has become obsolete because of the adoption of accrual accounting and reporting practices in all jurisdictions.

Recommendation: Delete.

Priority: High.

#### **Capital expenditure—gross (accrual accounting), version 2**

#### **Capital expenditure—net (accrual accounting), version 2**

Some respondents to the survey commented that the capital expenditure was poorly defined and inaccurately and inconsistently reported. In part, the problems may stem from reporting exclusively at the hospital level rather than at region or state/territory level. These definitions need to be reviewed following the development of a restructured NMDS and aligned with those used for the reporting of capital expenditure through the 'Government health expenditure' NMDS, which is under development.

Recommendation: Retain, pending the assessment of proposals to introduce a hierarchical reporting structure for the NMDS.

Priority: Medium.

### **Indirect health care expenditure, version 1**

This data element is defined as ‘Expenditures on health care that cannot be directly related to programs operated by a particular establishment...’ It relates to expenditure, which in large part is not incurred on public hospital services per se and accordingly the data element is outside of the scope of the NMDS. It would appear to be an appropriate data element for the new ‘Government health expenditure’ NMDS.

Recommendation: Delete.

Priority: High.

## **Establishment identification elements**

A reconfiguration of the establishment identification elements is required to underpin any hierarchal reporting structure. The recommendations in this report foreshadow the introduction of such a structure.

### **Establishment identifier, version 4**

The establishment identifier is derived using the state/territory identifier, establishment sector, region code, area/network code and establishment number. The existing identifier is deficient because of inconsistencies in the assignment of identifiers by the states and territories. As a consequence, national comparisons of data are difficult to achieve. The establishment sector should not continue to be a part of the identifying data element (see recommendation in relation to the Establishment sector, version 3 (below)).

There will be a need to review this following the introduction of any hierarchal reporting structure.

Recommendation: Review.

Priority: High.

### **Establishment number, version 4**

A numbering arrangement is used to identify separate establishments.

Recommendation: Retain.

### **Establishment sector, version 3**

In this context, the *Establishment sector* is an attribute of the entity delivering the service and not a method for identifying the service itself. A distinction in the NMDS between public hospitals and private hospitals providing public hospital services is seen to be useful. This could require consideration of the definition for privately operated public hospital services. Such a change would provide the means for combining the data reported from this NMDS with that reported by the Australian Bureau of Statistics (ABS) through the PHEC without double counting.

Recommendation: Amend to distinguish public hospitals from privately operated public hospital services.

Priority: Low.

## **Region code, version 2**

The NHDD defines this data element as the geographical or administrative area for the location of the establishment. The coding used needs to reference the administrative structure used by the state/territory to categorise the provision of health services within their jurisdictions rather than the geographical locality.

Recommendation: Amend to specify that it applies to administrative rather than geographical region.

Priority: High.

## **State/territory identifier, version 3**

Recommendation: Retain.

## **Establishment type, version 1**

Comments indicated a need to up-date this element. There is a need for further work to be undertaken on reviewing the definition and domain values for this data element with the objective of rationalising the numerous concepts involved.

It may be possible to adopt a simpler classification of 'hospital type', for example reflecting the peer groups in the AIHW's peer group classification used for *Australian hospital statistics*, particularly for the types of hospitals that are not assigned a peer group based on activity levels and/or location.

The Report of the Evaluation of the Admitted Patient Care NMDS which was conducted in 2002 recommended that the collection of information on whether the hospital is a public psychiatric, other public, private freestanding day hospital facility or other private hospital be replaced with either an appropriate revision of the data domain for 'Establishment sector', or the creation of a new data element on 'hospital type'. Responding to this recommendation, the AIHW has undertaken preliminary work to develop the proposed new data element. This work could form the basis for up-dating the 'Establishment type' data element.

Recommendation: Review.

Priority: High.

## **Geographical location of establishment, version 2**

Recommendation: Retain.

## **Establishment level expenditure elements**

Suggestions were received to revise the input and output categories for expenditure in the NMDS to achieve a more useful representation of hospital expenditure. Some proposed a closer alignment of expenditure categories with those reported in the National Hospital Cost Data Collection.

Consistent with accrual accounting practices, the reporting needs to be in terms of 'expenses' rather than expenditure or payments, and more generally the definitions need to be updated to accord with current accounting practices.

The states/territories are inconsistent in their reporting of recruitment costs, fringe benefits tax, equipment-leasing arrangements and building/garden maintenance by an outside agency.

More and better quality information is being sought on health expenditure outputs. Output categories could include admitted patients (acute, specialised, rehabilitation and other), non-admitted patients and emergency departments. The development of admitted patient cost proportions (or IFRACs) could then be included as a formal data element, at least for admitted patients but also possibly for non-admitted outpatients and emergency department patients.

Recommendation: Incorporate the revision of recurrent expenditure data elements in any new program of data development work relating to the NMDS. In addition, amend the NHDD to clarify the categories for the reporting of recruitment costs, fringe benefits tax, equipment-leasing arrangements and building/garden maintenance by an outside agency.

Recommendations for improvements of specific items are outlined below.

Priority: High.

### **Administrative expenses, version 1**

Recommendation: Retain, subject to the overall review of recurrent expenditure categories as outlined above.

### **Interest payments, version 1**

Methods of measuring this data element vary between jurisdictions, with some gaps in reporting.

Recommendation: Review to improve the consistency of measurement and reporting among jurisdictions.

Priority: Low.

### **Depreciation, version 1**

Methods of measuring this data (including the use of different depreciation schedules) vary between jurisdictions.

Recommendation: Review in conjunction with the review of capital expenditure items, to improve the consistency of measurement and reporting among jurisdictions.

Priority: Medium.

### **Patient transport, version 1**

This data element is not consistently collected and reported by jurisdictions.

Recommendation: Review to improve consistency across jurisdictions.

Priority: Low.

### **Repairs and maintenance, version 1**

Recommendation: Retain, subject to the overall review of recurrent expenditure categories as outlined above.

### **Superannuation employer contributions (including funding basis), version 1**

The reference in the title to 'including funding basis' is misleading and confusing.

Recommendation: Delete the reference to 'including funding basis'.

Priority: Medium.

### **Domestic services, version 1**

Recommendation: Retain, subject to the overall review of recurrent expenditure categories as outlined above.

### **Payments to visiting medical officers, version 1**

Recommendation: Retain, subject to the overall review of recurrent expenditure categories as outlined above.

### **Drug supplies, version 1**

Some respondents to the survey supported a disaggregation of this category, for example using WHO's Anatomic Therapeutic Chemical (ATC) classifications.

Recommendation: Review to consider a disaggregation into categories.

Priority: Low.

### **Food supplies, version 1**

Recommendation: Retain, subject to the overall review of recurrent expenditure categories as outlined above.

### **Medical and surgical supplies, version 1**

Similar comments to those received in relation to drug supplies were provided. A greater disaggregation of this category was considered likely to improve its usefulness.

Queensland, Victoria and South Australia include purchased pathology services in *Medical and surgical supplies*. Radiology services may also be included in some states. This is inconsistent with the NHDD definition for *Medical and surgical supplies*. However, the recurrent expenditure categories omit contracted or state-wide pathology or radiology services. It is likely that some of these issues can be resolved through the introduction of a hierarchical reporting structure.

Recommendation: Review to consider a disaggregation into categories.

Priority: High.

Recommendation: Consider how best to include or exclude state-wide and contract pathology and radiology services.

Priority: Low.

## **Other recurrent expenditure, version 1**

This is a balancing item and described as such in the NHDD. In some cases, negative amounts are reported. This could suggest errors in reporting against other items in the NMDS although further investigation may be required to verify this.

Recommendation: Retain.

## **Salaries and wages, version 1**

A review of staffing categories was supported. The compliance report also found problems in the reporting of registered nurses and other personal care staff. Categories could possibly be reviewed against the ABS *Australian standard classification of occupations*. They could also be reviewed with a view to aligning them with wider requirements for health labour force planning, for example to complement health care professional registrations and survey data. Comments on individual categories are outlined below.

Recommendation: Review, in conjunction with the review of *Full-time equivalent staff* categories.

Priority: Medium.

### **Salaries and wages—registered nurses**

#### **Salaries and wages—enrolled nurses**

Two states were unable to report registered nurses separately from enrolled nurses.

Recommendation: Review the category split for registered and enrolled nurses.

Priority: Medium.

### **Salaries and wages—student nurses**

Since 1998-99, the only jurisdiction to report against this category was South Australia, which did so for 2002-03 and 2003-04.

Recommendation: Delete subject to clarification of South Australia's use of this category.

Priority: High.

### **Salaries and wages—trainee/pupil nurses**

Trainee or pupil nurses have not been reported by any jurisdiction since 1997-98.

Recommendation: Delete.

Priority: High.

### **Salaries and wages—salaried medical officers**

Recommendation: Retain.

### **Salaries and wages—other personal care staff**

Other personal care staff are either not reported at all, or included with other categories, for a majority of jurisdictions.

Recommendation: Review, with a view to its deletion.

Priority: High.

### **Salaries and wages—diagnostic and health professionals**

Recommendation: Retain, subject to changes consequent upon the deletion of the *other personal care staff* category.

### **Salaries and wages—administrative and clerical staff**

It has been suggested that medical and nursing staff engaged in administrative duties not be counted as staff employed in clinical work.

Recommendation: Retain, subject to changes consequent upon the deletion of the *other personal care staff* category and include details of medical and nursing staff engaged in administrative duties.

### **Salaries and wages—domestic and other staff**

Recommendation: Retain, subject to changes consequent upon the deletion of the *other personal care staff* category.

## **Revenue data elements**

The variations between jurisdictions in the reporting of expenditure also extend to the reporting of revenue. Interstate differences relate to the reporting of Commonwealth residential aged care payments, payments from private hospitals for contracted patients and revenue from business units and hospital boarders. A review of revenue categories would lead to greater consistency in the reporting of revenue.

Some revenue types are not reported. It may be possible to develop a data element which could capture revenue from all other sources, including state government funding or Specific Purpose Payments. In addition, the recommended hierarchical structure of reporting could provide a means for capturing revenue data in the NMDS at the appropriate level.

Recommendation: Review to take into account the reporting of Commonwealth residential aged care payments, payments from private hospitals for contracted patients, revenue from business units, hospital boarders and other sources.

Priority: Medium.

### **Patient revenue, version 1**

Some jurisdictions experience difficulties determining the source for some revenue categories.

Recommendation: Review to clarify boundaries and reword as *Patient fee revenues* to make it simpler and to specify that it relates only to revenues from the provision of health services to patients.

Priority: High.

### **Other revenues, version 1**

Respondents commented on difficulties in distinguishing between the revenue categories and definitional issues.

Recommendation: Review with a view to improving definitional boundaries, including a review of the wording of the definition.

Priority: High.

## **Recoveries, version 1**

Respondents commented on difficulties in distinguishing between the revenue categories. There were also concerns that some inter-hospital transactions are causing expenditures to be double counted. An example is the supply on a cost recovery basis of laundry or maintenance services by larger hospitals to smaller hospitals. The associated expenses could be double counted when expenses and revenues are consolidated at a regional and state level. The issue of double counting could possibly be resolved by separately defining and recording *Recoveries from other (hospital) establishments* and would be reconciled with appropriate regional and state level reporting in a hierarchal structure.

Recommendation: Review to improve definitional boundaries. Consider separately defining and recording *Recoveries from other (hospital) establishments* to reduce double counting.

Priority: High.

## **Other data elements**

### **Full-time equivalent staff, version 2**

The *Full-time equivalent staff* data element categories need to be reviewed in conjunction with the *Salary and wages* data element.

Recommendation: Review in conjunction with the review of *Salaries and wages* categories.

Priority: High.

### **Specialised service indicators, version 1**

The categories of specialised service units may not accurately reflect the hospital service units of current interest or importance. Respondents commented that the categories were out-of-date, too broad and ill-defined. Some data may be more easily reported using National Hospital Morbidity Database information.

Recommendation: Review.

Priority: Medium.

### **Type of non-admitted patient care, version 1**

The categories in *Type of non-admitted patient care* may be out of date. Some are different from those collected in the Outpatient Care NMDS. It is timely to review these categories, particularly with reference to the Outpatient Care NMDS data elements *Establishment--number of occasions of service* and *Establishment--outpatient clinic type*. This data (and the corresponding *Group Sessions* data) need to be reported in this NMDS because the Outpatient Care NMDS only applies to peer group A and B hospitals.

Recommendation: Review in conjunction with the review of the *Group sessions* data element. This review to incorporate the issues for the following two categories for this data element:

Priority: Medium.

### **Type of non-admitted patient care—Accident and Emergency**

There are differences between the data reported for *Type of non-admitted patient care--Accident and emergency* and *Occasions of service* data reported to the *Emergency department waiting times*

NMDS. In small hospitals, this might be expected because accident and emergency services may be provided outside of an 'Emergency Department'. However, in larger hospitals, which would be expected to have an Emergency Department, the counts are likely to be similar. Within jurisdictions, there is inconsistency between the two sets of data reported.

Recommendation: Clarify the relationship between the *Type of non-admitted patient care-- Accident and emergency* and the *Occasions of service* data reported to the *Emergency department waiting times* NMDS (as part of the review of the categories in *Type of non-admitted patient care* as outlined above).

### **Type of non-admitted patient care—Mental health**

The difference between the *Type of non-admitted patient care – Mental health* data element and the mental health service contacts data element(s) in the *Community mental health care* NMDS is unclear.

Recommendation: As part of the review of the categories in *Type of non-admitted patient care*, review to clarify the relationship with the mental health service contacts in the *Community mental health care* NMDS.

### **Type of non-admitted patient care (public psychiatric, alcohol and drug), version 1**

This data element counts occasions of service in public psychiatric and alcohol and drug hospitals, of which there are fewer than 30 in total. *Occasions of service* and *Group session* data collected need to relate to all public hospital services. It would be more appropriate to collect *Type of non-admitted patient care* and *Group sessions* data for all public hospitals and not different types of counts for acute versus public psychiatric and alcohol and drug hospitals.

Recommendation: Delete and amend the *Type of non-admitted patient care* and *Group sessions* data elements to include public psychiatric and alcohol and drug hospitals.

Priority: Medium.

### **Group sessions, version 1**

The categories in group sessions (group data for *Type of non-admitted patient care*) have become out of date. For example, no jurisdiction reports group sessions for radiology and endoscopy and data for dialysis, pathology, dental, pharmacy and drug and alcohol are reported by one state only. A review of these categories could also take into consideration categories specified in the *Outpatient Care* NMDS.

Recommendation: Review in conjunction with the review of the *Type of non-admitted patient care* categories.

Priority: Medium.

### **Number of available beds for admitted patients, version 2**

A review of the data element is underway. The SIMC Working Party on Reporting of Bed Availability is seeking to:

- develop definitions to allow the number of available beds for admitted patients to be disaggregated into same day and overnight beds, and to consider whether definitions need to be disaggregated further

- consider how to include multipurpose services beds in the scope of the NMDS, and to consider whether multipurpose services beds be reported separately from other acute beds
- consider whether cots for normal neonates be brought into scope
- improve the definition of 'available'.

Recommendation: Review to incorporate recommendations from the SIMC Working Party on Reporting of Bed Availability.

Priority: High.

### **Teaching status, version 1**

Comments indicated that this data element was not very useful nor in demand.

Recommendation: Review with a view to its deletion.

Priority: Medium.

## **Supporting data elements and data element concepts**

### **Hospital, version 1**

Some issues regarding the definition of hospital services require clarification. The inclusion or exclusion of 'business units' (which supply services to hospitals but are not part of the hospital) in expenditure and revenue measures is one such issue. Another issue is the funding but not the provision of services. For example NSW has reported a mental health service, which only provides expenditure data.

It is possible that the development of a hierarchal reporting structure will resolve this latter issue. More generally, it needs to be clarified that what is reported by a hospital for one purpose (for example, admitted patient activity) is matched by other reporting (for example, expenses and revenue).

Recommendation: Review.

Priority: Medium.

### **Hospital boarder, version 1**

This data element does not relate to hospital services.

Recommendation: Delete this data element.

Priority: Medium.

### **Non-admitted patient, version 1**

The definition of admitted versus non-admitted patient has implications for other data elements including *Number of available beds*, *Occasions of service* and non-admitted patient cost proportions. The HDSC Admitted/Non-admitted Patient Boundary Working Party has been investigating definitions and related issues.

Recommendation: Review to incorporate recommendations from the HDSC Admitted/Non-admitted Patient Boundary Working Party.

Priority: High.

### **Overnight-stay patient, version 3**

This data element concept is not considered to be necessary for this NMDS.

Recommendation: Remove from the list of supporting data elements for the NMDS.

Priority: Medium.

### **Patient, version 2**

Recommendation: Retain.

### **Same-day patient, version 1**

This data element concept is not considered to be necessary for this NMDS.

Recommendation: Remove from the list of supporting data elements for the NMDS.

Priority: Medium.

### **Separation, version 3**

This data element concept is not considered to be necessary for this NMDS.

Recommendation: Remove from the list of supporting data elements for the NMDS.

Priority: Medium.

## **Proposed new data elements**

### **Admitted patient cost proportion**

The cost per casemix adjusted separation is a useful indicator of hospital performance. It can only be calculated using the admitted patient cost proportion for which there is no definition in the NHDD. The development of a clear definition for this data item would be valuable.

Recommendation: Develop definitions for the admitted patient cost proportion categories; standard, acute and acute non-psychiatric.

Priority: High.

### **Safety and quality—counts of sentinel events**

Some comments supported the inclusion of counts of sentinel events in the NMDS. This would then become part of the regular NMDS reporting. There may, however, be issues with confidentiality to be resolved.

Recommendation: Assess the proposal.

Priority: Medium.

### **Safety and quality—clinical indicators**

Hospitals voluntarily collect clinical indicators for internal review and report them to groups such as the Australian Council on Healthcare Standards (ACHS) and the Health Roundtable. It has been suggested that the NMDS include some of those indicators, for example those which are reported by the *Report on Government Services* (Steering Committee for the Review of Government Service Provision). The report uses ACHS data to report information on public hospital unplanned re-admission rates and surgical site infection rates.

Recommendation: Assess the proposal to include clinical indicators in the NMDS.

Priority: Medium.

### **Safety and quality—quality accreditation/certification status**

The following quality accreditation/certification status items are currently collected but not included in the NMDS:

- Establishment—quality accreditation/certification standard status (ACHS EQuIP).
- Establishment—quality accreditation/certification standard status (Australian Quality Council).
- Establishment—quality accreditation/certification standard status (International Organisation for Standardisation 9000 quality family).
- Establishment—quality accreditation/certification standard status (Quality Improvement Council).

Recommendation: Assess with a view to including them in the NMDS.

Priority: Medium.

### **Hospitals not currently included**

Some Australian hospitals are not currently included in this NMDS, for example hospitals run by Department of Defence, corrections authorities and public hospitals in Australia's external territories.

Priority: Low.

Recommendation: Assess with a view to including them in the NMDS.

### **Operating theatre efficiency**

Information on operating theatre utilisation and throughput could be useful. This could include information such as numbers of theatres, opening hours and numbers of patients or procedures.

Recommendation: Assess the feasibility of data elements relating to operating theatre efficiency.

Priority: Medium.

### **Admitted patient**

The definition of admitted patient is applicable to the NMDS.

Recommendation: Add to the NMDS (using the specification in the NHDD).

Priority: Low.

## **Amendments in order of priority**

### **High priority amendments**

#### **Data elements currently under review**

Establishment type, version 1

Number of available beds for admitted patients, version 2

Non-admitted and admitted patient, version 1

#### **Data elements to be deleted (or possibly deleted)**

Capital expenditure, version 1

Indirect health care expenditure, version 1

Salaries and wages – trainee/pupil nurses

Salaries and wages – student nurses

Salaries and wages – other personal care staff

#### **Data elements to be reviewed**

Public hospital establishments NMDS – hierarchical reporting structure

Establishment identifier, version 4

Region code, version 2

Establishment level expenditure elements

Medical and surgical supplies, version 1

Patient revenue, version 1

Other revenues, version 1

Recoveries, version 1

Full-time equivalent staff, version 2

#### **Proposed data element**

Admitted patient cost proportion

### **Medium priority amendments**

#### **Data elements to be deleted or amended**

Superannuation employer contributions (including funding basis), version 1

Type of non-admitted patient care (public psychiatric, alcohol and drug), version 1

Teaching status, version 1

Overnight-stay patient, version 3

Same-day patient, version 1

Hospital boarder, version 1

Separation, version 3

### **Data elements to be reviewed**

Capital expenditure – gross (accrual accounting), version 2  
Capital expenditure – net (accrual accounting), version 2  
Depreciation, version 1  
Salaries and wages, version 1  
Salaries and wages – registered nurses  
Salaries and wages – enrolled nurses  
Specialised service indicators, version 1  
Type of non-admitted patient care, version 1  
Group sessions, version 1  
Hospital, version 1

### **Proposed data elements**

Operating theatre efficiency  
Safety and quality – counts of sentinel events  
Safety and quality – clinical indicators  
Safety and quality – quality accreditation/certification status

### **Low priority amendments**

#### **Data elements to be deleted or amended**

Establishment sector, version 3

#### **Data elements to be reviewed**

Interest payments, version 1  
Patient transport, version 1  
Drug supplies, version 1

#### **Other data elements**

Hospitals not currently included  
Admitted patient

#### **Data elements to be retained**

Establishment number, version 4  
State/territory identifier, version 3  
Geographical location of establishment, version 2  
Administrative expenses, version 1  
Repairs and maintenance, version 1  
Domestic services, version 1  
Payments to visiting medical officers, version 1  
Food supplies, version 1

Other recurrent expenditure, version 1

Salaries and wages – salaried medical officer

Salaries and wages – diagnostic and health professionals

Salaries and wages – administrative and clerical staff

Salaries and wages – domestic and other staff

Patient, version 2

# 1 Introduction

This report presents the findings of an evaluation of the National Minimum Data Set for Public Hospital Establishments conducted by the AIHW. The evaluation was funded by AHMAC through the SIMC.

The aim was to assess the quality and utility of the NMDS, determine if it meets current requirements and to make recommendations to improve data quality and comparability. The methodology used was similar to that used for other evaluations of NMDS. It involved reviews of:

- compliance, that is, the extent to which data for 2003–04 were provided by states and territories in accordance with the specifications as published in the *National health data dictionary* (NHDC 2003).
- utility. Data collectors and users were surveyed using a tool similar to that designed for the evaluation of the *Admitted Patient Care* NMDS.

A questionnaire on state and territory reporting practices for reporting expenditure and revenue was used to supplement the information collected in the review of utility.

The report sets out recommendations for new or modified data elements (together with priorities for data development).

## This report

This chapter describes the National Minimum Data Set for Public Hospital Establishments and outlines the purpose of the evaluation.

Chapter 2 describes the method used as the basis for the evaluation.

Chapter 3 describes the results of the consultations with data collectors and users by means of a survey. Information is presented on the users and uses of the NMDS, the perceived importance and usefulness of the NMDS and individual data elements, and areas for data development.

Chapter 4 describes the results of the compliance review, including information on the scope of the data provided by states and territories and the extent to which the data provided for each data element comply with *National health data dictionary* (NHDD) definitions and domain values.

Chapter 5 presents comments on existing data elements from both the utility and compliance evaluations. It also outlines suggestions for new data elements.

Chapter 6 provides a collation of the responses to the expenditure and revenue questionnaire distributed to states and territories. This information has been used to supplement the information in the survey of utility.

The appendices include a list of data elements in the Public Hospital Establishments NMDS, the survey of utility, the expenditure and revenue questionnaire and a list of survey respondents.

# National Minimum Data Set for Public Hospital Establishments

A National Minimum Data Set is a core set of data elements established pursuant to a national agreement to collect uniform data and to supply it as part of a national collection. The standards applying to a NMDS improve:

- *efficiency* by standardising core data items and preventing duplication of effort
- *effectiveness* by ensuring that information collected is relevant and appropriate
- *comparability* and consistency for reporting purposes.

An NMDS consists of specified data elements (discrete items of information or variables) with supporting data elements and data element concepts. Definitions for the data elements are in the *National health data dictionary*, the Metadata Online Registry (METeOR) and in Appendix 1. In the description of an NMDS, the scope of the application of those data elements and the statistical units for collection of the data is also specified.

The scope of the National Minimum Data Set for Public Hospital Establishments is all public hospitals under the jurisdiction of the state and territory health authorities including psychiatric hospitals, dental hospitals and other special purpose hospitals such as those for rehabilitation, palliative care and alcohol and drug treatment. Hospitals operated by the Australian Defence Force, correctional authorities and Australia's external territories are excluded. This description of the scope is a proposed rewording of the current description.

The ABS collects similar data for private hospitals and free-standing day hospital facilities in the Private Health Establishments Collection.

The statistical unit is the public hospital or hospital/campus group as defined by the state or territory government. The state or territory health authority collects data for each hospital within its jurisdiction and provides the data annually to the AIHW for national collation.

Nationally comparable data are generated from the NMDS, such as the AIHW's National Public Hospital Establishments Database and *Australian hospital statistics* as well as state or territory hospital data collections. The NMDS is used in the ABS publication *Private hospitals Australia* and in the annual *Report on government services* (Steering Committee for the Review of Government Service Provision).

## Purpose of the evaluation

The purpose was to assess the quality and utility of the NMDS, determine if it meets current requirements and make recommendations to improve data quality and comparability. There has been no comprehensive assessment of the quality and utility of the NMDS-based data. Only minor changes have been made to the NMDS since it was first specified in 1989. An evaluation is timely given the considerable resources used at state and territory and national levels to collect the data.

## Hospital utilisation and costs study review

A review of the *Hospital utilisation and costs study* was undertaken in 1996 to address issues relating to the collection, analysis and dissemination of nationally comparable data on hospital costs and services. The review was commissioned by the National Health

Information Management Group in response to a perceived lack of quality and timeliness, changes in health care delivery and financing arrangements, and the emergence of other national hospital-based data collections.

The review surveyed data providers (state and territory health authorities) and data users on the uses of the data, methods to improve timeliness and data quality, and overlap with other hospital data collections. Compliance with NHDD definitions and the collection efficiency of NMDS items were also considered. Some data items were referred to the National Health Data Committee for definition development or review, including *Capital expenditure*, *Indirect health care expenditure*, *Full-time equivalent staff* and *Admitted patient cost proportion*. Responses from the review were used to develop recommendations, which agreed to new mechanisms to improve data quality and accelerate the timetable for data provision, processing and analysis.

## **NHDD and METeOR**

The NHDD is published by the AIHW regularly and incorporated into the AIHW's on-line metadata registry, METeOR, Australia's central repository for health, community services and housing assistance metadata. METeOR provides definitions for health and community services-related data topics, and specifications for related NMDS, such as the Public Hospital Establishments NMDS. It can be viewed on the web at [www.meteor.aihw.gov.au](http://www.meteor.aihw.gov.au).

The metadata standards in the NHDD were re-engineered for inclusion in METeOR, for example, to allow greater standardisation between National Minimum Data Sets. As a result, some of the terminology has changed. For example, data element concepts are now referred to as 'Object classes'. In addition, data elements have been renamed.

This report adopts the names for data elements that were used in the Knowledgebase, the predecessor to METeOR. The applicable METeOR names and identifiers are listed in Appendix 1, together with a mapping to the names and identifiers used in this report.

## 2 Methodology

This evaluation uses similar methodology to that used in the evaluations of the National Minimum Data Sets for Admitted Patient Care (AIHW 2003), Perinatal (AIHW: Laws and Sullivan 2004) and Admitted Patient Mental Health Care (AIHW 2005). Minor adjustments to the survey and assessment system have improved the process.

The methodology has been developed in consultation with the Australian Hospital Statistics Advisory Committee (AHSAC) which includes an invited expert and representatives from the:

- State and territory health authorities
- Australian Government Department of Health and Ageing
- ABS
- Australian Government Department of Veterans' Affairs
- Australian Healthcare Association
- Australian Private Hospitals Association
- Private Health Insurance Administration Council
- Clinical Casemix Committee of Australia
- National Centre for Classification in Health.

In accordance with the methodology, reviews were undertaken of:

- compliance, that is, the extent to which data for 2003–04 were provided by states and territories in accordance with the specifications as published in the *National health data dictionary* (NHDC 2003).
- utility. Data collectors and users were surveyed using a tool similar to that designed for the evaluation of the Admitted Patient Care NMDS.

A questionnaire on state and territory reporting practices for reporting expenditure and revenue was used to supplement the information collected in the review of utility.

### Evaluation of compliance

The quality and consistency of the data provided by states and territories were assessed. Data elements are to be collected and reported using standard definitions and domain values and reported for all separations within scope (essentially public hospitals in Australia). However, there are variations in the standards of reporting by the states and territories.

The compliance section of the evaluation focussed on 2003–04 data and was based on the specifications in the NHDD v12. The documentation provided by states and territories with the 2003–04 data was examined. In addition, communications between the AIHW and jurisdictions during compilation of the 2003–04 National Public Hospital Establishments Database (NPHEd) were reviewed.

Each data element for 2003–04 was assessed to determine:

- if states and territories had provided it
- if it was provided in accordance with the NMDS specifications as published in the *National health data dictionary* version 12, that is, whether the NHDD definition and domain values were used
- if it was reported for all public acute and psychiatric hospitals.

## Evaluation of utility

To be effective, the information collected needs to be relevant and appropriate to its purpose. The aim of evaluating the utility of the NMDS was to establish whether the data collection meets current requirements such as informing policy development and reporting on performance.

The AIHW surveyed data collectors and users of the NMDS specifications and NMDS-based data as well as other stakeholders. They were asked to indicate whether particular data elements were important (that the information needed to be collected) and useful (if the data collected in accordance with the existing definitions met current requirements). The responses to the survey were taken into account in formulating the recommendations for data development.

The survey was developed in consultation with members of AHSAC. It asked specific questions about the users and uses of the NMDS specifications and NMDS-based data; the utility of the NMDS as a whole and of individual data elements; and areas for development including modifications to data elements, new data elements or changes to scope. The survey also invited additional comments and suggestions.

The survey of utility sought comments on the NHDD v12, the version current at the time of the evaluation. Information on the HDSC and NHIMPC processes for changing NMDS items was attached to the survey. It was noted that any changes to data elements would require a business case to be prepared and submitted to the HDSC and the NHIMPC.

The survey was distributed by e-mail in April 2005, following feedback from AHSAC members on a draft survey form. It included explanatory notes and a flyer. A copy of the survey and explanatory notes is at Appendix 2. A questionnaire on state and territory practices in reporting expenditure and revenue was also distributed (copy at Appendix 3). The recipients of the survey included:

- AHSAC members
- SIMC and HDSC members
- Health Expenditure Advisory Committee (HEAC)
- Commonwealth Grants Commission
- Health Working Group of the Steering Committee for the Review of Government Service Provision
- Public Health Association of Australia
- Health Services Research Association
- recent recipients of the AIHW's NPHEd data.

The evaluation documentation was placed on the AIHW's website with an invitation to participate in the survey. Evaluation responses were returned to the AIHW by August 2005.

## **Recommendations for data development**

The AIHW has recommended priorities for future development of the NMDS based on the results of the evaluations of compliance and utility and suggestions received from survey respondents. These have been made in consultation with AHSAC, consistent with the NHIMPC assessment criteria for the development of National Minimum Data Sets such as the fit with national strategic directions and the benefits at the national level. A future program of data development work will address the recommendations for new data elements or revisions of existing data elements. Submissions to the HDSC, SIMC and NHIMPC will also be developed as appropriate.

# 3 Evaluation of utility

This chapter sets out the results from the consultations with data collectors and users by means of a survey. Information is presented on the users and uses of the NMDS, the importance and usefulness of the NMDS and individual data elements, and possible areas for data development. Comments provided by respondents on individual data elements are included in Chapter 5 of this report.

## Respondents

A copy of the survey is at Appendix 2 and the 17 people who responded to the survey are listed. One respondent answered the first two questions only and supplied comments (not rankings) on data elements. For the remaining 16 responses, a few did not answer all questions and so the responses may not always total 16.

Respondents were asked to indicate whether they were responding as individuals or on behalf of their unit or section within an organisation or the organisation as a whole. The responses received were:

- 15 on behalf of a unit within an organisation
- 4 as individuals
- 3 on behalf of an organisation.

Some respondents nominated more than one category.

Respondents were asked to indicate from a list of 15 user groups the main group to which they belonged (or identify additional user groups). A list of the user groups is presented in Question 1.1 of the survey (Appendix 2). The main user groups identified (Table 3.1) were the state and territory health authorities which collect and provide the NMDS data for national collation. All authorities responded to the survey providing comments from both a data collector and data provider perspective. There were responses from two areas of the health authority for some states and territories.

Some Australian Government departments and agencies responded, as did a university lecturer. Two units within the AIHW (the Hospitals and Mental Health Services Unit and the National Data Development and Standards Unit) also provided responses.

## Uses of the NMDS specifications and NMDS-based data

The survey sought information on the NMDS specifications and NMDS-based data being used, specifically:

- why they use the NMDS specifications or NMDS-based data
- how they access the specifications and the data
- their familiarity with the specifications and the data
- their frequency of use.

## Purpose

Respondents were asked to indicate the three most common purposes for which they use the NMDS specifications and/or NMDS-based data – see Question 2.1 of the survey (Appendix 2). The three most common purposes were (Table 3.1):

- collection and reporting of NMDS-based data
- statistical reporting
- comparisons and benchmarking.

Other uses for the NMDS specifications and NMDS-based data included:

- policy advice
- planning and monitoring hospital resources
- management and purchasing of hospital services
- health services research
- health education and training
- facility planning.

## Level of use

The data are used at more than one level, in particular at both state/territory and national level. Some respondents also used the data at hospital or group level. From the 16 surveys there were 31 indications of use, with by far the most common uses being at state or territory and national level.

## Access to NMDS specifications

The most common source used to obtain access to the NMDS specifications was state/territory data specifications, closely followed by the *National health data dictionary*, the *National health data dictionary* online and the Knowledgebase (the predecessor to METeOR). Some users obtained access through hospital-based specifications or AIHW annual data reporting specifications.

**Table 3.1: Purposes for which the NMDS specifications and NMDS-based data are being used, by user group**

User group	Compare/ benchmark	Collect/ report NMDS- based data	Manage/ purchase hospital services	Statistical reporting	Policy advice	Plan/ monitor hospital resources	Health services research	Facility planning	Other
State or territory health authority (10 responses)	✓	✓	✓	✓	✓	✓	✓	✓	✓ <sup>(a)</sup>
Australian Government Department of Health and Ageing	✓		✓			✓			
Other Australian Government department or agency (3)	✓	✓	✓	✓	✓		✓		
Australian Institute of Health and Welfare (1)	✓	✓		✓					
University or other research organisation (1)	✓	✓	✓		✓	✓	✓	✓	✓ <sup>(b)</sup>

(a) To check costings. (b) Education and training

## Source of NMDS-based data

The *Australian hospital statistics* publication (and internet tables) was the most common source of NMDS-based data identified by respondents. The second most common was state or territory hospital databases. These two sources accounted for more than 50% of use. Other sources included:

- state and territory data as supplied under the Australian Health Care Agreements (AHCA)
- Department of Health and Ageing *State of our public hospitals* publications
- state or territory publications
- the AIHW's National Public Hospital Establishments Database (both external and internal users)
- other AIHW publications.

## Knowledge and frequency of use

All respondents were familiar or very familiar with the NMDS specifications and/or the NMDS-based data.

NMDS specifications were used:

- occasionally (seven respondents)
- fortnightly or monthly (two respondents)
- weekly (five respondents)
- daily (two respondents).

The NMDS-based data were used:

- occasionally (five respondents)
- weekly (eight respondents)
- daily (three respondents).

## Utility

Survey participants were asked to rate the importance and usefulness of the NMDS (overall and for each individual data element) and to indicate which data elements need to remain unchanged, modified or deleted.

Assessing importance involves rating the significance of the data element in a national data collection on public hospitals. In assessing usefulness, respondents were asked whether the data element met current information requirements. Importance could be rated as 'not important', 'important', 'highly important' or 'unsure' and usefulness as 'not useful', 'useful', 'highly useful' or 'unsure'.

A rating of 'highly important' and 'highly useful' suggests that the data element be unchanged. If rated 'highly important', but 'not useful', the definition may need to be modified and if rated as both 'not important' and 'not useful', a data element may need to be deleted from the NMDS.

Table 3.2 summarises the respondents' ratings. Not all respondents rated every data element and so the frequencies will not add to the total number of respondents for every data element. One survey respondent provided comments only, not individual ratings and so the maximum number of responses to each data element is 16. Comments on each data element are included in Chapter 5 of this report.

Thirteen of the 17 respondents rated the NMDS as highly important and 12 rated it as highly useful. Two respondents considered it to be not important but none thought it to be not useful. The NMDS was considered to be useful in time-series analysis and in providing consistent definitions for data collection. Comments emphasised the need to assess the impact of any proposed changes on long term consistency of the data.

Some respondents mainly used the data specifications for supply of annual data to the AIHW and to the Department of Health and Ageing. Others use it to provide a breakdown of expenditure and activity items for comparative purposes, and in policy development. Several respondents use it as the 'only nationally comparable data source for public hospitals' and noted that it is used in the *Report on government services* and by the National Health Performance Committee. Comments also stated that the NMDS is a useful source for general statistical information about Australian public hospitals, in its own right and in comparison with ABS data on private hospitals.

Some were critical of the quality of the data, its relevance and the difficulties in comparing among jurisdictions. One comment pointed to the increased burden due to the mismatch for some data elements with current state accounting standards. To the extent that definitions are inadequate, data consistency can be compromised.

**Table 3.2: Importance and usefulness of the NMDS, individual data elements and data element concepts**

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
<b>NMDS for public hospital establishments</b>	2	1	13	1	0	3	12	2
<b>System level expenditure elements</b>								
Capital expenditure - gross	3	3	8	2	3	4	6	3
Capital expenditure - net	3	4	8	1	3	5	6	2
Indirect health care expenditure	4	9	2	1	5	8	1	2
<b>Establishment identification data elements</b>								
Establishment identifier	4	3	9	0	2	4	9	1
Establishment number	2	4	10	0	0	5	10	1
Establishment sector	3	2	10	0	1	3	10	1
Region code	8	0	7	1	5	4	6	1
State/territory identifier	2	2	12	0	0	4	11	1
Establishment type	2	2	12	0	0	4	11	1
Geographical location of establishment	3	2	10	1	5	3	7	1
<b>Establishment level expenditure elements</b>								
Administrative expenses	2	9	5	0	0	11	4	1
Interest payments	3	7	4	2	4	8	3	1
Depreciation	2	7	7	0	0	11	4	1
Patient transport	2	9	5	0	1	9	4	2
Repairs and maintenance	2	8	4	2	0	10	3	3
Superannuation employer contribution	2	8	5	1	0	10	4	2
Domestic services	2	8	6	1	1	10	3	2
Payments to visiting medical officers	2	8	6	0	0	10	5	1
Drug supplies	2	6	8	0	0	9	6	1
Food supplies	2	9	5	0	0	11	4	1
Medical and surgical supplies	2	6	8	0	0	9	6	1
Other recurrent expenditure	2	6	7	1	1	8	6	1
Salaries and wages	2	5	9	0	0	9	6	1
Salaries and wages—registered nurses	2	5	9	0	0	9	6	1
Salaries and wages—enrolled nurses	2	5	9	0	0	9	6	1
Salaries and wages—student nurses	4	7	4	1	3	9	2	2
Salaries and wages—trainee/pupil nurses	5	6	4	1	4	8	2	2

(continued)

**Table 3.2 (continued): Importance and usefulness of the NMDS, individual data elements and data element concepts**

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
Salaries and wages—salaried medical officer	2	5	9	0	0	9	6	1
Salaries and wages—other personal care staff	2	8	6	0	2	9	4	1
Salaries and wages—diagnostic and health professionals	2	6	8	0	0	10	5	1
Salaries and wages—administrative and clerical staff	2	7	7	0	1	9	5	1
Salaries and wages—domestic and other staff	2	7	7	0	1	9	5	1
<b>Revenue data elements</b>								
Patient revenue	2	6	8	0	1	7	6	2
Other revenues	2	7	7	0	1	8	5	2
Recoveries	2	8	6	0	1	9	4	2
<b>Other data elements</b>								
Full-time equivalent staff	2	6	8	0	1	8	6	1
Specialised service indicators	3	3	9	1	3	5	8	0
Occasions of service	3	3	9	1	1	5	8	2
Type of non-admitted patient care	2	4	9	1	2	5	7	2
Type of non-admitted patient care (public psychiatric, alcohol and drug)	3	4	8	1	1	5	7	3
Individual / group session	2	5	7	2	2	5	6	3
Group sessions	2	6	6	2	3	5	5	3
Number of available beds for admitted patients	3	4	9	0	2	5	8	1
Teaching status	5	6	5	0	3	9	4	0
<b>Supporting data element concepts</b>								
Hospital	2	5	9	0	0	7	7	2
Hospital boarder	3	10	3	0	2	11	3	0
Non-admitted patient	2	4	10	0	1	6	8	1
Overnight-stay patient	3	4	9	0	1	5	9	1
Patient	2	4	9	0	1	5	10	0
Same-day patient	2	4	10	0	1	5	10	0
Separation	2	3	11	0	1	5	10	0

## Suggestions for data development

Respondents were asked to nominate areas for development of the NMDS, including new or modified data elements, possible changes to the scope or other priorities for the development of definitions. The views of respondents are summarised in this section. Chapter 5 contains the detailed comments on individual data elements and data element concepts.

## Changes to the NMDS

### Scope description for the NMDS

The scope of the NMDS for Public Hospital Establishments as published in the NHDD is:

... establishment-level data for public acute and psychiatric hospitals, including hospitals operated for or by the Department of Veterans' Affairs, and alcohol and drug treatment centres.

From version 9 Patient level data remains in the new National Minimum Data Set (NMDS) called Admitted patient care. This new NMDS replaces the version 8 NMDS called Institutional health care.

Similar data for private hospitals and free standing day hospital facilities is collected by the Australian Bureau of Statistics in the Private Health Establishments Collection.

Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not currently included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

This needs to be updated to remove the reference to Department of Veterans' Affairs hospitals which no longer exist. A possible new definition, which would not change the scope of the NMDS is:

... establishment-level data for public hospitals, including psychiatric hospitals, dental hospitals and other special purpose hospitals such as those for rehabilitation, palliative care and alcohol and drug treatment.

All Australian public hospitals are included, except those not within the jurisdiction of a state or territory health authority (hospitals operated by the Australian Defence Force, correctional authorities and hospitals located in offshore territories).

### Definition of an establishment

The definition of an establishment needs to be clearer and more useable. Hospitals and organisations which span traditional units present a challenge. The NHDD specifies that hospitals are as defined by the state or territory, which results in differences that reduce comparability between jurisdictions. Whether or not to include in the hospital data business units such as cafeterias and car parks and those that may provide services to other hospitals (such as laundry services) is an issue.

A major difficulty is the configuration of organisational and physical structures (for example between networks and campuses) that comprise a hospital. Clinical activity data may be reported at campus level but financial information relating to a hospital may be compiled at a network or area health service level. This is one example of a more general issue relating to the organisational level at which 'establishments' are defined and reported for this NMDS. The definitions need to be reviewed following the development of a restructured NMDS and aligned with those used for the reporting of capital expenditure through the 'Government health expenditure' NMDS, which is under development.

### Public versus private hospitals

A related issue is the categorisation of public and private hospitals varies between jurisdictions. A selection of hospitals that predominantly provide public hospital services but

are privately owned and/or operated is listed in Table 3.6. In *Australian hospital statistics 2004–05* Hawkesbury Base and Port Macquarie hospitals were reported as public hospitals although prior to 2003–04 they were reported as private hospitals. For 2004–05, the Mersey Community Hospital in Tasmania which previously operated as a private hospital providing predominately public services on a contracted basis merged with the Northwest Regional Hospital and is now categorised as a public hospital. A further issue is the status of hospitals operated by non-government organisations such as churches, which are variously regarded as public and private.

A guiding principle is that hospitals which report to the Public Hospital Establishments NMDS should ideally not also report to the PHEC unless any overlap is known and quantified.

### **Approach to resolving issues relation to the definition of an establishment and public versus private hospitals**

These issues could be addressed separately. A tighter definition of a private hospital may achieve greater comparability within the Public Hospital Establishments NMDS and ensure that there are no gaps or overlaps between the NMDS and the PHEC. However, the issue of defining a hospital 'establishment' would remain.

One approach to improve comparability would be to change the focus of the NMDS to public hospital services, rather than public hospitals. At a minimum establishment identifiers could be developed to indicate relationships between networks and individual service units. If this is not possible, a separate data element for networks (or similar) could be developed.

Another approach is to introduce a hierarchical reporting structure, similar to that now used for the Mental Health Establishments NMDS. It allows reporting at different levels and the relationships between reporting entities to be reflected within the NMDS data. One of the benefits of this approach is that it is less critical to define an 'establishment'. All relevant data relating to the provision of hospital services would be captured at some point in the health services reporting hierarchy. A second benefit is that the distinction between public and private hospital is unimportant. The critical issue is whether the hospital is delivering public hospital services.

**Table 3.3: Selected hospitals that predominantly provide public hospital services but are privately owned and/or operated, 2004-05**

State	Hospital	How reported
NSW	Hawkesbury Base	Public hospital
Vic	Mildura Base	Public hospital
Qld	Noosa	Private hospital
WA	Joondalup	Private hospital
WA	Peel	Private hospital
SA	Southern Districts War Memorial Private Hospital	Public hospital for services provided under contract and a private hospital for services provided to private patients
SA	Modbury	Public hospital (publicly owned – privately operated)
Tas	May Shaw District Nursing Centre	Public hospital (reports total expenditure only)
Tas	Toosey	Public hospital (reports total expenditure only)

### Admitted versus non-admitted patient definitions

Some respondents commented on confusions in the definitions of admitted and non-admitted patients and the variation in admission practices between jurisdictions and hospitals, which are blurring the distinction between admitted and non-admitted patients. These confusions are affecting the reporting of non-admitted patient occasions of service and admitted patient cost proportions and the assessment of the impact of increased use of same-day surgery, changes to emergency department operations and changes to outpatient services. One respondent also noted that current use of ‘admitted patient’ (in the NPHED and the National Hospital Cost Data Collection or NHCDC) is inconsistent with the Organisation for Economic Cooperation and Development (OECD) definition of admitted patient.

### Recurrent expenditure items—input categories

Recurrent expenditure is disaggregated into input categories such as administrative expenditure, cost of drug supplies and cost of medical and surgical supplies. Respondents sought changes to these categories to achieve a better representation of hospital expenditure. One suggestion was to align the expenditure categories with the NHCDC *cost buckets*. There are limiting factors. For example, in NPHED theatre nurse salaries are counted in nurses’ salaries, but in NHCDC theatre nurse salaries are counted in theatre costs.

Another suggestion was for expenditure to be disaggregated in a more detailed manner, for example pharmacy by the WHO’s ATC classification system.

Table 3.4 lists the current input categories and the potential output categories, indicating how expenditure data could be disaggregated using both axes. The extent to which such disaggregation could be achieved would be likely to be limited. However the marginal totals and subtotals could be worth collecting as a first step to improving these data.

### Recurrent expenditure items—output categories

The only output expenditure currently reported is the admitted patient cost proportion (IFRAC), which is not formally part of the NMDS. There was support for the disaggregation of expenditure data by output categories. Categories could include admitted patient (acute, psychiatric, rehabilitation and other), non-admitted patients and emergency department.

Alternatively, the HEAC work based on the OECD *International Classification for Health Accounts* 'Functions of personal health care' could be useful when considering suitable categories. Under the OECD system, functions of personal health care are classified by both *basic functions of care* (curative, rehabilitative and long-term nursing care) and *mode of production* (in-patient, day care, outpatient and home care).

**Table 3.4: Expenditure input and output categories**

		Possible output categories (1)							Total
		Admitted patient—acute	Admitted patient—psychiatric	Admitted patient—rehab	Admitted patient—other	Admitted patient—total	Non-admitted patient	Emergency department	
Current input categories (2)	Administrative expenses								X
	Depreciation								X
	Domestic services								X
	Drug supplies								X
	Food supplies								X
	Interest payments								X
	Medical and surgical supplies								X
	Other recurrent expenditure								X
	Patient transport								X
	Payments to VMO's								X
	Repairs and maintenance								X
	Superannuation								X
	<b>Total non-salary expenditure</b>								X
	Salaries and wages								X
<b>Total expenditure</b>	X	X			X			X	

(1) Other possible output categories could be based on the OECD International Classification for Health Accounts.

(2) Other possible input categories could be based on National Hospital Cost Data Collection categories.

X Current reporting requirements—NMDS and IFRACs (informal).

## Inter-hospital transactions

There are concerns that expenditures are being double-counted as a result of inter-hospital transactions. For example, the expenses incurred by large hospitals supplying laundry or kitchen facilities (or maintenance services) to smaller hospitals on a fee for service may be reported by both hospitals.

This method of accounting for the provision may be acceptable in describing the operating costs and revenues of individual establishments. However when expenses and revenues are consolidated to a regional and state level, they are counted twice. From the expenditure and revenue questionnaire, it appears that this is occurring in four states, and probably occurs in all states and territories.

The extent of the double counting is unknown, although Victoria has estimated it to be around \$85 million per year in that state. The expenditure totals would be affected and also affect calculations for items such as admitted patient cost proportions.

Conversely, data may be excluded from hospital transactions if it is allocated to an outside entity. For example, Tasmanian psychiatric hospitals report zero medical officers because the officers are 'employed' by another entity, even though they provide services to Tasmanian hospitals. A hierarchical reporting structure would resolve this problem.

## **Public and private hospital data consistency**

Consistency between public and private sector standards is important. The NMDS is also used in the PHEC and any changes to the NMDS need to ensure that comparability of public and private hospitals data is not diminished.

## **Extending the NMDS**

### **Hospitals not currently included**

One respondent proposed expanding the scope of the collection to include hospitals which are not currently included – for example, hospitals run by the Department of Defence, corrections authorities, and public hospitals in Australia's external territories. There is an eight bed public hospital on Christmas Island run by the Indian Ocean Territory Health Service, through the Australian Department of Transport and Regional Services. There are three medical services (each of which includes a two bed hospital ward) on the Australian Antarctic Division stations, Casey, Mawson and Davis. A hospital also operates on Norfolk Island.

### **Public hospital services**

Some respondents noted that the NMDS currently describes public hospitals rather than public hospital services. It may be worthwhile expanding the NMDS to cover expenditure (and perhaps other data such as full-time equivalent staff) on public hospital services at the region and state level.

Counting public hospital services would encapsulate those public hospital services which are purchased from the private sector, and support services such as pathology which are purchased by hospitals from non-hospital entities (public and private). If data were collected on purchasing of services, the result could be more comparable data about public hospital service funding and provision.

The new Mental Health Establishments NMDS incorporates this type of reporting structure, with different data requirements at the state, region, organisation and service unit level (Figure 3.1). Together, the data will provide a comprehensive picture of public mental health service provision that is not readily available for public hospital service provision. This structure would effectively make operational (and expand on) the two tier system of 'network-level' and 'establishment-level' data which is currently reported in the NMDS.

An appropriate hierarchical reporting structure could be based on entities such as states and territories, administrative regions, networks, establishments and campuses. Most data would be reported at the lowest level possible (or applicable) in the state or territory but could be reported at the higher levels if not available at lower levels.

Expenditure reported in *Australian hospital statistics 2004–05* is largely expenditure by hospitals and does not include all expenditure on hospital services by the state or territory government. Similarly, reported revenue is largely revenue received by individual hospitals, and does not include all revenue received by the state or territory government for provision of public hospital services.

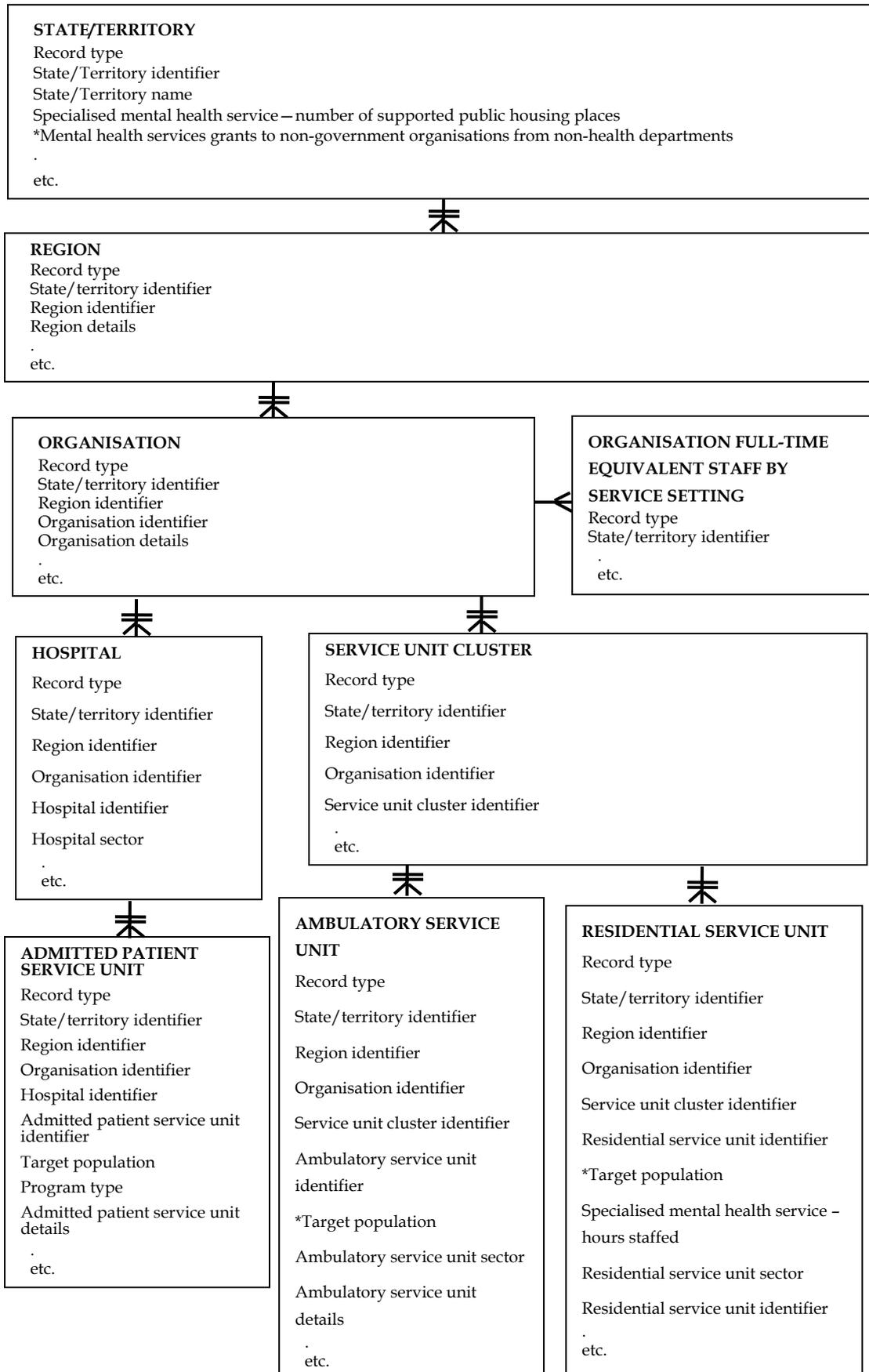
For example, expenditure on public hospital services purchased by the state or territory government (at the state or area health service level) from privately owned and/or operated hospitals is not included unless the privately owned and/or operated hospital has been reported as a public hospital.

One survey response which supports the 'reporting public hospital services' approach suggested that the scope of the NMDS be made consistent with clause 36 of the Australian Health Care Agreements 2003–2008. Clause 36 of the AHCA state that:

(states or territories agree) to work with the Commonwealth and other States that have signed agreements to develop a comprehensive, standardised system for determining recurrent health expenditure in relation to the *services* provided under this Agreement by June 2005. If such a system cannot be developed collaboratively, the Commonwealth will determine the nature of such a system.

Such consistency could be considered, or at least mechanisms developed to ensure that differences between the NMDS and the AHCA collections are known and understood.

**Figure 3.1: Data model underlying the NMDS - Mental Health Establishments (Abbreviated 1 page example)**



## **Safety and quality**

Several respondents suggested an increased focus on safety and quality data collection.

For example, could clinical indicators (such as those in the ACHS dataset) be reported by all public hospitals instead of just a voluntary sample, so that performance and quality of care could be assessed?

Another respondent suggested including sentinel events in the NMDS. Although some adverse events are reported in patient-level morbidity data and some sentinel events data may be obtained from those data, it may be possible to include a count of sentinel events at the establishment level. However, qualitative data which is needed to allow interpretation of these numbers would not be easily included in the NPHEd.

The quality accreditation/certification status items are currently collected for the NPHEd but are not included in the NMDS. Adding these to the NMDS would give information on accredited hospitals using these quality standards.

The data elements are:

- Establishment – quality accreditation/certification standard status (ACHS EQuIP).
- Establishment – quality accreditation/certification standard status (Australian Quality Council).
- Establishment – quality accreditation/certification standard status (International Organisation for Standardisation 9000 quality family).
- Establishment – quality accreditation/certification standard status (Quality Improvement Council).

## **Performance indicators**

One respondent suggested that it would be beneficial to develop the NMDS so that performance indicators which are needed for AHCA-related purposes can be derived from this NMDS. New data elements may be required to support these indicators.

One respondent suggested NMDS collections incorporate the work being done by groups such as the Health Roundtable benchmarking group. Health Roundtable Limited ([www.healthroundtable.org.au](http://www.healthroundtable.org.au)) is an organisation of health executives (generally public hospital chief executive officers) which researches and discusses best practice procedures in hospitals. It also collects, analyses and publishes information comparing organisations and identifying ways to improve operational practices.

## **Operating theatre efficiency**

One respondent suggested that increased work on operating theatre utilisation and throughput would be worthwhile. This could include information such as numbers of theatres, opening hours and numbers of patients or procedures.

## **System and establishment level data**

Three data elements in the NMDS are collected at a state or territory health authority level ('system level'). These are *Capital expenditure – gross (accrual accounting)*, *Capital expenditure – net (accrual accounting)* and *Indirect health care expenditure*. All other data elements are collected at establishment level.

## **Measuring capital expenditure**

AIHW publications present some information on capital. For example *Australian hospital statistics* shows estimates of depreciation for public hospitals in each state and territory. *Health expenditure Australia* shows a time series of capital consumption (depreciation) and outlays on capital by sector.

Integrated capital accounts would supply useful information on the economics of health in Australia. Such accounts would cover the key variables of investment (capital expenditure or capital formation), capital stock, and depreciation (capital consumption). The accounts would ideally be dissected by type of asset (buildings, information technology etc.), by segment of health (particularly hospitals), by state or territory and by public or private sector.

The AIHW, under the guidance of HEAC, is investigating the possibility of compiling experimental integrated accounts. This project has begun with hospitals, because of the large amount of capital in that sector and because the data sources are relatively rich. However it is not possible at present to compile such integrated accounts, even for hospitals, owing to deficiencies and inconsistencies in the available data. For example data is usually only available for depreciation, but not for capital expenditure or capital stock.

Another difficulty is that different jurisdictions (and, perhaps, area health services or hospitals within jurisdictions) assemble their capital estimates using different accounting conventions and other rules. For example, the thresholds that distinguish capital items from recurrent items differ from jurisdiction to jurisdiction, as do the bases of evaluation (historical or replacement cost, etc.) and the assumptions about asset lives or depreciation rates.

Despite these difficulties, work is progressing and will be presented progressively to HEAC and to AHSAC during 2006–07. If the project proves successful, it would be possible to enhance the capital items in the Public Hospital Establishments NMDS. A more ambitious longer term goal is to develop nationally-agreed standards for the reporting of capital data, as part of a new NMDS covering all government expenditure on health.

## **Persons to be consulted for future data development**

Most respondents were satisfied with the data development process, whereby submissions for data development are sent to the HDSC, SIMC and the NHIMPC.

Respondents nominated a wide range of stakeholders to be consulted, including

- state or territory health authority staff
- data collectors and processors
- data users
- hospitals and health care providers
- casemix experts (specifically for work on the admitted patient cost proportion)
- costing officers
- policy development officers.

# 4 Compliance evaluation

## National summary

### Scope

The NMDS for Public Hospital Establishments is a set of establishment level data for public hospitals, including psychiatric hospitals, dental hospitals and other special purpose hospitals such as those for rehabilitation, palliative care and alcohol and drug treatment.

The NPHEd for 2003–04 covered all Australian public hospitals, except those not within the jurisdiction of a state or territory health authority (hospitals operated by the Australian Defence Force, correctional authorities and hospitals located in offshore territories).

The statistical units for this database are establishments, with data on each establishment being collected by the relevant state or territory health authority and provided to the AIHW on an annual basis. Information on hospital expenditures, revenues and occasions of service (non-admitted patient services) is collated to form a state-by-state picture of hospitals.

In 2003–04 the NPHEd covered 761 public acute care hospitals, including twenty public psychiatric hospitals, two public alcohol and drug establishments and one public hospice. States and territories define hospital establishments in their jurisdiction, and determine which hospitals are reported as public hospitals in the NPHEd. Included in the data for 2003–04 were two hospitals which had previously been reported as private hospitals and several privately operated hospitals that mainly provided public hospital services (Table 3.3).

Essentially states and territories reported to the NPHEd for all public hospitals in scope in 2003–04. For five small hospitals in Tasmania, basic data were supplied (name, location, available beds, some salary and staffing data) but financial and occasions of service information was not supplied. Two of these hospitals were privately operated, one was operated by local government, one by a community organisations and one was a newly 'public' hospital.

Victoria, and to a lesser extent South Australia, supply data at both campus and network level and so compliance was assessed at two levels.

Table 4.1 summarises coverage information by state and territory and by establishment type.

**Table 4.1: Coverage for hospitals in the National Public Hospital Establishments Database, 2003–04**

	Public acute hospitals	Public psychiatric, alcohol and drug hospitals
NSW	Complete	Complete
Vic	Complete	Complete
Qld	Complete	Complete
WA	Complete	Complete
SA	Complete	Complete
Tas	Complete	Complete
ACT	Complete	Not applicable
NT	Complete	Not applicable

Note: Complete – All establishments of this type reported data to the National Public Hospital Establishments Database.

Not applicable – There are no facilities of this type in this state or territory.

### Summary of selected NHDD terms relating to the use of hospital data

#### *Hospital*

*A health care facility established under Commonwealth, state or territory legislation as a hospital or a free-standing day procedure unit and authorised to provide treatment and/or care to patients.*

#### *Public hospital*

*A hospital controlled by a state or territory health authority. Public hospitals offer free diagnostic services, treatment, care and accommodation to all eligible patients.*

#### *Recurrent expenditure*

*Expenditure on goods and services which are used up during the year, for example, salaries and wages expenditure and non-salary expenditure such as drug supplies, food supplies and patient transport.*

#### *Non-admitted patient occasion of service*

*Occurs when a patient attends a functional unit of the hospital for the purpose of receiving some form of service, but is not admitted. A visit for administrative purposes is not an occasion of service.*

#### *Type of non-admitted patient care*

*A broad classification of occasions of service provided to non-admitted patients, services include emergency, dialysis, pathology, radiology and organ imaging, endoscopy, other medical/surgical/diagnostic, mental health, drug and alcohol, dental, pharmacy, allied health, community health, district nursing, and other outreach.*

## Use of national standard definition, domain values and NMDS scope

This is a national summary of information presented in more detail on the following pages. The NMDS contains 31 data elements plus four supporting data elements (a total of 35). Of the 35 data elements, two elements (*Individual/group session* and *Occasions of service*) supply definitions for other elements where the counts occur and hence were not assessed for compliance. Therefore 33 data elements were assessed for compliance.

Within the compliance review, the *Salaries and wages* data element and the *Type of non-admitted patient care* data element were assessed by individual category (nine salaries categories and 14 non-admitted patient categories). Thus compliance was assessed for a total of 54 data elements, including sub-categories of those elements.

Of these 54 data elements, the national standard definition was used for 41 (76%) by all states and territories. The national standard domain values were used for 47 (87%) elements. Data

was reported for all establishments, for all states and territories, for only seven (13%) elements.

**Table 4.2: National summary of the use of the *National health data dictionary* definition and domain values and NMDS scope**

Data element	NHDD definition used?		NHDD domain values used?		Provided for all establishments*?	
System level expenditure elements						
Capital expenditure - gross (accrual accounting)	Yes		Yes			No
Capital expenditure - net (accrual accounting)	Yes		Yes			No
Indirect health care expenditure	Yes		Yes			No
Establishment identification data elements						
Establishment identifier	Yes			No	Yes	
Establishment number	Yes			No	Yes	
Establishment sector	Yes			No		No
Region code	Yes		Yes			No
State/territory identifier	Yes		Yes			No
Establishment type		No	Yes		Yes	
Geographical location of establishment		No		No		No
Establishment level expenditure elements						
Administrative expenses		No	Yes			No
Interest payments		No	Yes			No
Depreciation	Yes		Yes			No
Patient transport	Yes		Yes			No
Repairs and maintenance	Yes		Yes			No
Superannuation employer contributions	Yes		Yes			No
Domestic services	Yes		Yes			No
Payments to visiting medical officers	Yes		Yes			No
Drug supplies	Yes		Yes			No
Food supplies	Yes		Yes			No
Medical and surgical supplies		No	Yes			No
Other recurrent expenditure		No		No		No
Salaries and wages						
Registered nurses		No	Yes			No
Enrolled nurses	Yes		Yes			No
Student nurses	Yes		Yes		Yes	
Trainee/pupil nurses	Yes		Yes		Yes.	
Salaried medical officers	Yes		Yes			No
Other personal care staff		No	Yes			No

(continued)

**Table 4.2 (continued): National summary of the use of the *National health data dictionary* definition and domain values and NMDS scope**

Data element	NHDD definition used?		NHDD domain values used?		Provided for all establishments*?	
	Yes	No	Yes	No	Yes	No
Diagnostic & health professionals		No	Yes			No
Administrative & clerical staff	Yes		Yes			No
Domestic & other staff		No	Yes			No
Revenue data elements						
Patient revenue		No	Yes			No
Other revenues	Yes			No		No
Recoveries	Yes			No		No
Other data elements						
Full-time equivalent staff		No	Yes			No
Specialised service indicators	Yes		Yes			No
Type of non-admitted patient care						
Accident & Emergency	Yes		Yes			No
Dialysis	Yes		Yes			No
Pathology	Yes		Yes			No
Radiology	Yes		Yes			No
Endoscopy	Yes		Yes			No
Other medical/surgical/ diagnostic	Yes		Yes			No
Mental health	Yes		Yes			No
Alcohol and drug	Yes		Yes			No
Dental	Yes		Yes			No
Pharmacy	Yes		Yes			No
Allied health	Yes		Yes			No
Community health	Yes		Yes			No
District nursing	Yes		Yes			No
Other outreach	Yes		Yes			No
Type of non-admitted patient care (public psychiatric, alcohol & drug)	Yes		Yes			No
Group sessions	Yes		Yes			No
Number of available beds for admitted patients		No	Yes		Yes	
Teaching status	Yes		Yes		Yes	

\* Provided for establishments in each state or territory

## Data element compliance summary

### System level expenditure elements

These data elements were reported using standard definitions and domain values, but data were not supplied by several states (Victoria and Western Australia for capital expenditure items; Victoria, Western Australia and Tasmania for *Indirect health care expenditure*).

### Establishment identification data elements

Overall, these data elements were well reported. Two states supplied a shortened version of establishment identifier, but overall compliance with NHDD definitions and NHDD domain values was good. There were some gaps within states' reporting of *Region code* and state and sector elements. However all states and territories supplied identifying information for all establishments. These gaps did not have a significant impact on the quality of data for establishment identification, but did mean that manual processes were required to match identifiers with those in other hospital datasets.

### Establishment level expenditure elements (non-salary items)

The NHDD definition was used for all data elements in this section by most states and territories. One state included *Interest payments* in *Administrative expenses* and several states included outsourced pathology services in *Medical and surgical supplies*. Also, one state included termination payments in *Other recurrent expenditure*.

Data was reported using NHDD domain values, apart from one state reporting a few negative values in *Other recurrent expenditure*. Victorian data were reported at 'network' rather than establishment level, one level above establishment. Tasmania did not report any non-salary expenditure for five small hospitals and Victoria did not report for most categories for one establishment (its single psychiatric hospital). This had an impact on national coverage for data in these categories and so no data elements had complete coverage. If the Tasmanian and Victorian establishments were excluded, several elements still had inadequate coverage, in particular *Interest payments* and *Depreciation*.

### Establishment level expenditure elements (salaries and wages)

Salaries and wages data element categories were not particularly well reported. Within nurses salaries and wages, several states could not distinguish between different nursing categories, although total nurses salaries was reported by all jurisdictions. *Other personal care staff* category was poorly reported, with data often allocated to other staffing categories. This then reduced the comparability of data in the other categories (*Diagnostic and health professionals* and *Domestic and other staff*).

### Revenue data elements

There were considerable gaps in these data, with incomplete data being supplied by four jurisdictions. In addition, states and territories indicated that it was difficult for them to determine whether revenue had been allocated to the correct revenue category.

## Other data elements

As was the case with *Salaries and wages*, there were difficulties with *Full-time equivalent staff* categories. The NHDD definition was not used in several instances and this reduced the quality of data in other *Full-time equivalent staff* categories. Apart from *Full-time equivalent staff* and a definitional issue for one state for *Number of Available Beds* all data elements in this section used NHDD definitions and NHDD domain values.

For all these ‘other’ data elements, data were not reported for all establishments. In particular *Non-admitted patient occasions of service* was not reported for several establishments in Western Australia and Victoria. As a result, data was provided for all establishments for only one of the 21 elements/categories (*Teaching status*).

## State and territory summary

The state and territory summary (Table 4.3) provides information on the number and proportion of data elements for which the NHDD definition and domain values were used, and the number and proportion of data elements which were reported for all separations.

**Table 4.3: State and territory summary of the use of the *National health data dictionary* definition and domain values and NMDS scope**

State/territory	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
	Number	Per cent	Number	Per cent	Number	Per cent
[Number (out of 54*) and % of data elements]						
NSW	45	83	53	98	44	81
Vic	53	98	51	94	20	37
Qld	52	96	51	94	50	93
WA	53	98	51	94	32	59
SA	46	85	54	100	48	89
Tas	50	93	54	100	25	46
ACT	53	100	53	100	51	96
NT	53	100	53	100	49	92
Australia total	41	76	47	87	7	13

\* Out of 53 for Australian Capital Territory and Northern Territory.

All states and territories used the NHDD definition in more than 76% of data elements. The Australian Capital Territory and Northern Territory used the definitions for 100% of reporting, and four states (Victoria, Western Australia, Queensland and Tasmania) used the definitions for more than 93% of reporting. All states and territories had excellent use of NHDD domain values, with more than 93% of reporting using accurate domain values. However for this NMDS most domain values are numbers, for example dollars or counts, so any number was considered valid for this purpose.

Queensland, South Australia, the Australian Capital Territory and Northern Territory had the highest data coverage, with data provided for all establishments for more than 89% of data elements/categories. Reporting from Western Australia was affected by several ‘not reported’ for the *Type of non-admitted patient occasions of service* categories. Tasmania’s coverage was reduced as data were not provided for 5 small hospitals. Victoria’s coverage was significantly reduced by not reporting most of the recurrent expenditure categories for

its single psychiatric hospital and by not reporting for some establishments for *Type of non-admitted patient occasions of service*.

## Assessment of individual data elements

This section reports on the assessment of compliance for each data element in the NMDS reported by states and territories for 2003–04. It details states' and territories' use of the national standard definition, domain values and scope. It also provides details of the use of non-standard NHDD definitions and domain values and non-standard use of scope. Information is provided on mapping required from state and territory data sets to comply with the national standard domain values, and additional comments or information from states and territories to assist in the evaluation.

Scope and definitions are as defined in the *National health data dictionary* version 12. Data listed as 'Supplied for all establishments' is data apparently supplied for all applicable establishments.

If an establishment supplied a total for any category (for example, recurrent expenditure, salaries, full-time equivalent staff, revenue) but did not supply data for individual categories (for example administrative expenses, interest payments) elements, then it was considered non-compliant. However, if data were supplied for the total, and for only some individual categories which added to the total, then other categories were assumed to be zero and so considered compliant.

If an establishment reported *Full-time equivalent staff* but not *Salaries and wages* for the corresponding category (or vice versa) then it was considered non-compliant in the non-reporting category.

The order of data elements in this section is according to how the data elements are presented in Table 4.2.

**Data element name: Capital expenditure—gross (accrual accounting)**

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000325</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> System-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 2</b>
<b>Definition:</b> Expenditure in a period on the acquisition or enhancement of an asset (excluding financial assets).		

**Use of National Standard definition, domain values and NMDS scope:**

State	NHDD definition used?		NHDD domain values used?		Provided for all states or territories?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

**Details of use of non-standard NHDD definition and domain values:**

Not applicable, NHDD definition and domain values used by all jurisdictions.

**Does the data supplied cover all establishments?**

Victoria and Tasmania did not supply *Capital expenditure – gross (accrual accounting)*.

**Was mapping required from state and territory data sets?**

No.

## Data element name: Capital expenditure—net (accrual accounting)

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000396</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> System-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 2</b>
<b>Definition:</b> Gross capital expenditure less trade-in values of replaced items and receipts from the sale of replaced or otherwise disposed items.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all states or territories?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

Victoria and Tasmania did not supply *Capital expenditure – net (accrual accounting)*.

### Was mapping required from state and territory data sets?

No.

## Data element name: Indirect health care expenditure

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003-04</b>
		<b>Knowledgebase ID: 000326</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> System-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> Expenditures on health care that cannot be directly related to programs operated by a particular establishment (that is, can only be indirectly related to particular establishments). To be provided at the State level but disaggregated into patient transport services, public health and monitoring services, central and state-wide support services, central administrations and other indirect health care expenditure.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all states or territories?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

Victoria, Western Australia and Tasmania did not supply *Indirect health care expenditure*.

### Was mapping required from state and territory data sets?

No.

## Data element name: Establishment identifier

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Admitted Patient Mental Health Care Admitted Patient Palliative Care Alcohol and Other Drug Treatment Services Elective Surgery Waiting Times (census data) Elective Surgery Waiting Times (removals data) Mental Health Establishments Non-admitted Patient Emergency Department Care Outpatient Care Perinatal	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000050</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 4</b>
<b>Definition:</b> Identifier for the establishment in which episode or event occurred. Each separately administered health care establishment to have a unique identifier at the national level.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all states or territories?	
NSW	Yes		Yes		Yes	
Vic	Yes			No	Yes	
Qld	Yes		Yes		Yes	
WA	Yes			No	Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

*Establishment identifier* is a concatenation of:

- State/territory identifier (character position 1)
- Establishment sector (character position 2)
- Region identifier (character positions 3-4)
- Establishment number supplied by state/territory (character positions 5-9).

The *Establishment identifier* can be up to 9 digits. The majority of states or territories supplied an 8 number code (Northern Territory, Australian Capital Territory, South Australia and Queensland); New South Wales reported a 7 digit alphanumeric code and Tasmania a 6 number code. Western Australia supplied a 3 digit Establishment number. Victoria supplied a variety of a 4 digit 'establishment numbers' (including 'auspice' identifier and campus identifier) and the AIHW used those data and historical information to assign establishment numbers which align with the Admitted Patient Care NMDS. The AIHW combined establishment numbers with state identifiers and sector or region codes to provide an *Establishment identifier* for establishments in Western Australia and Victoria.

### **Does the data supplied cover all establishments?**

Relevant information is supplied for all establishments in all jurisdictions. However Western Australia and Victoria supply *Establishment number* rather than *Establishment identifier*.

### **Was mapping required from state and territory data sets?**

As noted above, the AIHW combined establishment number supplied with state identifiers and sector or region codes to provide complete *Establishment identifiers* for Western Australia and Victoria.

## Supporting data element name: Establishment number

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Admitted Patient Mental Health Care Admitted Patient Palliative Care Alcohol and Other Drug Treatment Services Elective Surgery Waiting Times (census data) Elective Surgery Waiting Times (removals data) Mental Health Establishments Non-admitted Patient Emergency Department Care Outpatient Care Perinatal	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000377</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 4</b>
<b>Definition:</b> An identifier for an establishment, unique within a state or territory.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all states or territories?	
NSW	Yes		Yes		Yes	
Vic	Yes			No	Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Victoria supplied a variety of a 4 digit 'establishment numbers' (including 'auspice' identifier and campus identifier) and the AIHW used those data and historical information to assign establishment numbers which align with the Admitted Patient Care NMDS.

### Does the data supplied cover all establishments?

*Establishment number* was supplied for all establishments.

**Was mapping required from state and territory data sets?**

No.

## Supporting data element name: Establishment sector

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Admitted Patient Mental Health Care Admitted Patient Palliative Care Alcohol and Other Drug Treatment Services Elective Surgery Waiting Times (census data) Elective Surgery Waiting Times (removals data) Mental Health Establishments Non-admitted Patient Emergency Department Care Outpatient Care Perinatal	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000050</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 4</b>
<b>Definition:</b> A section of the health care industry with which a health care establishment can identify.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all states or territories?	
NSW	Yes		Yes		Yes	
Vic	Yes			No		No
Qld	Yes		Yes		Yes	
WA	Yes			No		No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

**Details of use of non-standard NHDD definition and domain values:**

*Establishment sector* was not specifically supplied by Victoria and Western Australia. However, states and territories determine which hospitals are 'public hospitals' and only public hospitals are required to be reported to this NMDS.

**Does the data supplied cover all establishments?**

As above.

**Was mapping required from state and territory data sets?**

No.

## Supporting data element name: Region code

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Admitted Patient Mental Health Care Admitted Patient Palliative Care Alcohol and Other Drug Treatment Services Elective Surgery Waiting Times (census data) Elective Surgery Waiting Times (removals data) Mental Health Establishments Non-admitted Patient Emergency Department Care Outpatient Care Perinatal	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000050</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 4</b>
<b>Definition:</b> An identifier for location of health services in a defined geographic or administrative area.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all states or territories?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

**Details of use of non-standard NHDD definition and domain values:**

NHDD definition and domain values used by all jurisdictions.

**Does the data supplied cover all establishments?**

*Region code* was not supplied (as part of establishment identifier) by Western Australia or Victoria. Other states or territories may not have region codes.

**Was mapping required from state and territory data sets?**

No.

## Supporting data element name: State/territory identifier

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Admitted Patient Mental Health Care Admitted Patient Palliative Care Alcohol and Other Drug Treatment Services Elective Surgery Waiting Times (census data) Elective Surgery Waiting Times (removals data) Mental Health Establishments Non-admitted Patient Emergency Department Care Outpatient Care Perinatal	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000050</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 4</b>
<b>Definition:</b> An identifier for Australian state or territory.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all states or territories?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

**Details of use of non-standard NHDD definition and domain values:**

NHDD definition and domain values used by all jurisdictions.

**Does the data supplied cover all establishments?**

*State or territory identifier* not supplied by Western Australia or Victoria.

**Was mapping required from state and territory data sets?**

Where data was not supplied it was ascertained from the jurisdiction supplying the data.

## Data element name: Establishment type

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000327</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> Type of establishment (defined in terms of legislative approval, service provided and patients treated) for each separately administered establishment.  Residential establishments are considered to be separately administered if managed as an independent unit in terms of financial, budgetary and activity statistics. The situation where establishment-level data, say for components of an area health service, were not available separately at a central authority was not grounds for treating such a group of establishments as a single establishment unless such data were not available at any level in the health care system.  Non-residential health services are classified in terms of separately administered organisations rather than in terms of the number of sites at which care is delivered. Thus, domiciliary nursing services would be counted in terms of the number of administered entities employing nursing staff rather than in terms of the number of clinic locations used by the staff.  Establishments can cater for several activities and in some cases separate staff and financial details are not available for each activity. In the cases it is necessary to classify the establishment according to its predominant residential activity (measured by costs) and to allocate all the staff and finances to that activity. Where non-residential services only are provided at one establishment, that establishment is classified according to the predominant non-residential activity (in terms of costs).		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW		? No	Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas		? No	Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

**Details of use of non-standard NHDD definition and domain values:**

All states and territories used the NHDD definition and domain values. However, in the peer grouping process (Table 4.2, *Australian hospital statistics 2003-04*) four hospitals peer grouped to 'hospice' – three in NSW and one in Tasmania – but only one NSW hospital actually reported as type R6.1.

**Does the data supplied cover all establishments?**

*Establishment type* was supplied for all establishments.

**Was mapping required from state and territory data sets?**

No.

**Additional information:**

For 2003–04 this data element was used to report 738 R1.1 public acute care hospitals, 20 R2.1 public psychiatric hospitals, two R4.1 public alcohol and drug establishments, and one R6.1 public hospice.

One establishment in Victoria with *hospice* in its name reported as type R1.1 but peer grouped to 'Other non-acute'.

## Data element name: Geographical location of establishment

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000260</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 2</b>
<b>Definition:</b> Geographical location of the establishment. For establishments with more than one geographical location, the location is defined as that of the main administrative centre.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW		No		No	Yes	
Vic	Yes		Yes		Yes	
Qld		No		No	Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

New South Wales and Queensland used Statistical Location Area (SLA) codes which are not valid in the current version, that is they used old SLA codes.

### Does the data supplied cover all establishments?

*Geographical location of establishment* was not supplied for some establishments in Tasmania.

### Was mapping required from state and territory data sets?

No.

### Additional information

Queensland has rectified this problem for 2004–05 reporting.

## Data element name: Administrative expenses

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000244</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> All expenditure incurred by establishments (but not central administrations) of a management expenses/administrative support nature such as any rates and taxes, printing, telephone, stationery and insurance (including workers compensation).		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA		No	Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

South Australia included *Interest payments* in *Administrative expenses*.

### Does the data supplied cover all establishments?

*Administrative expenses* data were supplied for all states and territories. However Tasmania did not report data for five small establishments. Victoria did not report this category for its single psychiatric hospital.

### Was mapping required from state and territory data sets?

No.

## Data element name: Interest payments

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000245</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> Payments made by or on behalf of the establishment in respect of borrowings (e.g. interest on bank overdraft) provided the establishment is permitted to borrow. This does not include the cost of equity capital (i.e. dividends on shares) in respect of profit-making private establishments.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes			No
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA		No	Yes			No
Tas	Yes		Yes			No
ACT	Yes		Yes			No
NT	Yes		Yes			No

### Details of use of non-standard NHDD definition and domain values:

South Australia included *Interest payments* in *Administrative expenses*.

### Does the data supplied cover all establishments?

Reporting on interest payments is of indeterminate quality. Some variations in data reported arise from different financial and accounting systems among states and territories. In some jurisdictions public hospitals may not be permitted to borrow funds or funds may be supplied by the state treasury. Zero interest payments were reported by Victoria, Tasmania and Northern Territory. In Queensland one establishment reported interest payments by special arrangement, other establishments were generally not permitted to report interest payments. In the Australian Capital Territory only one establishment reported making interest payments. South Australia included interest payments in administrative expenses (although *Interest payments* were reported for four establishments). New South Wales reported *Interest payments* for 44% of its establishments and Western Australia reported *Interest payments* for 63% of its establishments.

**Was mapping required from state and territory data sets?**

No.

## Data element name: Depreciation

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003-04</b>
		<b>Knowledgebase ID: 000246</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> Depreciation represents the expensing of a long-term asset over its useful life and is related to the basic accounting principle of matching revenue and expenses for the financial period. Depreciation charges for the current financial year only should be shown as expenditure. Where intangible assets are amortised (such as with some private hospitals) this should also be included in recurrent expenditure.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes			No
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all reporting jurisdictions.

### Does the data supplied cover all establishments?

Tasmania did not report *Depreciation* for any establishments and South Australia reported *Depreciation* for a very small subset of establishments.

### Was mapping required from state and territory data sets?

No.

## Data element name: Patient transport

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000243</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> The direct cost of transporting patients excluding salaries and wages of transport staff.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?	NHDD domain values used?	Provided for all establishments?
NSW	Yes	Yes	Yes
Vic	Yes	Yes	No
Qld	Yes	Yes	Yes
WA	Yes	Yes	Yes
SA	Yes	Yes	Yes
Tas	Yes	Yes	No
ACT	Yes	Yes	Yes
NT	Yes	Yes	Yes

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

Tasmania supplied *Patient transport* information for approximately 20% of its establishments. Victoria did not report this category for its single psychiatric hospital.

### Was mapping required from state and territory data sets?

No.

## Data element name: Repairs and maintenance

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000242</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> The costs incurred in maintaining, repairing, replacing and providing additional equipment, maintaining and renovating building and minor additional works. Expenditure of a capital nature should not be included here. Do not include salaries and wages of repair and maintenance staff. Gross expenditure should be reported with no revenue offsets (except for inter-hospital transfers).		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all reporting jurisdictions.

### Does the data supplied cover all establishments?

*Repairs and maintenance* data were supplied for all states and territories. However Tasmania did not report data for five small establishments. Victoria did not report this category for its single psychiatric hospital.

### Was mapping required from state and territory data sets?

No.

**Data element name: Superannuation employer contributions (including funding basis)**

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000237</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> Contributions paid or (for an emerging cost scheme) that should be paid (as determined by an actuary) on behalf of establishment employees either by the establishment or a central administration such as a State health authority, to a superannuation fund providing retirement and related benefits to establishment employees. The following different funding bases are identified: <ul style="list-style-type: none"> <li>• paid by hospital to fully funded scheme</li> <li>• paid by Commonwealth Government or State government to fully funded scheme</li> <li>• unfunded or emerging costs schemes where employer component is not presently funded.</li> </ul> Fully funded schemes are those in which employer and employee contributions are paid into an invested fund. Benefits are paid from the fund. Most private sector schemes are fully funded. Emerging cost schemes are those in which the cost of benefits is met at the time a benefit becomes payable; that is, there is no ongoing invested fund from which benefits are paid. The Commonwealth superannuation fund is an example of this type of scheme as employee benefits are paid out of general revenue.		

**Use of National Standard definition, domain values and NMDS scope:**

State	NHDD definition used?	NHDD domain values used?	Provided for all establishments?
NSW	Yes	Yes	Yes
Vic	Yes	Yes	No
Qld	Yes	Yes	Yes
WA	Yes	Yes	Yes
SA	Yes	Yes	Yes
Tas	Yes	Yes	No
ACT	Yes	Yes	Yes
NT	Yes	Yes	Yes

**Details of use of non-standard NHDD definition and domain values:**

Not applicable, NHDD definition and domain values used by all jurisdictions.

### **Does the data supplied cover all establishments?**

*Superannuation employer contributions* data were supplied for all states and territories. However Tasmania did not report data for five small establishments. Victoria did not report this category for its single psychiatric hospital.

### **Was mapping required from state and territory data sets?**

No.

### **Additional information:**

Superannuation funding basis has never been collected. The *National health data dictionary* identifies three different funding bases:

- paid by hospital to fully funded scheme
- paid by Commonwealth, State or Territory government to fully funded scheme
- unfunded or emerging costs schemes where employer component is not presently funded.

Comments in the NHDD indicate that funding basis is required for cost comparison purposes. However this has never been utilised. In the NHDD the domain values are an Australian dollar amount, the same as for other recurrent expenditure items, and there is no information on *how* to report funding basis.

## Data element name: Domestic services

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003-04</b>
		<b>Knowledgebase ID: 000241</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> The costs of all domestic services including electricity, other fuel and power, domestic services for staff, accommodation and kitchen expenses but not including salaries and wages, food costs or equipment replacement and repair costs. Gross expenditure should be reported with no revenue offsets, except for inter-hospital transfers.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

*Domestic services* data were supplied for all states and territories. However Tasmania did not report data for five small establishments and Victoria did not report for one establishment.

### Was mapping required from state and territory data sets?

No.

## Data element name: Payments to visiting medical officers

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000236</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> All payments made by an institutional health care establishment to visiting medical officers for medical services provided to hospital (public) patients on an honorary, sessionally paid, or fee for service basis. A visiting medical officer is a medical practitioner appointed by the hospital board to provide medical services for hospital (public) patients on an honorary, sessionally paid, or fee for service basis. This category includes the same Australian Standard Classification of Occupations (ASCO) codes as the salaried medical officers category.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

*Payments to visiting medical officers* data were supplied for all states and territories. However Tasmania did not report data for five small establishments and Victoria did not report for one establishment.

### Was mapping required from state and territory data sets?

No.

## Data element name: Drug supplies

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000238</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> The cost of all drugs including the cost of containers. Gross expenditure should be reported with no revenue offsets, except for inter-hospital transfers.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

*Drug supplies* data were supplied for all states and territories. However Tasmania did not report data for five small establishments and Victoria did not report this category for its single psychiatric hospital.

### Was mapping required from state and territory data sets?

No.

## Data element name: Food supplies

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000240</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> The cost of all food and beverages but not including kitchen expenses such as utensils, cleaning materials, cutlery and crockery. Gross expenditure should be reported with no revenue offsets, except for inter-hospital transfers.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

*Food supplies* data were supplied for all states and territories. However Tasmania did not supply this information for five hospitals and Victoria did not report this category for its single psychiatric hospital.

### Was mapping required from state and territory data sets?

No.

## Data element name: Medical and surgical supplies

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000239</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> The cost of all consumables of a medical or surgical nature (excluding drug supplies) but not including expenditure on equipment repairs. Gross expenditure should be reported with no revenue offsets, except for inter-hospital transfers.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic		No	Yes			No
Qld		No	Yes		Yes	
WA	Yes		Yes		Yes	
SA		No	Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

NHDD definition and domain values were used. However Victoria, Queensland and South Australia (and possibly other jurisdictions) included outsourced or state-supplied pathology services in this category. This is a reflection of a shortcoming in recurrent expenditure categories which do not seem to have a place for pathology services.

### Does the data supplied cover all establishments?

*Medical and surgical supplies* data were supplied for all states and territories. However Tasmania did not report data for five small establishments and Victoria did not report for its single psychiatric hospital.

### Was mapping required from state and territory data sets?

No.

## Data element name: Other recurrent expenditure

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003-04</b>
		<b>Knowledgebase ID: 000247</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> Other payments are all other recurrent expenditure not included elsewhere in any of the recurrent expenditure categories. Gross expenditure should be reported with no revenue offsets (except for inter-hospital transfers).		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes			No	Yes	
WA	Yes			No	Yes	
SA		No	Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

South Australia included termination payments in *Other recurrent expenditure*. Queensland and Western Australia data included negative *Other recurrent expenditure*.

### Does the data supplied cover all establishments?

Tasmania did not report *Other recurrent expenditure* data for five small hospitals and Victoria did not report this category for its single psychiatric hospital.

### Was mapping required from state and territory data sets?

No.

## Data element name: Salaries and wages

<b>Evaluation NMDs:</b> Public Hospital Establishments	<b>Other NMDs:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000254</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> Salary and wage payments for all employees of the establishment (including contract staff employed by an agency, provided staffing data are also available). This is to include all paid leave (recreation, sick and long-service) and salary and wage payments relating to workers compensation leave for the following staffing categories (see below). Generally, salary data by staffing categories should be broadly consistent with full-time equivalent staffing numbers. Where staff provide services to more than one hospital, their salaries should be apportioned between all hospitals to whom services are provided on the basis of hours worked in each hospital. Salary payments for contract staff employed through an agency should be included under salaries for the appropriate staff category provided they are included in full-time equivalent staffing. If they are not, salary payments should be shown separately.		

The *Salaries and wages* data element includes nine categories:

1. registered nurses
2. enrolled nurses
3. student nurses
4. trainee/pupil nurses
5. salaried medical officers
6. other personal care staff
7. diagnostic and health professionals
8. administrative and clerical staff
9. domestic and other staff.

Information on compliance with the individual categories in this data element follows.

### Was mapping required from state and territory data sets?

Mapping was not required for any of the *Salaries and wages* categories.

## 1. Salaries and wages—Registered nurses

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
	Yes	No	Yes	No	Yes	No
NSW		No	Yes			No
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA		No	Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

NHDD definition and domain values used by all jurisdictions, except New South Wales and Western Australia (see below).

### Does the data supplied cover all establishments?

Total nurses (salaries and wages) = Registered nurses + Enrolled nurses + Student nurses + Trainee/pupil nurses.

All states and territories supplied *Total nurses salaries and wages*. However New South Wales did not split data into individual categories and therefore did not supply *Registered nurses salaries and wages*. Victoria supplied some data. However it did not cover all hospitals. For Western Australia, many hospitals were unable to provide a split between nurse categories and these have been reported as registered nurses. Nurses' salaries, either totals or categories, were not reported by Tasmania for a few establishments.

## 2. Salaries and wages—Enrolled nurses

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
	Yes	No	Yes	No	Yes	No
NSW		No	Yes			No
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

NHDD definition and domain values used by all jurisdictions, except New South Wales (see below).

### Does the data supplied cover all establishments?

Total nurses (salaries and wages) = Registered nurses + Enrolled nurses + Student nurses + Trainee/pupil nurses.

All states and territories supplied *Total nurses salaries and wages*. However New South Wales did not split data into individual categories and therefore did not supply *Enrolled nurses salaries and wages*. Victoria supplied some data. However it did not cover all hospitals. A very small number of establishments in Tasmania did not supply nurses salaries, either totals or in categories.

### 3. Salaries and wages—Student nurses

#### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		..	
Vic	Yes		Yes		..	
Qld	Yes		Yes		..	
WA	Yes		Yes		..	
SA	Yes		Yes		Yes	
Tas	Yes		Yes		..	
ACT	Yes		Yes		..	
NT	Yes		Yes		..	

.. Not applicable

#### Details of use of non-standard NHDD definition and domain values:

NHDD definition and domain values used by one reporting jurisdiction.

#### Does the data supplied cover all establishments?

Total nurses (salaries and wages) = Registered nurses + Enrolled nurses + Student nurses + Trainee/pupil nurses.

All states and territories supplied *Total nurses salaries and wages*. However only South Australia reported *Student nurses salaries and wages*, for around 30% of establishments. South Australia is the only jurisdiction to report *Student nurses salaries and wages* since 1998-99. New South Wales did not divide *Total nurses salaries and wages* into categories, and other jurisdictions indicated zero student nurses.

#### 4. Salaries and wages—Trainee/pupil nurses

##### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

##### Details of use of non-standard NHDD definition and domain values:

Not applicable; standard definitions used.

##### Does the data supplied cover all establishments?

Total nurses (salaries and wages) = Registered nurses + Enrolled nurses + Student nurses + Trainee/pupil nurses.

All jurisdictions indicated zero *Trainee/pupil nurses salaries and wages*. No data have been reported in this category since 1997-98.

## 5. Salaries and wages—Salaried medical officers

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

All states and territories supplied data for *Salaried medical officers salaries and wages*. However Tasmania did not supply salaries and wages information for a few establishments.

## 6. Salaries and wages—Other personal care staff

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
	Yes	No	Yes	No	Yes	No
NSW		No	Yes			No
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA		No	Yes			No
Tas		No	Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

New South Wales and South Australia include *Other personal care staff* in *Diagnostic and health professionals* and *Domestic and other staff*. Tasmania includes *Other personal care staff* in *Domestic and other staff*.

### Does the data supplied cover all establishments?

*Salaries and wages – other personal care staff* was not reported by five jurisdictions. Queensland, Northern Territory and Australian Capital Territory reported *Other personal care staff*. Western Australia reported *Other personal care staff* for a few establishments. New South Wales, South Australia, Tasmania and Victoria did not supply data for *Other personal care staff*.

## 7. Salaries and wages—Diagnostic and health professionals

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW		No	Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA		No	Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Although New South Wales and South Australia allocated diagnostic and health professionals to this category, they also include data from other categories. Both states include *Other personal care staff in Diagnostic and allied health professionals* and *Domestic and other staff*.

### Does the data supplied cover all establishments?

All states and territories supplied data for *Salaries and wages – diagnostic and health professionals*. Tasmania did not supply salaries and wages information for a few small establishments.

## 8. Salaries and wages—Administrative and clerical staff

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

All states and territories supplied data for *Salaries and wages – administrative and clerical staff*. Tasmania did not supply any salaries and wages information for a few small establishments.

## 9. Salaries and wages—Domestic and other staff

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
	Yes	No	Yes	No	Yes	No
NSW		No	Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA		No	Yes		Yes	
Tas		No	Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Although *Domestic and other staff* were allocated to this category, some states added extra data to this category. New South Wales and South Australia include *Other personal care staff* in *Diagnostic and allied health professionals* and *Domestic and other staff*. Tasmania includes *Other personal care staff* in *Domestic and other staff*.

### Does the data supplied cover all establishments?

All states and territories supplied data for *Salaries and wages – domestic and other staff*. Tasmania did not supply any salaries and wages information for a few small establishments.

## Data element name: Patient revenue

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003-04</b>
		<b>Knowledgebase ID: 000296</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> Patient revenue comprises all revenue received by, and due to, an establishment in respect of individual patient liability for accommodation and other establishment charges. All patient revenue is to be grouped together regardless of source of payment (Commonwealth, health fund, insurance company, direct from patient) or status of patient (whether inpatient or non-inpatient, private or compensable). Gross revenue should be reported.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?	NHDD domain values used?	Provided for all establishments?
NSW	Yes	Yes	No
Vic	Yes	Yes	Yes
Qld	Yes	Yes	No
WA	Yes	Yes	Yes
SA	Yes	Yes	Yes
Tas	Yes	Yes	No
ACT	Yes	Yes	Yes
NT	Yes	Yes	Yes

### Details of use of non-standard NHDD definition and domain values:

Queensland *Patient revenue* included items such as pharmacy and ambulance which are borderline *Patient revenue* or *Recoveries*.

### Does the data supplied cover all establishments?

All states and territories supply *Patient revenue* data, but Tasmania, New South Wales and Queensland did not supply data for a small subset of hospitals in each state.

### Was mapping required from state and territory data sets?

No.

## Data element name: Other revenues

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003-04</b>
		<b>Knowledgebase ID: 000323</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> All other revenue received by the establishment that is not included under patient revenue or recoveries (but not including revenue payments received from state or territory governments). This would include revenue such as investment income from temporarily surplus funds and income from charities, bequests and accommodation provided to visitors. Gross revenue should be reported (except in relation to payments for inter-hospital transfers of goods and services).		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes			No
Vic	Yes		Yes		Yes	
Qld	Yes			No		No
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Standard definition and domain values used, except Queensland reported negative revenue for two establishments.

### Does the data supplied cover all establishments?

New South Wales, Queensland and Tasmania did not supply *Other revenue* for a subset of their establishments.

### Was mapping required from state and territory data sets?

No.

## Data element name: Recoveries

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003-04</b>
		<b>Knowledgebase ID: 000295</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> All revenue received that is in the nature of a recovery of expenditure incurred. This would include: <ul style="list-style-type: none"> <li>• income received from the provision of meals and accommodation to members of staff of the hospital (assuming it is possible to separate this from income from the provision of meals and accommodation to visitors;</li> <li>• income received from the use of hospital facilities by salaried medical officers exercising their rights of private practice and by private practitioners treating private patients in hospital; and</li> <li>• other recoveries such as those relating to inter-hospital services where the revenue relates to a range of different costs and cannot be clearly offset against any particular cost.</li> </ul> Generally, gross revenues should be reported but, where inter-hospital payments for transfers of goods and services are made, offsetting practices are acceptable to avoid double counting. Where a range of inter-hospital transfers of goods and services is involved and it is not possible to allocate the offsetting revenue against particular expenditure categories, then it is acceptable to bring that revenue in through recoveries.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?	NHDD domain values used?	Provided for all establishments?
NSW	Yes	Yes	No
Vic	Yes	Yes	Yes
Qld	Yes	Yes	Yes
WA	Yes	Yes	Yes
SA	Yes	Yes	No
Tas	Yes	Yes	No
ACT	Yes	Yes	Yes
NT	Yes	Yes	Yes

**Details of use of non-standard NHDD definition and domain values:**

Standard definition and domain values used. Queensland reported a negative value for one establishment in *Recoveries*.

**Does the data supplied cover all establishments?**

Incomplete data were supplied for New South Wales, South Australia and Tasmania.

**Was mapping required from state and territory data sets?**

No.

## Data element name: Full-time equivalent staff

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b> Mental Health Establishments	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000252</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 2</b>
<b>Definition:</b> Full time equivalent staff units are the on-job hours paid for (including overtime) and hours of paid leave of any type for a staff member (or contract employee where applicable) divided by the number of ordinary-time hours normally paid for a full-time staff member when on the job (or contract employee where applicable) under the relevant award or agreement for the staff member (or contract employee occupation where applicable). Hours of unpaid leave are to be excluded. Contract staff employed through an agency are included where the contract is for the supply of labour (e.g. nursing) rather than of products (e.g. photocopier maintenance). In the former case, the contract would normally specify the amount of labour supplied and could be reported as full-time equivalent units.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW		No	Yes			No
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA		No	Yes		Yes	
Tas		No	Yes			No
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

New South Wales and South Australia included *Other personal care staff in Diagnostic and allied health professionals* and *Domestic and other staff*. Tasmania included *Other personal care staff in Domestic and other staff*. For New South Wales, only *Total nurses FTE* was supplied.

## Does the data supplied cover all establishments?

The *Full-time equivalent (FTE) staff* data element includes nine categories:

1. registered nurses
2. enrolled nurses
3. student nurses
4. trainee/pupil nurses
5. salaried medical officers
6. other personal care staff
7. diagnostic and health professionals
8. administrative and clerical staff
9. domestic and other staff.

*Full-time equivalent staff* categories are the same as *Salaries and wages* categories, and jurisdictions are asked to ensure that data are consistent between the two data elements. Therefore most comments on compliance for *Salaries and wages* are applicable to *Full-time equivalent staff*.

*Total full-time equivalent staff* data were supplied for all states and territories, although a few small establishments in Tasmania did not supply the data. Table 4.4 shows reporting of full-time equivalent staff by states and territories.

As for *Salaries and wages*, *Other personal care staff* was patchily reported and often allocated to other categories. The Australian Capital Territory, Northern Territory and Queensland reported *Other personal care staff* FTE. New South Wales and South Australia included *Other personal care staff* in *Diagnostic and allied health professionals* and *Domestic and other staff*. Tasmania included *Other personal care staff* in *Domestic and other staff*. Western Australia supplied *Other personal care staff* FTE for just a few establishments and Victoria did not supply data for *Other personal care staff*.

In the nursing categories, all states and territories supplied *Total nurses FTE*. For New South Wales, only *Total nurses FTE* was supplied. Victoria supplied some data. However it did not cover all hospitals. For other states, *Total nurses* was split into *Enrolled nurses* and *Registered nurses*. South Australia also reported *Student nurses* FTE (for 30% of South Australia establishments) and included this data in its *Total nurses* FTE data. All other states and territories reported zero *Student nurses*, although Western Australia did supply some 'not reported'. Similarly, all states or territories reported zero *Trainee nurses*, but Western Australia supplied some 'not reported'.

## Was mapping required from state and territory data sets?

No.

**Table 4.4: Full-time equivalent staff coverage by state and territory, 2003-04**

Staffing category	NSW <sup>(a)</sup>	Vic <sup>(b)</sup>	Qld <sup>(c)</sup>	WA <sup>(d)</sup>	SA <sup>(b)</sup>	Tas <sup>(e)</sup>	ACT	NT
Salaried medical officers	✓	✓	✓	✓	✓	✓	✓	✓
Registered nurses	n.a.	n.a.	✓	✓	✓	✓	✓	✓
Enrolled nurses	n.a.	n.a.	✓	✓	✓	✓	✓	✓
Student nurses	..	..	..	..	✓	..	..	..
Trainee/pupil nurses	..	..	..	..	..	..	..	..
<b>Total nurses</b>	✓	✓	✓	✓	✓	✓	✓	✓
Other personal care staff	n.a.	n.a.	✓	✓	n.a.	n.a.	✓	✓
Diagnostic & health professionals	✓	✓	✓	✓	✓	✓	✓	✓
Administrative & clerical staff	✓	✓	✓	✓	✓	✓	✓	✓
Domestic & other staff	✓	✓	✓	✓	✓	✓	✓	✓
<b>Total staff</b>	✓	✓	✓	✓	✓	✓	✓	✓

(a) *Other personal care staff* are included in *Diagnostic & allied health professionals* and *Domestic & other staff*.

(b) *Other personal care staff* are included in *Domestic & other staff*.

(c) Queensland staff employed by the state pathology service not reported here.

(d) *Other personal care staff* for Western Australia excludes staff on retention who do not work regular hours. Many hospitals were unable to provide a split between nurse categories and these have been reported as *registered nurses*.

(e) Data for 2 small Tasmanian hospitals not supplied. *Other personal care staff* are included in *Domestic & other staff*.

✓ Reported

n.a. Not available (or not reported)

.. Not applicable

## Data element name: Specialised service indicators

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000321</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> Specialised services provided in establishments.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes			No
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Standard definitions and domain values used.

### Does the data supplied cover all establishments?

There are specialised service indicators for 28 different units; see list below. All states and territories reported whether or not establishments have specialised service units. New South Wales had 11 establishments which indicated 'not reported': seven establishments for dental, psychiatric and drug and alcohol care and 4 very small establishments in remote areas.

### Was mapping required from state and territory data sets?

No.

**Additional Information:**

Specialised service units are as follows:

1. obstetric/maternity
2. specialist paediatric
3. psychiatric unit/ward
4. intensive care unit (level 3)
5. hospice care unit
6. nursing home unit
7. geriatric assessment unit
8. domiciliary care service
9. alcohol and drug unit
10. acute spinal cord injury unit
11. coronary care unit
12. cardiac surgery unit
13. acute renal dialysis unit
14. maintenance renal dialysis centre
15. burns unit
16. plastic/reconstructive surgery unit
17. oncology unit
18. neonatal intensive care unit
19. in-vitro fertilisation unit
20. comprehensive epilepsy centre
21. bone marrow unit
22. renal transport unit
23. heart and heart-lung transplant unit
24. pancreas transplantation unit
25. clinical genetics unit
26. sleep centre
27. neurological surgery unit
28. infectious diseases unit
29. AIDS unit
30. diabetes unit
31. rehabilitation unit.

## Data element name: Type of non-admitted patient care

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000231</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute hospitals. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, some corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> This data element identifies types of services provided to non-admitted patients in different institutional ways in different systems. It is not a summary casemix classification.		

### Does the data supplied cover all establishments?

*Type of non-admitted patient care* (also called *Occasions of service*) data counts non-admitted patient occasions of service for individuals. It is collected for 14 categories, which are examined individually on the following pages. Data are collected for R1.1 establishments, public acute hospitals. Data for non-admitted patient occasions of service for groups are collected for the same 14 categories in the *Group sessions* data element.

In all categories, it is difficult to assess compliance due to difficulties distinguishing between services 'not reported' and services which 'did not occur'. Western Australia and Victoria, in particular, did not report (that is reported 'blanks') for some categories. Other states and territories reported all zeros in some categories. However we have taken this at face value and assumed that the jurisdiction had no occasions of service for that category.

The categories of *Accident and emergency services*, *Other medical/surgical/obstetric* and *Allied health* had coverage for all states. *Pathology*, *Radiology and Organ imaging*, *Mental health*, *Pharmacy*, *Community health* and *Other outreach* also had reasonable coverage (data for at least six states/territories). *Dental* was reported by six states/territories and *District nursing* was reported by four jurisdictions. *Dialysis*, *Drug and alcohol* and *Endoscopy* were reported by just a few jurisdictions.

### Was mapping required from state and territory data sets?

Mapping was not required for any of the individual categories.

## 1. Type of non-admitted patient care—Accident and emergency services

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

All states and territories reported *Non-admitted patient accident and emergency services*. Western Australia did not report for some establishments.

## 2. Type of non-admitted patient care—Dialysis

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

NHDD definition and domain values used by reporting jurisdictions.

### Does the data supplied cover all establishments?

Western Australia did not report data for *Non-admitted patient dialysis*.

### Additional information:

Only NSW reported greater than zero occasions of service for this category, all other states and territories reported zero *Non-admitted patient dialysis occasions of service*.

### 3. Type of non-admitted patient care—Pathology

#### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes			No

#### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by reporting jurisdictions.

#### Does the data supplied cover all establishments?

Victoria, Western Australia and Northern Territory did not report *Non-admitted patient pathology services* for a subset of establishments.

#### 4. Type of non-admitted patient care—Radiology and organ imaging

##### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes			No

##### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

##### Does the data supplied cover all establishments?

The Northern Territory indicated that its *Non-admitted patient radiology and organ imaging* data are underestimated. Victoria and Western Australia did not report for some establishments.

## 5. Type of non-admitted patient care—Endoscopy and related procedures

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

NHDD definition and domain values used by reporting jurisdictions.

### Does the data supplied cover all establishments?

Western Australia did not report data for *Non-admitted patient endoscopy and related procedures* for some establishments.

### Additional information:

Only New South Wales and Queensland reported greater than zero occasions of service for this category, all other reporting states and territories reported zero *Non-admitted patient endoscopy occasions of service*.

## 6. Type of non-admitted patient care—Other medical/surgical/diagnostic

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

*Non-admitted patient other medical/surgical/diagnostic* was supplied by all jurisdictions. Western Australia and Victoria did not report for some establishments.

## 7. Type of non-admitted patient care—Mental health

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

NHDD definition and domain values used by all reporting jurisdictions.

### Does the data supplied cover all establishments?

Victoria and Western Australia did not report data for some establishments.

## 8. Type of non-admitted patient care—Alcohol and drug

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

Victoria and Western Australia did not report data for *Non-admitted patient drug and alcohol services* for some establishments.

### Additional information:

Only New South Wales and Queensland reported greater than zero occasions of service for this category, all other jurisdictions reported zero *Non-admitted patient alcohol and drug occasions of service*.

## 9. Type of non-admitted patient care—Dental

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

*Non-admitted patient dental services* were not reported by Western Australia and Victoria for some establishments.

## 10. Type of non-admitted patient care—Pharmacy

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

Western Australia and Victoria did not report *Non-admitted patient pharmacy services* for some establishments.

## 11. Type of non-admitted patient care—Allied health services

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

All jurisdictions supplied *Non-admitted patient allied health services*. Victoria and Western Australia did not report for a small number of establishments.

## 12. Type of non-admitted patient care—Community health services

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

Western Australia and Victoria did not report *Non-admitted patient community health services* for some establishments.

### 13. Type of non-admitted patient care—District nursing services

#### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

#### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

#### Does the data supplied cover all establishments?

All jurisdictions supplied *Non-admitted patient district nursing services*. Victoria and Western Australia did not report data for a small number of establishments.

#### Additional information:

Only New South Wales, Queensland and Western Australia reported greater than zero occasions of service for this category, all other states and territories reported zero *Non-admitted patient endoscopy occasions of service*.

## 14. Type of non-admitted patient care—Other outreach services

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes			No
Qld	Yes		Yes		Yes	
WA	Yes		Yes			No
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

Western Australia and Victoria did not report data for some establishments for *Non-admitted patient other outreach services*.

## Data element name: Type of non-admitted patient care (public psychiatric, alcohol and drug)

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000233</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public psychiatric hospitals and public alcohol and drug treatment centres. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> Emergency patients and outpatients are persons who receive non-admitted care. Non-admitted care is care provided to a person who receives direct care within the emergency department or other designated clinics within the hospital and who is not formally admitted at the time when the care is provided. A person who first contacts the hospital and receives non-admitted care, for example through the emergency department, and is subsequently admitted should have both components of care enumerated separately. For outreach/ community patients, care delivered by hospital employees to the patient in the home, place of work or other non-hospital site. A group is defined as two or more patients receiving a service together, where all individuals are not members of the same family. Family services are to be treated as occasions of service to an individual.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes (?)	
Vic	Yes		Yes			No
Qld	Yes		Yes			No
WA	Yes		Yes		Yes (?)	
SA	Yes		Yes			No
Tas	Yes		Yes			No
ACT	..		..		..	
NT	..		..		..	

.. Not applicable; Australian Capital Territory and Northern Territory do not have separate public psychiatric or alcohol and drug establishments.

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all states.

## Does the data supplied cover all establishments?

The Australian Capital Territory and Northern Territory do not have separate public psychiatric or alcohol and drug establishments; other states have small numbers of such establishments. This data element is reported for four non-admitted patient categories: individual emergency and outpatient, group emergency and outpatient, individual outreach and community and group outreach and community. The data coverage is summarised in Table 4.5

None of the categories had complete coverage, although the individual emergency category had reasonable coverage. Four states reported *individual emergency occasions of service*, two states reported *group emergency occasions of service*, one state reported *individual outreach occasions of service* and zero states reported *group outreach occasions of service*.

For this data element only, in Table 4.5 'no' indicates zero reported for all establishments, rather than not reported at all.

**Table 4.5: Coverage for Type of non-admitted patient care (public psychiatric, alcohol & drug), by category and by jurisdiction.**

State (number of establishments)	NAP individual emergency & outpatient		NAP group emergency & outpatient		NAP individual outreach & community		NAP group outreach & community	
	Yes	No	Yes	No	Yes	No	Yes	No
NSW (11)	Yes		Yes		Yes			No
Vic (1)	Yes			No		No		No
Qld (4)	Yes			No		No		No
WA (2)	Yes		Yes			No		No
SA (1)		No		No		No		No
Tas (3)		No		No		No		No
ACT (0)	..		..		..		..	
NT (0)	..		..		..		..	

.. Not applicable

## Was mapping required from state and territory data sets?

No.

## Data element name: Group sessions

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000210</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute hospitals only. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Public psychiatric and alcohol and drug hospitals are not included.		<b>Version number: 1</b>
<b>Definition:</b> The number of groups of patients/clients receiving services. Each group is to count once, irrespective of size or the number of staff providing services.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes			No
Vic	Yes		Yes			No
Qld	Yes		Yes			No
WA	Yes		Yes			No
SA	Yes		Yes			No
Tas	Yes		Yes			No
ACT	Yes		Yes			No
NT	Yes		Yes			No

### Details of use of non-standard NHDD definition and domain values:

NHDD definition and domain values used by all reporting jurisdictions.

### Does the data supplied cover all establishments?

Non-admitted patient group occasions of service are collected for 14 categories, the same 14 categories that are collected for non-admitted patient individual occasions of service (under *Type of non-admitted patient care*).

Data for the following categories was provided by three, four or five states and territories:

- community health
- district nursing
- other medical/surgical/diagnostic
- other outreach
- mental health
- allied health.

Only New South Wales provided data for *Group sessions* for the following categories:

- dialysis
- pathology
- drug and alcohol
- dental
- pharmacy.

No states or territories provided data for *Group sessions* for the following categories:

- emergency
- radiology
- endoscopy.

It is quite likely that for many of these categories where data is reported as 'zero', that in fact there were no occasions of service. Compliance may actually be better than it appears from Table 4.6. State by state analysis is shown in Table 4.6. New South Wales reported data for 11 out of 14 *Group sessions* categories, although numbers in some categories were very small. South Australia, Australian Capital Territory, Queensland and Western Australia each reported data for between four and six categories. Victoria supplied total *Group sessions* data but did not divide it into individual categories. Tasmania and Northern Territory did not report *Group sessions* data for any category.

### **Was mapping required from state and territory data sets?**

No.

Table 4.6: Group sessions categories coverage by state and territory, 2003-04

Group sessions	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total S/T reporting
Other outreach	✓		✓	✓	✓		✓		5
Allied health	✓		✓	✓	✓		✓		5
Mental health	✓		✓	✓(a)	✓(a)		✓		5
Other medical/surgical/diagnostic	✓		✓		✓		✓		4
Community health	✓		✓	✓					3
District nursing	✓		✓	✓					3
Dialysis	✓(a)								1
Pathology	✓(a)								1
Drug and alcohol	✓(a)								1
Dental	✓(a)								1
Pharmacy.	✓(a)								1
Emergency									0
Radiology									0
Endoscopy									0
<b>Total Group Sessions</b>	<b>✓</b>	<b>0</b>							

✓ Data reported

✓(a) Data reported for a few establishments only.

## Data element name: Number of available beds for admitted patients

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000255</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 2</b>
<b>Definition:</b> An available bed is a bed which is immediately available to be used by an admitted patient or resident if required. A bed is immediately available for use if it is located in a suitable place for care with nursing and auxiliary staff available within a reasonable period. Inclusions: both occupied and unoccupied beds are included. Exclusions: surgical tables, recovery trolleys, delivery beds, cots for normal neonates, emergency stretchers/beds not normally authorised or funded and beds designated for same-day non-admitted patient care are excluded. Beds in wards which were closed for any reason (except weekend closures for beds/wards staffed and available on weekdays only) are also excluded.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW		No	Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

New South Wales includes cots for normal neonates in its count of *Number of available beds for admitted patients*.

**Does the data supplied cover all establishments?**

*Number of available beds for admitted patients* was supplied for all jurisdictions.

**Was mapping required from state and territory data sets?**

No.

## Data element name: Teaching status

<b>Evaluation NMDS:</b> Public Hospital Establishments	<b>Other NMDS:</b>	<b>Collection year: 2003–04</b>
		<b>Knowledgebase ID: 000322</b>
		<b>NHDD Version 12</b>
<b>Scope:</b> Establishment-level data for public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not included.		<b>Version number: 1</b>
<b>Definition:</b> An indicator (yes/no) to identify the non-direct patient care activity of teaching for a particular establishment. This is where teaching (associated with a university) is a major program activity of the establishment. It is primarily intended to relate to teaching hospitals affiliated with universities providing undergraduate medical education as advised by the relevant State health authority.		

### Use of National Standard definition, domain values and NMDS scope:

State	NHDD definition used?		NHDD domain values used?		Provided for all establishments?	
NSW	Yes		Yes		Yes	
Vic	Yes		Yes		Yes	
Qld	Yes		Yes		Yes	
WA	Yes		Yes		Yes	
SA	Yes		Yes		Yes	
Tas	Yes		Yes		Yes	
ACT	Yes		Yes		Yes	
NT	Yes		Yes		Yes	

### Details of use of non-standard NHDD definition and domain values:

Not applicable, NHDD definition and domain values used by all jurisdictions.

### Does the data supplied cover all establishments?

All states and territories reported *Teaching status* for establishments.

### Was mapping required from state and territory data sets?

No.

# 5 Comments on data elements

This chapter brings together summary information on utility and importance of the NMDS data elements, information from the compliance evaluation and the survey of revenue and expenditure and other comments obtained during the NMDS evaluation.

This section provides summary statistics for each individual data element obtained from the utility survey, as well as comments and recommendations for change from both the utility and compliance evaluations. The order of data elements in this section is according to how the data elements are presented in Table 4.2. A summary of utility and importance responses for each data element is presented in Table 5.1. Please note percentages may not always add to totals due to rounding. See Table 5.1 for more detail on percentages for each data element.

## Existing data elements and data element concepts

### System level expenditure elements

#### Capital expenditure—gross (accrual accounting)

Sixty-nine per cent of respondents who assessed the importance of this data element rated it as either important (19%) or highly important (50%) and 63% rated it as either useful (25%) or highly useful (38%). Nineteen per cent thought the data element was not important and 19% thought it not useful.

There were a large number of comments on this data element indicating that it is poorly defined and inaccurately and inconsistently reported. Comments also indicated that is not well used or useful when it is reported. A few respondents thought it would be useful if it was better reported, one respondent thought it unnecessary if depreciation was used. If the quality of capital expenditure data was improved, then it could be used for comparisons among states and territories, whereas it can only provide indicative data at present.

One respondent suggested that capital expenditure should be reported at state, regional and establishment level, so that the data could be used to describe capital expenditure *on* hospitals rather than *by* hospitals.

#### Capital expenditure—net (accrual accounting)

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (25%) or highly important (50%) and 69% rated it as either useful (31%) or highly useful (38%). Nineteen per cent thought the data element was not important and 19% thought it not useful.

The comments on net capital expenditure were very similar to the comments on gross capital expenditure. Respondents mentioned the lack of accuracy and consistency in the reporting and consequent lack of usefulness of reported data. Several respondents indicated that they had never used this data.

## **Indirect health care expenditure**

Sixty-nine per cent of respondents who assessed the importance of this data element rated it as either important (56%) or highly important (13%), and 56% rated it as either useful (50%) or highly useful (6%). Twenty-five per cent thought the data element was not important and 31% thought it not useful.

Comments on this data element indicated that it is poorly defined and inconsistently collected among jurisdictions. One of the consequences of this is that any data collected is not comparable across jurisdictions. Questions were raised regarding the usefulness of data collected (without extensive improvements) and some respondents commented that they had never used this data. Some states or territories may have difficulties isolating expenditures relating to central health administrations only, if the 'health department' also has responsibility for other portfolios.

As noted for gross capital expenditure, if the NMDS were to be restructured to cover public hospital services, this data element could be refined and reported at the regional and state level to capture expenditure on public hospital services. However, the extent to which this data element actually relates to public hospitals would also need to be clarified, as some categories are apparently unrelated to the provision of public hospital services.

## **Establishment identification data elements**

### **Establishment identifier**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (19%) or highly important (56%), and 81% rated it as either useful (25%) or highly useful (56%). Twenty-five per cent thought the data element was not important and 13% thought it not useful.

Comments stated that this data element is necessary to identify health facilities on a state and national basis and ensuring continuity of organisation identification over time. One respondent noted that the *Establishment sector* number is redundant while the NMDS is restricted to public hospitals. Comments on *Region code*, which is also part of this data element, are outlined below.

If the NMDS were to be restructured like the Mental Health Establishments NMDS, the establishment identifier could be designed to indicate the relationship between reporting entities. For example, the first two characters of the establishment number could refer to networks or multi-component entities and the last three characters could refer to the individual campuses or other units.

### **Establishment number (supporting data element)**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (25%) or highly important (63%), and 94% rated it as either useful (31%) or highly useful (63%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Comments on this supporting data element referred to its value in ensuring that the AIHW and the jurisdiction are looking at the data for the same establishment, and its usefulness in identifying establishments during name changes or sector changes.

### **Establishment sector (supporting data element)**

Eighty per cent of respondents who assessed the importance of this data element rated it as either important (13%) or highly important (67%), and 87% rated it as either useful (20%) or highly useful (67%). Twenty per cent thought the data element was not important and 7% thought it not useful.

One respondent commented that this data element is redundant because the NMDS is restricted to public hospitals, while another indicated that it is a significant component of *Establishment identifier*. If the NMDS is restructured, this element could be retained to allow private hospitals such as those funded by public authorities (for which some data are available) to be differentiated from public hospitals. This data element is also useful for cross-checking establishment 'sector' in other data sets, particularly the Admitted Patient Care NMDS.

### **Region code (supporting data element)**

Forty-four per cent of respondents who assessed the importance of this data element rated it as highly important, and 63% rated it as either useful (25%) or highly useful (38%). Fifty per cent thought the data element was not important and 31% thought it not useful. This element had the lowest important/useful percentages and the highest not important/not useful percentages in the survey.

Comments on this data element were wide-ranging. Several respondents thought it could be removed altogether as it only supplies state-allocated codes which cannot be compared nationally, although others thought it useful as a part of *Establishment identifier*. One respondent suggested that the *Region code* may help health authorities identify the regional office or authority responsible for the establishment, although the SLA or LGA of the hospital or campus, as collected for *Geographical location of establishment*, might also achieve this.

### **State/territory identifier (supporting data element)**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (13%) or highly important (75%), and 94% rated it as either useful (25%) or highly useful (69%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Comments on this data element indicated that it is an essential item for collection.

### **Establishment type**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (13%) or highly important (75%), and 94% rated it as either useful (25%) or highly useful (69%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Comments on this data element indicated that the definition needs improvement. Difficulties include:

- The range of values is now outdated and values do not reflect peer groups.
- An increasing number of establishments fulfil several of these 'types'.
- How to allocate private providers of public hospital services and privately run public hospitals.

## Geographical location of establishment

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (13%) or highly important (63%), and 63% rated it as either useful (19%) or highly useful (44%). Nineteen per cent thought the data element was not important and 31% thought it not useful.

Comments on this data element were generally positive. However, there can be difficulties for states or territories when the *Geographical location of establishment* (state identifier plus SLA) is applied to remoteness area (for example Table 3.1 of *Australian hospital statistics 2003–04*). Allocating hospitals to remoteness area may not reflect hospital services supplied across multiple campuses or outreach services from regional hospitals. *Geographical location of establishment* reflects establishment locations rather than accessibility of services.

One respondent suggested adding travel times or distances to public hospital to this NMDS. The AIHW feels that this issue is best dealt with using the Admitted Patient Care NMDS, as patient-level data could be extracted/approximated from the National hospital morbidity database's information on area of usual residence and hospital SLA.

## Recurrent expenditure data elements

Recurrent expenditure items were considered to be useful for comparative purposes, policy development and monitoring of major expense categories. Some respondents indicated that it may be useful to align recurrent expenditure categories with National Hospital Costs Data Collection categories.

One respondent noted that the expenditure categories mix cash and accrual concepts together. If establishments are to report their operating expenses and revenues, then they need to be reported as 'expenses' and 'revenues', with consistent terminology throughout the definitions. If this recommendation is adopted, then all expenditure categories would be renamed, for example *Administrative expenditure* would become *Administration expenses* and *Interest payments* would become *Interest expenses*. Definitions for all categories would also need to be reworded to ensure that they refer to expenses rather than payments, for example *Visiting medical officer expenses* rather than *Payments to Visiting Medical Officers*.

On the output side, respondents noted that non-admitted patient cost proportions (IFRACs) are the only expenditure output measure currently collected (and they are not officially in this NMDS). It was suggested that recurrent expenditure components would be more useful if jurisdictions could separate outputs into categories. Categories could include admitted patients (acute, psychiatric, rehabilitation and other), non-admitted patients and emergency department. This would allow costs relating to certain sectors to be more accurately assessed.

## Administrative expenses

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (56%) or highly important (31%), and 94% rated it as either useful (69%) or highly useful (25%). Thirteen per cent thought the data element was not important and zero thought it not useful.

See comments for *all recurrent expenditure components* above. Workers compensation premiums are included in *Administrative expenses* but they may be more useful in a different category, to allow analysis of staffing costs.

## **Interest payments**

Sixty-nine per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (25%), and 69% rated it as either useful (50%) or highly useful (19%). Nineteen per cent thought the data element was not important and 25% thought it not useful.

Comments on this data element noted that it is small in relative terms (<\$18,000 for Australia in 2003–04) and reflects administrative arrangements for access to money rather than performance. One respondent suggested a review might be worthwhile, but others indicated that it be retained because it is important in the PHEC. Keeping interest payments out of other categories such as administrative expenses also keeps accuracy in recurrent expenditure categories.

## **Depreciation**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (44%), and 94% rated it as either useful (69%) or highly useful (25%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Comments on this data element indicated that its identification facilitates inter-jurisdictional analysis of recurrent expenditure totals. One respondent mentioned that in theory depreciation reduces the lumpiness of capital expenditure and reduces incomparability between capital and recurrent expenditure caused by different capital expenditure limits. Erratic reporting and use of different depreciation schedules can reduce its usefulness in practice.

## **Patient transport**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (56%) or highly important (31%), and 81% rated it as either useful (56%) or highly useful (25%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

The comments on this item indicated that a lack of consistency and limited availability of data decrease its usefulness. It is an element which could provide more useful information if it was more consistently defined and reported. One respondent suggested amending the definition to 'the expense incurred by the establishment in transporting patients'.

## **Repairs and maintenance**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (25%), and 81% rated it as either useful (63%) or highly useful (19%). Thirteen per cent thought the data element was not important and none thought it was not useful.

The few comments on this data element indicated its usefulness for comparative purposes. One respondent suggested rewording the definition to 'The expense incurred by the establishment in maintaining and repairing buildings and equipment. Expenses of a capital nature are not to be included here'.

## **Superannuation employer contributions (including funding basis)**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (31%), and 88% rated it as either useful (63%)

or highly useful (25%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Superannuation is included in non-salary recurrent expenditure. One respondent suggested a rearrangement of these data elements so that staffing costs could be captured. For example data elements to capture salaries and wages, superannuation, workers compensation (premiums and payments) and leave liabilities could be grouped and totalled to allow analysis of staffing costs. The costs of salary sacrifice schemes could also be captured in this group.

Another respondent suggested specifying that this category includes all superannuation expenses, not just the amounts that have been paid, for example 'Contributions payable either by the establishment or on its behalf to a superannuation fund providing...'

### **Domestic services**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (31%), and 81% rated it as either useful (63%) or highly useful (19%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Outsourcing of domestic services may reduce the accuracy of reporting in this category. One respondent noted that staff may perform a variety of domestic, personal care and administration duties, making accurate reporting difficult.

See comments for *all recurrent expenditure components* above.

### **Payments to visiting medical officers**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (38%), and 94% rated it as either useful (63%) or highly useful (31%). Thirteen per cent thought the data element was not important and zero thought it not useful.

The only specific comment was that the definition includes reference to payments for 'honorary' work, which does not seem to make sense. It perhaps was intended to be 'hourly' or there was confusion with visiting medical officers paid an 'honorarium'.

### **Drug supplies**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (50%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

One respondent commented that the outsourcing of pharmacy services and inclusion of the expenditure for those contracts lessens the utility of this item. Disaggregation of pharmacy expenditure might increase the usefulness of this data element, for example by the WHO's ATC classification system.

### **Food supplies**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (56%) or highly important (31%), and 94% rated it as either useful (69%) or highly useful (25%). Thirteen per cent thought the data element was not important and zero thought it not useful.

One comment mentioned that the inclusion of outsourced food services in this category may mean that this expenditure category includes variable labour components.

### **Medical and surgical supplies**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (50%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Several respondents indicated the need to disaggregate this category to make it more useful. One respondent suggested an additional data element to cover in-house and outsourced pathology and radiology services.

### **Other recurrent expenditure**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (44%), and 88% rated it as either useful (50%) or highly useful (38%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Respondents indicated that this data element allows some jurisdictions to allocate a high percentage of expenditure to this category, reducing the usefulness of inter-jurisdictional analysis of all the recurrent expenditure categories. Although it is necessary to have this 'other' category, the onus is on each jurisdiction to divide expenditures accurately between all recurrent expenditure categories. One respondent suggested renaming this category 'Other non-staff expenses'.

### **Salaries and wages—total**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (31%) or highly important (56%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Comments on this data element indicated that each of the *Salaries and wages* categories are important and useful in building a picture of total salaries and wages. Good definitions allow accuracy and consistency in each category so that states and territories can use the data within their jurisdiction. Reliable data collections also allow the data to be comparable among states and territories and between years.

Several respondents commented that all staffing categories are overdue for a review. Staffing categories could be reviewed against the ABS ASCO codes. Another respondent noted that outsourcing of staffing arrangements may reduce the usefulness of some of staffing categories. One respondent suggested that the category be retitled *Staff expenses* (including salaries, wages and leave accruals) to be consistent with accrual accounting practices.

### **Salaries and wages—registered nurses**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (31%) or highly important (56%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Some jurisdictions do not report salaries and wages for individual nurse categories, only total nurses. This limits the usefulness of the individual components. In particular, it would

be preferable to be able to differentiate between registered versus enrolled nurses given the difference in educational requirements for the two.

### **Salaries and wages—enrolled nurses**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (31%) or highly important (56%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

See comments on *Salary and wage – total* and *Salary and wages – registered nurses*.

### **Salaries and wages—student nurses**

Sixty-nine per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (25%), and 69% rated it as either useful (56%) or highly useful (13%). Twenty-five per cent thought the data element was not important and 19% thought it not useful.

This category has been reported as zero by most jurisdictions for most years. Even when it is reported, staff numbers and salary amounts are very small. Some respondents questioned the value of this element. It is important to review this category to see if it is relevant.

### **Salaries and wages—trainee/pupil nurses**

Sixty-three per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (25%), and 63% rated it as either useful (50%) or highly useful (13%). A comparatively high number of respondents, 31%, thought the data element was not important and 25% thought it not useful.

Several states and territories questioned whether trainee or pupil nurses still exist. No trainee or pupil nurses have been reported to NPHEd since 1997-98. This category needs to be reviewed.

### **Salaries and wages—salaried medical officer**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (31%) or highly important (56%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

There were no comments on this individual data element.

### **Salaries and wages—other personal care staff**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (38%), and 81% rated it as either useful (56%) or highly useful (25%). Thirteen per cent thought the data element was not important and 13% not useful.

Respondents indicated that there are constant difficulties distinguishing between *Other personal care staff* and *Domestic and other staff*. Several respondents suggested that staffing categories be reviewed to see which categories are necessary and useful. See also comments on *Salary and wages – total staff*.

### **Salaries and wages—diagnostic and health professionals**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (50%), and 94% rated it as either useful (63%) or highly useful (31%). Thirteen per cent thought the data element was not important and zero thought it not useful.

There may be scope for some profession based health categories to be reported separately, for example by registration status. Outsourcing of pathology and pharmacy services in particular may reduce the accuracy of salary and wage measures.

### **Salaries and wages—administrative and clerical staff**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (44%), and 88% rated it as either useful (56%) or highly useful (31%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

See comments on *Salary and wages – total staff*.

### **Salaries and wages—domestic and other staff**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (44%), and 88% rated it as either useful (56%) or highly useful (31%). Thirteen per cent thought the data element was not important and 6% not useful.

Respondents indicated that there are constant difficulties distinguishing between *Domestic and other staff* and *Other personal care staff*. Several respondents suggested that staffing categories be reviewed to specify which categories are necessary and useful.

## **Revenue data elements**

State government sources of revenue are currently excluded from revenue counting. One respondent suggested that revenue from all sources disaggregated by funding source may be more useful than the current three categories. Revenue sources could include Department of Veterans' Affairs (DVA) payments, inter-hospital payments, contracted patients from private sector, research grants, and state block /Diagnosis Related Group (DRG) funding.

The Mental Health Establishments NMDS contains eight data elements which may be a useful starting point in developing more appropriate revenue categories. The categories are DVA funded expenditure, National Mental Health Strategy funded expenditure, other Australian Government funded expenditure, other patient revenue funded expenditure, other revenue funded expenditure, other state or territory funded expenditure, recoveries funded expenditure, and state or territory health authority funded expenditure.

### **Patient revenue**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (50%), and 81% rated it as either useful (44%) or highly useful (38%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

One comment on this element was that capture and recording are not consistent across states and territories. Another respondent suggested that the title be changed to *Patient fee revenues*

and that the definition be reworded to simplify it and to specify that it relates only to revenues from the provision of health services to patients.

## **Other revenues**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (44%), and 81% rated it as either useful (50%) or highly useful (31%). Thirteen per cent thought the data element was not important and 6% not useful.

Respondents commented that the split between *Other revenue* and *Recoveries* is unclear. One respondent commented that the definition could do with some tightening, and suggested *All revenues of the establishment that are not included under patient fee revenues or recoveries revenues (but not including revenues from state and territory governments). This would include: earnings on investments; gifts from charitable institutions; bequests; and revenues deriving from the provision of accommodation to non-patients.*

## **Recoveries**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (38%), and 81% rated it as either useful (56%) or highly useful (25%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Comments indicated that the distinctions between *Recoveries* and *Other revenue* and *Patient revenue* is unclear. Another respondent felt that the current definition poses substantial problems as it allows revenues from the provision of goods and services to related establishments to be recorded as recoveries (for example cost recovery for laundry services). It is important to avoid double counting by separately defining and recording recoveries from other (hospital) establishments.

## **Other data elements**

### **Full-time equivalent staff (FTE)**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (50%), and 88% rated it as either useful (50%) or highly useful (38%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Comments on this data element focused on issues of scope: the inclusion or exclusion of staff in business units, outsourced contracts and staff working in non-hospital services (e.g. aged care services). Inconsistencies in reporting could reduce the usefulness of the FTE data. One respondent suggested that the disaggregation of FTE into admitted versus non-admitted patients could be useful.

*Salaries and wages* and *Full-time equivalent staff (FTE)* numbers are collected for the same categories. Comments on the *Salaries and wages* categories translate to the *FTE* categories and any amendments to *Salaries and wages* would also require amendments to *Full-time equivalent staff*.

One respondent suggested that Indigenous status identifier could be included for staffing data. The AIHW's medical labour force surveys include Indigenous status in their staffing categories.

One respondent requested more information on staff vacancies (unfilled medical and nursing positions) be included in this NMDS. The AIHW believes this information is more appropriately covered by the ABS job vacancies survey and the ANZ Bank Employment Advertisement Series.

### **Specialised service indicators**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (19%) or highly important (56%), and 81% rated it as either useful (31%) or highly useful (50%). Nineteen per cent thought the data element was not important and 19% not useful.

There were a large number of comments on this data element, all agreeing that it needed work. Generally, respondents thought that the categories were out of date, too broad and ill-defined. Specific problems included:

1. Small categories such as pancreas transplantation units are included while some major craft groups such as orthopaedics are not represented. Other units not represented include operating theatres, eating disorders and specialised procedure rooms (for example angioplasty and endoscopy).
2. Some categories use labels which are not defined – e.g. level III, Acute and Maintenance.
3. Some categories use superseded terminology that may be misinterpreted. For example, Geriatric Assessment Unit is now called Aged Care Assessment Team.
4. There are frequent mismatches between specialised service units counted and hospital functions. For example one hospital might indicate that it has a specialised obstetric unit but have few obstetric patients, whereas another hospital might have large numbers of obstetric patients but no specialised obstetric unit.

The AIHW noted that these data are frequently requested, with enquirers also requesting beds available in these and other (not included) units. Another respondent indicated that the hospice unit count contributes to the picture of palliative care provision in Australia. Alternative sources of information were suggested, including DRG data (for admitted patients), Service Related Groups or the list of clinics in the Outpatient Care NMDS.

### **Outpatient Care NMDS**

There is some overlap between this NMDS and the Outpatient Care NMDS. The Outpatient Care NMDS includes Peer Group A and B hospitals only (Principal referral and specialist women's and children's hospitals and Large hospitals). However, the data elements in both data sets should be monitored as the Outpatient Care NMDS develops. The data elements are:

- . number of group sessions
- . number of occasions of service
- . organisation identifier (Australian)
- . outpatient clinic type
- . non-admitted patient service event
- . service contact – group session status, individual/group session indicator code.

## **Occasions of service**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (19%) or highly important (63%), and 81% rated it as either useful (31%) or highly useful (50%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

One respondent suggested that this data would be more useful if it was counted for occasions per person. Other respondents noted that there is overlap between this data element and the *Occasions of service* data element in the new Outpatient Care NMDS. However the Outpatient Care NMDS does not cover all public hospitals in Australia.

## **Type of non-admitted patient care**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (25%) or highly important (56%), and 75% rated it as either useful (31%) or highly useful (44%). Thirteen per cent thought the data element was not important and 13% thought it not useful.

Several respondents requested work to disaggregate non-admitted patient care. While this disaggregation will partially be covered by the new Outpatient Care NMDS, there is also room to improve the categories in the *Type of non-admitted patient care*.

The AIHW noted that it would be better if the definition of emergency services matched the definition of emergency department services in the Non-admitted Patient Emergency Department Care NMDS, and if counts for mental health were aligned with the Community Mental Health Care NMDS.

One respondent suggested that Indigenous status identifier be included for *Type of non-admitted patient care* (although, over time, Indigenous status for occasions of service needs to be addressed by the Outpatient Care NMDS).

## **Type of non-admitted patient care (public psychiatric, alcohol and drug)**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (25%) or highly important (50%), and 75% rated it as either useful (31%) or highly useful (44%). Nineteen per cent thought the data element was not important and 6% thought it not useful.

A few respondents commented that the scope of this data element is narrow. The AIHW noted that there is more detailed information collected on non-admitted patient care in public psychiatric hospitals in the Community Mental Health Care NMDS. Also the non-admitted patient care in public alcohol and drug hospitals (of which there are only two in Australia) may be better covered by the Alcohol and Other Drug Treatment Services NMDS.

## **Individual/group session**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (31%) or highly important (44%), and 69% rated it as either useful (31%) or highly useful (38%). Thirteen per cent thought the data element was not important and 13% thought it not useful.

Some respondents indicated that this is a 'highly important and useful' data element as it distinguishes between groups when counting occasions of service. Other respondents indicated that they did not use this data element.

## **Group sessions**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (38%), and 63% rated it as either useful (31%) or highly useful (31%). Thirteen per cent thought the data element was not important and 19% thought it not useful.

Comments on this data element were generally supportive, a number suggesting that it might be useful to also count the number of participants in the session. Number of group sessions does not give information about what occurs (resource wise) at the group sessions. The Outpatient Care NMDS has counts of patients attending group sessions in its *Occasions of service* data element.

## **Number of available beds for admitted patients**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (25%) or highly important (56%), and 81% rated it as either useful (31%) or highly useful (50%). Nineteen per cent thought the data element was not important and 13% thought it not useful.

This data element elicited more comments than any other data element. Most comments related to the broad definition and varied interpretation of the definition, for example 'the definition is too open to interpretation which leads to haphazard reporting'. Difficulties defining beds were consistently mentioned, as were issues counting day surgery beds, trolleys, chairs and beds in specialty clinics, such as coronary care beds.

Some respondents suggested improvements to the definition of an 'available bed' are needed, while others indicated that this data element may no longer be relevant to the analysis of service capacity and provision. The AIHW noted that these data are often requested.

## **Teaching status**

Sixty-nine per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (31%), and 81% rated it as either useful (56%) or highly useful (25%). Thirty-one per cent thought the data element was not important and 19% thought it not useful.

Several respondents suggested that this data element be reviewed. Many hospitals (of all sizes) are now providing clinical experience for students and so data are fairly ambiguous. Respondents also questioned if these data have any meaning.

## **Supporting data elements and data element concepts**

### **Hospital**

Eighty-eight per cent of respondents who assessed the importance of this data element concept rated it as either important (31%) or highly important (56%), and 88% rated it as either useful (44%) or highly useful (44%). Thirteen per cent thought the data element was not important and zero thought it not useful.

There were quite a variety of comments on this data element. Several respondents thought it central to the whole NMDS, whereas others thought it might be made redundant by the *Establishment type* data element work. Some respondents thought it 'acceptable' provided that there is acknowledgement that definitions of hospitals (and hospital services) vary. The issue of counting hospitals versus other facilities was again raised. The NMDS for

Community Mental Health Care and the NMDS for Mental Health Establishments provide examples of how this can be done. Theoretically, the data that they specify can be analysed disregarding the boundary between hospital and non-hospital services (as is currently done with the Community Mental Health Care data).

### **Hospital boarder**

Eighty-one per cent of respondents who assessed the importance of this data element concept rated it as either important (63%) or highly important (19%), and 88% rated it as either useful (69%) or highly useful (19%). Nineteen per cent thought the data element was not important and zero thought it not useful.

Several respondents commented that this data element concept is useful for determining what records need to be excluded from data for this NMDS.

### **Non-admitted patient**

Eighty-eight per cent of respondents who assessed the importance of this data element concept rated it as either important (25%) or highly important (63%), and 88% rated it as either useful (38%) or highly useful (50%). Thirteen per cent thought the data element was not important and 6% not useful.

The definition of admitted versus non-admitted patient impacts on other data elements including *Number of available beds*, *Occasions of service* and non-admitted patient cost proportions (IFRACs). Comments supported the need to improve the definitional boundary between admitted and non-admitted patient. Several respondents referred to the work on this data element currently being conducted by HDSC.

### **Overnight-stay patient**

Eighty-one per cent of respondents who assessed the importance of this data element concept rated it as either important (25%) or highly important (56%), and 88% rated it as either useful (31%) or highly useful (56%). Nineteen per cent thought the data element was not important and 13% thought it not useful.

One respondent commented that this data element concept is not really needed for this NMDS.

### **Patient**

Eighty-eight per cent of respondents who assessed the importance of this data element concept rated it as either important (25%) or highly important (63%), and 94% rated it as either useful (31%) or highly useful (63%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

One respondent commented that this data element concept is not really needed for this NMDS.

### **Same-day patient**

Eighty-eight per cent of respondents who assessed the importance of this data element concept rated it as either important (25%) or highly important (63%), and 94% rated it as either useful (31%) or highly useful (63%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

One respondent commented that this data element concept is not really needed for this NMDS.

## **Separation**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (19%) or highly important (69%), and 94% rated it as either useful (31%) or highly useful (63%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Regarding this derived data element, one respondent indicated that it would be useful to be able to distinguish between physical discharge and statistical separations to determine the actual time a patient spends within an organisation for a specific condition. Other comments noted that this definition has limited applicability in this NMDS which focuses on establishments rather than separations.

## **Proposed data elements**

### **Admitted patient cost proportion (IFRAC)**

At present jurisdictions provide admitted patient cost proportions to the AIHW as part of the NPHEd. They are required for the calculation of cost per casemix adjusted separation. There is no definition of admitted patient cost proportion in the NHDD. Given the importance of cost per casemix adjusted separation as an indicator of hospital performance, the development of clear definition for this data item would be valuable.

Several respondents registered the need to formalise definitions for the admitted patient cost proportion categories – standard, acute and acute non-psychiatric – and to include them in the NMDS.

### **Operating theatre efficiency**

One respondent suggested that increased work on operating theatre utilisation and throughput would be worthwhile. This could include information such as numbers of theatres, opening hours and numbers of patients and/or procedures.

### **Safety and quality**

As outlined in Chapter 3, several respondents to the survey of utility requested an increased focus on safety and quality data collection. Suggestions included counts of sentinel events, reporting of ACHS clinical indicators, and the inclusion of NPHEd quality accreditation/certification status items in the NMDS.

Table 5.1: 'Importance and usefulness': Survey responses and percentages by data element.

Data element	Importance				Importance (per cent*)				Useful				Useful (per cent*)			
	Not important	Important	Highly important	Unsure	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure	Not useful	Useful	Highly useful	Unsure
<b>NMDS for public hospital establishments</b>	2	1	13	1	12%	6%	76%	6%	0	3	12	2	0%	18%	71%	12%
<b>System level expenditure elements</b>																
Capital expenditure - gross	3	3	8	2	19%	19%	50%	13%	3	4	6	3	19%	25%	38%	19%
Capital expenditure - net	3	4	8	1	19%	25%	50%	6%	3	5	6	2	19%	31%	38%	13%
Indirect health care expenditure	4	9	2	1	25%	56%	13%	6%	5	8	1	2	31%	50%	6%	13%
<b>Establishment identification elements</b>																
Establishment identifier	4	3	9	0	25%	19%	56%	0%	2	4	9	1	13%	25%	56%	6%
Establishment number	2	4	10	0	13%	25%	63%	0%	0	5	10	1	0%	31%	63%	6%
Establishment sector	3	2	10	0	20%	13%	67%	0%	1	3	10	1	7%	20%	67%	7%
Region code	8	0	7	1	50%	0%	44%	6%	5	4	6	1	31%	25%	38%	6%
State/territory identifier	2	2	12	0	13%	13%	75%	0%	0	4	11	1	0%	25%	69%	6%
Establishment type	2	2	12	0	13%	13%	75%	0%	0	4	11	1	0%	25%	69%	6%
Geographical location of establishment	3	2	10	1	19%	13%	63%	6%	5	3	7	1	31%	19%	44%	6%
<b>Establishment level expenditure elements</b>																
Administrative expenses	2	9	5	0	13%	56%	31%	0%	0	11	4	1	0%	69%	25%	6%
Interest payments	3	7	4	2	19%	44%	25%	13%	4	8	3	1	25%	50%	19%	6%
Depreciation	2	7	7	0	13%	44%	44%	0%	0	11	4	1	0%	69%	25%	6%
Patient Transport	2	9	5	0	13%	56%	31%	0%	1	9	4	2	6%	56%	25%	13%

(continued)

**Table 5.1 (continued): 'Importance and usefulness': Survey responses and percentages by data element.**

Data element	Importance				Importance (per cent*)				Useful				Useful (per cent*)			
	Not important	Important	Highly important	Unsure	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure	Not useful	Useful	Highly useful	Unsure
Repairs & maintenance	2	8	4	2	13%	50%	25%	13%	0	10	3	3	0%	63%	19%	19%
Superannuation employer contribution	2	8	5	1	13%	50%	31%	6%	0	10	4	2	0%	63%	25%	13%
Domestic services	2	8	5	1	13%	50%	31%	6%	1	10	3	2	6%	63%	19%	13%
Payments to VMOs	2	8	6	0	13%	50%	38%	0%	0	10	5	1	0%	63%	31%	6%
Drug supplies	2	6	8	0	13%	38%	50%	0%	0	9	6	1	0%	56%	38%	6%
Food supplies	2	9	5	0	13%	56%	31%	0%	0	11	4	1	0%	69%	25%	6%
Medical & surgical supplies	2	6	8	0	13%	38%	50%	0%	0	9	6	1	0%	56%	38%	6%
Other recurrent expenditure	2	6	7	1	13%	38%	44%	6%	1	8	6	1	6%	50%	38%	6%
Salaries & wages	2	5	9	0	13%	31%	56%	0%	0	9	6	1	0%	56%	38%	6%
Salaries & wages – salaried medical officer	2	5	9	0	13%	31%	56%	0%	0	9	6	1	0%	56%	38%	6%
Salaries & wages – registered nurses	2	5	9	0	13%	31%	56%	0%	0	9	6	1	0%	56%	38%	6%
Salaries & wages – enrolled nurses	2	5	9	0	13%	31%	56%	0%	0	9	6	1	0%	56%	38%	6%
Salaries & wages – student nurses	4	7	4	1	25%	44%	25%	6%	3	9	2	2	19%	56%	13%	13%
Salaries & wages – trainee/pupil nurses	5	6	4	1	31%	38%	25%	6%	4	8	2	2	25%	50%	13%	13%
Salaries & wages – other personal care staff	2	8	6	0	13%	50%	38%	0%	2	9	4	1	13%	56%	25%	6%
Salaries & wages – diagnostic & health professionals	2	6	8	0	13%	38%	50%	0%	0	10	5	1	0%	63%	31%	6%
Salaries & wages – administrative & clerical staff	2	7	7	0	13%	44%	44%	0%	1	9	5	1	6%	56%	31%	6%
Salaries & wages – domestic & other staff	2	7	7	0	13%	44%	44%	0%	1	9	5	1	6%	56%	31%	6%

(continued)

Table 5.1 (continued): 'Importance and usefulness': Survey responses and percentages by data element.

Data element	Importance			Importance (per cent*)			Useful			Useful (per cent*)				
	Not important	Important	Highly important	Not important	Important	Highly important	Not useful	Useful	Highly useful	Not useful	Useful	Highly useful	Unsure	
<b>Revenue data elements</b>														
Patient revenue	2	6	8	13%	38%	50%	0%	0%	7	6	2	44%	38%	13%
Other revenues	2	7	7	13%	44%	44%	0%	0%	1	8	2	6%	50%	13%
Recoveries	2	8	6	13%	50%	38%	0%	0%	1	9	2	6%	56%	13%
<b>Other data elements</b>														
Full-time equivalent staff	2	6	8	13%	38%	50%	0%	0%	1	8	1	6%	50%	6%
Specialised service indicators	3	3	9	19%	19%	56%	6%	6%	3	5	0	19%	31%	50%
Occurrences of service	2	3	10	13%	19%	63%	6%	6%	1	5	2	6%	31%	50%
Type of non-admitted patient (NAP) care	2	4	9	13%	25%	56%	6%	6%	2	5	2	13%	31%	44%
Type of NAP care (public psych, alcohol & drug)	3	4	8	19%	25%	50%	6%	6%	1	5	3	6%	31%	44%
Individual / group session	2	5	7	13%	31%	44%	13%	13%	2	5	3	13%	31%	38%
Group sessions	2	6	6	13%	38%	38%	13%	13%	3	5	3	19%	31%	31%
Number of available beds for admitted patients	3	4	9	19%	25%	56%	0%	0%	2	5	1	13%	31%	50%
Teaching status	5	6	5	31%	38%	31%	0%	0%	3	9	4	19%	56%	25%
<b>Supporting data element concepts</b>														
Hospital	2	5	9	13%	31%	56%	0%	0%	0	7	2	0%	44%	44%
Hospital boarder	3	10	3	19%	63%	19%	0%	0%	2	11	3	13%	69%	19%
Non-admitted patient	2	4	10	13%	25%	63%	0%	0%	1	6	1	6%	38%	50%
Overnight-stay patient	3	4	9	19%	25%	56%	0%	0%	1	5	1	6%	31%	56%
Patient	2	4	10	13%	25%	63%	0%	0%	1	5	10	6%	31%	63%
Same-day patient	2	4	10	13%	25%	63%	0%	0%	1	5	10	6%	31%	63%
Separation	2	3	11	13%	19%	69%	0%	0%	1	5	10	6%	31%	63%

\* Percentages may not add to 100 due to rounding.

# 6 Expenditure and revenue questionnaire

Four responses were received to the *expenditure and revenue questionnaire*; from Victoria, Tasmania, Western Australia and Queensland.

In Victoria, only expenditure relating to Health Service Agreements (HSA) between establishments and the Victorian Department of Human Services is included in figures supplied to the AIHW. Non-HSA expenditures include:

- private hospitals owned by the public hospital or health service
- services provided under contract to co-located private hospitals
- separate business units selling goods or services of a retail, commercial or medical nature to external parties (e.g. cafeterias, food catering, car park, linen services, cleaning services, privatised clinical services)
- health services that are wholly funded by the Commonwealth, plus client co-payments (e.g. community aged care packages, day therapy centres)
- health services provided on a contractual basis to external parties (e.g. mammography services provided for Breastscreen Victoria)
- special projects and trust funds that are accounted for outside the HSA segment (e.g. coordinated care trials).

## Expenditure

### Workers compensation premiums

Victoria, Western Australia and Queensland included workers compensation premiums in *Administrative expenses*. Tasmania did not specify how it dealt with workers compensation premiums.

### Workers compensation payments

Victoria and Tasmania included workers compensation payments in *Salaries and wages* expenditures (termed 'Employee Entitlements' in Victoria), Victoria recoups costs through revenue. Western Australia netted the expenditure out against revenue, and Queensland indicated that if it was payment for salaries and wages (which have already been paid by the facility) then money was paid into revenue and reported under *Other revenues*.

### Redundancy packages

Victoria, Western Australia and Queensland included redundancy packages in *Salary and wages* expenditure. Tasmania did not specify how it dealt with redundancy packages.

### **Accrual of long-service leave and annual leave**

Victoria, Western Australia and Queensland included these expenditures in *Salary and wages* expenditure. Tasmania did not specify how it dealt with accrual of long-service leave and annual leave.

### **Payout of leave entitlements on termination**

All states included payout of leave entitlements on termination in *Salary and wages* expenditure.

### **Recruitment costs**

Victoria, Western Australia and Queensland allocated recruitment costs to *Administrative expenses*. Tasmania allocated recruitment costs to *Other recurrent expenditure*.

### **Salary sacrifice and salary package**

Victoria, Western Australia and Queensland included this expenditure in *Salary and wages* expenditure. Tasmania did not specify how it dealt with salary sacrifice and salary package.

### **Superannuation**

All states reported superannuation in the *Superannuation payments* category when reporting to AIHW.

### **Fringe benefits tax**

Victoria reported fringe benefits tax in *Salary and wages* expenditure.

Tasmania and Queensland reported fringe benefits tax in *Other recurrent expenditure*.

Western Australia reported fringe benefits tax in *Administrative expenses*.

### **Payroll tax**

Tasmania and Queensland reported payroll tax in *Other recurrent expenditure*. Payroll tax was not applicable in Victoria and Western Australia.

### **Public liability insurance**

Public liability insurance is reported under *Administrative expenses* for Victoria, Western Australia and Queensland. Tasmania did not specify how it dealt with public liability insurance.

### **Building and contents insurance**

Building and contents insurance is reported under *Administrative expenses* for Victoria, Western Australia and Queensland. Tasmania did not specify how it dealt with building and contents insurance

### **Medical indemnity insurance**

Medical indemnity insurance is reported under *Administrative expenses* for Victoria, Western Australia and Queensland. Tasmania did not specify how it dealt with medical indemnity insurance.

## **Equipment leasing arrangements**

Victoria reported equipment leasing arrangements in *Other recurrent expenditure*. Tasmania and Western Australia reported equipment leasing arrangements in *Repairs and maintenance*. Queensland reported equipment leasing arrangements in *Administrative expenses*.

## **Building/garden maintenance by outside agency**

Victoria reported this expense in *Domestic services*. Western Australia and Queensland reported it in *Repairs and maintenance*. Tasmania did not specify how it dealt with building/garden maintenance by an outside agency.

## **Revenue**

For Queensland, generally speaking, any significant revenue streams that originate from the Commonwealth are dealt with at the state level and little of this money appears on the revenue ledgers of the facilities. For example, payments by DVA are negotiated at the State level and the money then distributed to the facilities via ledger transfers. Also State-level funding arrangements are not regarded as revenue and so do not appear on the facility ledgers as revenue.

## **Defence force funding**

Victoria and Western Australia did not include Defence force funding in *Patient revenue*, *Other revenue* or *Recoveries*, although Western Australia indicated that it is 'unknown' whether it is included in *Other revenue*. Queensland indicated that only a small proportion of Commonwealth revenue is included in reported revenue. Tasmania did not specify how it dealt with Defence force funding.

## **Department Veterans' Affairs payments (state negotiated payments, payments direct to hospitals, or payments to hospital doctors / for hospital prostheses)**

Western Australia did not include DVA funding in *Patient revenue*, *Other revenue* or *Recoveries*. Victoria included some payments to hospitals in *Other revenue*, depending on the type of payment. Queensland indicated that only a small proportion of Commonwealth revenue is included in reported revenue. Tasmania did not specify how it dealt with DVA funding.

## **National Health and Medical Research Centre (NHMRC)**

Victoria, Western Australia and Queensland indicated either that they did not include National Health and Medical Research Centre (NHMRC) funding in *Patient revenue*, *Other revenue* or *Recoveries*, or that it is unknown. Tasmania did not specify how it dealt with NHMRC funding.

## **Isolated patients transport (Commonwealth)**

Victoria and Western Australia did not include isolated patients transport in *Patient revenue*, *Other revenue* or *Recoveries*, although Western Australia indicated that it is 'unknown' whether it is included in *Other revenue*. Queensland indicated that this information is not available. Tasmania did not specify how it dealt with isolated patients transport.

## **Commonwealth residential aged care subsidies / payments**

Victoria did not include Commonwealth residential aged care subsidies or payments in *Patient revenue*, *Other revenue* or *Recoveries*. Western Australia included it in *Other revenue*. Queensland indicated that only a small proportion of Commonwealth revenue is included in reported revenue. Tasmania did not specify how it dealt with Commonwealth residential aged care subsidies.

## **Other Commonwealth funding**

Victoria did not include other Commonwealth funding in *Patient revenue*, *Other revenue* or *Recoveries*. Western Australia included it in *Other revenue*. Tasmania included it all three revenue categories. Queensland indicated that only a small proportion of Commonwealth revenue is included in reported revenue.

## **Joint Commonwealth/state funding**

Victoria, Queensland and Western Australia did not report any Commonwealth/state funding in *Patient revenue*, *Other revenue* or *Recoveries*, although Western Australia indicated that it is 'unknown' whether it is included in *Other revenue*. Tasmania reported Commonwealth/state funding in *Other revenue*.

## **State funding**

This category includes:

- state health department funding
- state non-health department funding
- correctional authorities
- state patient transport services
- other funding (to be specified)
- other state funding (i.e. not this state).

Victoria did not include any of this type of funding in revenue reported to the AIHW. Tasmania included revenue from patient transport services in *Patient revenue* but did not include any other types of state funding in revenue reported to the AIHW. Western Australia included Disabilities Services Commission funding in *Other revenue* reported to the AIHW, but no other kinds of state funding. Queensland did not usually include state-level funding arrangements in revenue. However patient transport services can sometimes be included in *Patient revenue*.

## **Residential aged care patient co-payments**

Tasmania, Western Australia and Queensland all included residential aged care patient co-payments in *Patient revenue*. Victoria did not include these payments in revenue. However Victoria also did not include residential aged care patients in activity measures.

## **Facility fees**

Victoria, Western Australia and Queensland included this in *Recoveries*, Tasmania included it *Other revenue*.

### **Payments from private hospitals (e.g. for contracted patients)**

Victoria did not include this in revenue reported to the AIHW. Tasmania and Western Australia included it in *Patient revenue*. Queensland does not have arrangements of this kind and so it is not included in revenue.

### **Payments from public hospitals (e.g. for contracted patients)**

Victoria, Tasmania and Queensland do not include this in revenue. Western Australia includes it in *Patient revenue*.

### **Investments and interest bearing accounts**

Victoria, Tasmania and Western Australia included this in *Other revenue*, Queensland did not include it in revenue (establishments do not receive interest in Queensland) .

### **Other business units (car park, canteen, equipment hire)**

Victoria did not report any of these as revenue. Tasmania reported car park and canteen revenue in *Other revenue*, and equipment hire in *Patient revenue*. Western Australia reported car park and canteen revenue in *Recoveries* and equipment hire as *Patient revenue*. Queensland reported car park and canteen revenue in *Other revenue*, and did not include equipment hire in revenue. For Queensland, funds from equipment hire for medical type equipment (such as crutches) are managed as trust fund accounts; for non-medical equipment (such as TVs and phones) the services are not managed by the hospital and there is no commission to the hospital.

### **Trust funds (private practice, charitable or other)**

Victoria, Western Australia and Queensland did not report any of these as establishment revenue. Tasmania reported private practice trust funds in *Patient revenue*.

### **Donations**

Victoria, Western Australia and Tasmania reported donations as *Other revenue*. Queensland did not count donations as revenue.

### **Building/garden maintenance by outside agency**

Victoria, Tasmania and Queensland did not include this in revenue. Western Australia included it in *Recoveries*.

### **Hospital boarders**

Victoria included revenue from hospital boarders in *Other revenue*. Tasmania did not include it in revenue. Queensland indicated that it does not usually raise revenue from hospital boarders, although such monies might occasionally be included in *Recoveries*. Western Australia included it in *Recoveries*.

# Group services

## Victoria

In Victoria, services for repairs and maintenance, pathology, radiology, food supplies, drug supplies and linen are provided in two ways. Firstly, they can be provided by hospital staff or contracted services, in which case the expenditures are reported to the AIHW in the relevant recurrent expenditure category (pathology services are reported under *Medical and surgical supplies*). Alternatively, the services can be provided by hospital business units (either business units within an establishment or business units in another establishment) in which case the expenditures are not reported to the AIHW as they are considered separate to the establishment. If a hospital buys the services from another hospital's business unit, the expenditure and revenue is not reported to the AIHW.

Ambulance services are reported in *Patient transport*. Many hospitals have their own patient transport vehicles and these costs are reported in expenditure. Some ambulance services in Victoria are provided by separate non-hospital services and if hospitals use these services, the expenditure is also reported to the AIHW.

## Tasmania

In Tasmania, ambulance services are not counted in expenditure and revenue reported to AIHW. No charges are levied on hospitals for ambulance transport as both services fall within the hospitals and ambulance service division.

Small amounts of maintenance services and food services are provided to rural hospitals by major hospitals. The smaller hospital is charged for these services on a cost recovery basis.

## Western Australia

In Western Australia, ambulance services are provided by St John Ambulance and do not appear in expenditure and revenue reports. Linen, maintenance, pathology, radiology, food services and drug costs are reported as follows where services are supplied by one hospital to another hospital:

- the supplying hospital charges the other hospital.
- the expenditure is not 'netted out' against revenue.
- the revenue is reported by the supplying hospital and the expense is reported by the receiving hospital.

## Queensland

In Queensland, if the services are supplied either by or for another hospital or agency, the expenditure will be reported to the AIHW in the relevant recurrent expenditure category. If a service is supplied by one hospital to another hospital the supplying hospital charges the other hospital the revenue is reported, the expenditure is not 'netted out' against revenue. Conversely, if a hospital receives a service, they are charged and they report the charge as an expense.

Ambulance services are reported in *Patient transport*. Maintenance services are reported in *Repairs and maintenance*. Pathology services are reported in *Medical and surgical supplies*. Drug costs are reported in *Drug supplies* and radiology services are reported in *Medical and surgical supplies*.

# Appendix 1: List of data elements in the NMDS

NHDD Version 12	Knowledge-base ID	METeOR name	METeOR ID
Type of non-admitted patient care (public psychiatric, alcohol and drug), version 1	000233	Establishment (public psychiatric or alcohol and drug hospital) – number of group session occasions of service for non-admitted patients (outreach and community), total N[NNNNNN]	270219
		Establishment (public psychiatric or alcohol and drug hospital) – number of individual session occasions of service for non-admitted patients (emergency and outpatient), total N[NNNNNN]	270216
		Establishment (public psychiatric or alcohol and drug hospital) – number of individual session occasions of service for non-admitted patients (outreach and community), total N[NNNNNN]	270218
		Establishment (public psychiatric or alcohol and drug hospital) – number of group session occasions of service for non-admitted patients (emergency and outpatient), total N[NNNNNN]	270217
Establishment type, version 1	000327	Establishment – establishment type, sector and services provided code AN.N{.N}	269971
Geographical location of establishment, version 2	000260	Establishment – geographical location, code (ASGC 2001) NNNNN	270154
Capital expenditure – gross (accrual accounting), version 2	000325	Establishment – gross capital expenditure (accrual accounting) (buildings and building services) (financial year), total Australian currency N[N(8)]	270521
		Establishment – gross capital expenditure (accrual accounting) (constructions) (financial year), total Australian currency N[N(8)]	270526
		Establishment – gross capital expenditure (accrual accounting) (equipment) (financial year), total Australian currency N[N(8)]	270525
		Establishment – gross capital expenditure (accrual accounting) (information technology) (financial year), total Australian currency N[N(8)]	270527
		Establishment – gross capital expenditure (accrual accounting) (intangible) (financial year), total Australian currency N[N(8)]	270522
		Establishment – gross capital expenditure (accrual accounting) (land) (financial year), total Australian currency N[N(8)]	270528
		Establishment – gross capital expenditure (accrual accounting) (major medical equipment) (financial year), total Australian currency N[N(8)]	269968

NHDD Version 12	Knowledge-base ID	METeOR name	METeOR ID
Capital expenditure – net (accrual accounting), version 2	000396	Establishment – gross capital expenditure (accrual accounting) (other equipment) (financial year), total Australian currency N[N(8)]	270523
		Establishment – gross capital expenditure (accrual accounting) (transport) (financial year), total Australian currency N[N(8)]	270524
		Establishment – net capital expenditure (accrual accounting) (buildings and building services) (financial year), total Australian currency N[N(8)]	269969
		Establishment – net capital expenditure (accrual accounting) (constructions) (financial year), total Australian currency N[N(8)]	270531
		Establishment – net capital expenditure (accrual accounting) (equipment) (financial year), total Australian currency N[N(8)]	270534
		Establishment – net capital expenditure (accrual accounting) (information technology) (financial year), total Australian currency N[N(8)]	270529
		Establishment – net capital expenditure (accrual accounting) (intangible) (financial year), total Australian currency N[N(8)]	270535
		Establishment – net capital expenditure (accrual accounting) (land) (financial year), total Australian currency N[N(8)]	270536
		Establishment – net capital expenditure (accrual accounting) (major medical equipment) (financial year), total Australian currency N[N(8)]	270530
		Establishment – net capital expenditure (accrual accounting) (other equipment) (financial year), total Australian currency N[N(8)]	270533
Number of available beds for admitted patients, version 2	000255	Establishment – number of available beds for admitted patients/residents, average N[NNN]	270133
		Establishment – number of group sessions, total N[NNNNN]	292789
Group sessions, version 1	000210		
Type of non-admitted patient care, version 1	000231	Establishment – number of occasions of service (non-admitted patient) (alcohol and drug), total N[NNNNNN]	270508
		Establishment – number of occasions of service (non-admitted patient) (allied health services), total N[NNNNNN]	270502
(Occasions of service, version 1)		Establishment – number of occasions of service (non-admitted patient) (community health services), total N[NNNNNN]	270395
		Establishment – number of occasions of service (non-admitted patient) (dental), total N[NNNNNN]	270513

NHDD Version 12	Knowledge-base ID	METeOR name	METeOR ID
		Establishment – number of occasions of service (non-admitted patient) (dialysis), total N[NNNNNN]	270503
		Establishment – number of occasions of service (non-admitted patient) (district nursing services), total N[NNNNNN]	270512
		Establishment – number of occasions of service (non-admitted patient) (emergency services), total N[NNNNNN]	270506
		Establishment – number of occasions of service (non-admitted patient) (endoscopy and related procedures), total N[NNNNNN]	270507
		Establishment – number of occasions of service (non-admitted patient) (mental health), total N[NNNNNN]	270504
		Establishment – number of occasions of service (non-admitted patient) (other medical/surgical/diagnostic), total N[NNNNNN]	270511
		Establishment – number of occasions of service (non-admitted patient) (other outreach services), total N[NNNNNN]	270514
		Establishment – number of occasions of service (non-admitted patient) (pathology), total N[NNNNNN]	270505
		Establishment – number of occasions of service (non-admitted patient) (pharmacy), total N[NNNNNN]	270509
		Establishment – number of occasions of service (non-admitted patient) (radiology and organ imaging), total N[NNNNNN]	270510
Establishment identifier, version 4	000050	Establishment – organisation identifier (Australian), NNX[X]NNNNN	269973
Full-time equivalent staff, version 2	000252	Establishment – paid full-time equivalent staff (administrative and clerical staff), average N[NNN{.N}]	270496
		Establishment – paid full-time equivalent staff (diagnostic and health professionals), average N[NNN{.N}]	270495
		Establishment – paid full-time equivalent staff (domestic and other staff), average N[NNN{.N}]	270498
		Establishment – paid full-time equivalent staff (enrolled nurses), average N[NNN{.N}]	270497
		Establishment – paid full-time equivalent staff (other personal care staff), average N[NNN{.N}]	270171
		Establishment – paid full-time equivalent staff (registered nurses), average N[NNN{.N}]	270500
		Establishment – paid full-time equivalent staff (salaried medical officers), average N[NNN{.N}]	270494
		Establishment – paid full-time equivalent staff (student nurses), average N[NNN{.N}]	270499

<b>NHDD Version 12</b>	<b>Knowledge-base ID</b>	<b>METeOR name</b>	<b>METeOR ID</b>
		Establishment – paid full-time equivalent staff (trainee/pupil nurses), average N[NNN{.N}]	270493
Administrative expenses, version 1	000244	Establishment – recurrent expenditure (administrative expenses) (financial year), total Australian currency N[N(8)]	270107
Depreciation, version 1	000246	Establishment – recurrent expenditure (depreciation) (financial year), total Australian currency N[N(8)]	270279
Domestic services, version 1	000241	Establishment – recurrent expenditure (domestic services) (financial year), total Australian currency N[N(8)]	270283
Drug supplies, version 1	000238	Establishment – recurrent expenditure (drug supplies) (financial year), total Australian currency N[N(8)]	270282
Food supplies, version 1	000240	Establishment – recurrent expenditure (food supplies) (financial year), total Australian currency N[N(8)]	270284
Indirect health care expenditure, version 1	000326	Establishment – recurrent expenditure (indirect health care) (central administrations) (financial year), total Australian currency N[N(8)]	270294
		Establishment – recurrent expenditure (indirect health care) (central and statewide support services) (financial year), total Australian currency N[N(8)]	270293
		Establishment – recurrent expenditure (indirect health care) (other) (financial year), total Australian currency N[N(8)]	270295
		Establishment – recurrent expenditure (indirect health care) (patient transport services) (financial year), total Australian currency N[N(8)]	270291
		Establishment – recurrent expenditure (indirect health care) (public health and monitoring services) (financial year), total Australian currency N[N(8)]	270292
Interest payments, version 1	000245	Establishment – recurrent expenditure (interest payments) (financial year), total Australian currency N[N(8)]	270186
Medical and surgical supplies, version 1	000239	Establishment – recurrent expenditure (medical and surgical supplies) (financial year), total Australian currency N[N(8)]	270358
Other recurrent expenditure, version 1	000247	Establishment – recurrent expenditure (other recurrent expenditure) (financial year), total Australian currency N[N(8)]	270126
Patient transport, version 1	000243	Establishment – recurrent expenditure (patient transport cost) (financial year), total Australian currency N[N(8)]	270048
Repairs and maintenance, version 1	000242	Establishment – recurrent expenditure (repairs and maintenance) (financial year), total Australian currency N[N(8)]	269970
Salaries and wages, version 1	000254	Establishment – recurrent expenditure (salaries and wages) (administrative and clerical staff) (financial year), total Australian currency	270275

NHDD Version 12	Knowledge-base ID	METeOR name	METeOR ID
		N[N(8)]	
		Establishment – recurrent expenditure (salaries and wages) (diagnostic and health professionals) (financial year), total Australian currency N[N(8)]	270274
		Establishment – recurrent expenditure (salaries and wages) (domestic and other staff) (financial year), total Australian currency N[N(8)]	270276
		Establishment – recurrent expenditure (salaries and wages) (enrolled nurses) (financial year), total Australian currency N[N(8)]	270270
		Establishment – recurrent expenditure (salaries and wages) (financial year), total Australian currency N[N(8)]	270470
		Establishment – recurrent expenditure (salaries and wages) (other personal care staff) (financial year), total Australian currency N[N(8)]	270273
		Establishment – recurrent expenditure (salaries and wages) (registered nurses) (financial year), total Australian currency N[N(8)]	270269
		Establishment – recurrent expenditure (salaries and wages) (salaried medical officers) (financial year), total Australian currency N[N(8)]	270265
		Establishment – recurrent expenditure (salaries and wages) (student nurses) (financial year), total Australian currency N[N(8)]	270271
		Establishment – recurrent expenditure (salaries and wages) (trainee/pupil nurses) (financial year), total Australian currency N[N(8)]	270272
Superannuation employer contributions (including funding basis), version 1	000237	Establishment – recurrent expenditure (superannuation employer contributions) (financial year), total Australian currency N[N(8)]	270371
Payments to visiting medical officers, version 1	000236	Establishment – recurrent expenditure (visiting medical officer payments) (financial year), total Australian currency N[N(8)]	270049
Other revenues, version 1	000323	Establishment – revenue (other revenue) (financial year), total Australian currency N[N(8)]	270128
Patient revenue, version 1	000296	Establishment – revenue (patient) (financial year), total Australian currency N[N(8)]	270047
Recoveries, version 1	000295	Establishment – revenue (recoveries) (financial year), total Australian currency N[N(8)]	269974
Specialised service indicators, version 1	000321	Establishment – specialised service indicator (acquired immune deficiency syndrome unit), yes/no code N	270448
		Establishment – specialised service indicator (acute renal dialysis unit), yes/no code N	270435
		Establishment – specialised service indicator (acute spinal cord injury unit), yes/no code N	270432

NHDD Version 12	Knowledge-base ID	METeOR name	METeOR ID
		Establishment – specialised service indicator (alcohol and drug unit), yes/no code N	270431
		Establishment – specialised service indicator (burns unit (level III)), yes/no code N	270438
		Establishment – specialised service indicator (cardiac surgery unit), yes/no code N	270434
		Establishment – specialised service indicator (clinical genetics unit), yes/no code N	270444
		Establishment – specialised service indicator (comprehensive epilepsy centre), yes/no code N	270442
		Establishment – specialised service indicator (coronary care unit), yes/no code N	270433
		Establishment – specialised service indicator (diabetes unit), yes/no code N	270449
		Establishment – specialised service indicator (domiciliary care service), yes/no code N	270430
		Establishment – specialised service indicator (geriatric assessment unit), yes/no code N	270429
		Establishment – specialised service indicator (hospice care unit), yes/no code N	270427
		Establishment – specialised service indicator (in-vitro fertilisation unit), yes/no code N	270441
		Establishment – specialised service indicator (infectious diseases unit), yes/no code N	270447
		Establishment – specialised service indicator (intensive care unit (level III)), yes/no code N	270426
		Establishment – specialised service indicator (maintenance renal dialysis centre), yes/no code N	270437
		Establishment – specialised service indicator (major plastic/reconstructive surgery unit), yes/no code N	270439
		Establishment – specialised service indicator (neonatal intensive care unit (level III)), yes/no code N	270436
		Establishment – specialised service indicator (neuro surgical unit), yes/no code N	270446
		Establishment – specialised service indicator (nursing home care unit), yes/no code N	270428
		Establishment – specialised service indicator (obstetric/maternity), yes/no code N	270150
		Establishment – specialised service indicator (oncology unit) (cancer treatment), yes/no code N	270440
		Establishment – specialised service indicator (psychiatric unit/ward), yes/no code N	270425
		Establishment – specialised service indicator (rehabilitation unit), yes/no code N	270450
		Establishment – specialised service indicator (sleep centre), yes/no code N	270445
		Establishment – specialised service indicator (specialist paediatric), yes/no code N	270424

<b>NHDD Version 12</b>	<b>Knowledge- base ID</b>	<b>METeOR name</b>	<b>METeOR ID</b>
		Establishment – specialised service indicator (transplantation unit), yes/no code N	270443
Teaching status, version 1	000322	Establishment – teaching status (university affiliation), code N	270148
Individual/ group session, version 1	000325	Service contact – group session status, individual/ group session indicator code ANN.N	291057

# Appendix 2: Survey documentation

## Survey of users and data collectors for the evaluation of the National Minimum Data Set for Public Hospital Establishments

Please respond by 13 May 2005

The Australian Institute of Health and Welfare ('the Institute') is interested in obtaining contact details for any follow-up queries and to gain an understanding of the types of organisations using the NMDS specifications and NMDS-based data. This information will also help us interpret responses to the more specific questions that follow.

Identifying details provided will NOT be used for any other purpose, nor will any individual be identified in the analysis and reporting of results.

<p><b>Name:</b> _____</p> <p><b>Job title:</b> _____</p> <p><b>Unit/section:</b> _____</p> <p><b>Organisation:</b> _____</p> <p><b>E-mail address:</b> _____</p> <p><b>Address:</b> _____</p> <p><b>City/town:</b> _____ <b>State:</b> _____ <b>Postcode:</b> _____</p> <p><b>Telephone:</b> _____ <b>Fax:</b> _____</p> <p><b>Date this survey was completed:</b> _____</p>
--

**For whom are you responding? Please indicate (X) all that apply.**

<b>Respondent</b>	<b>[X]</b>
On behalf of yourself	<input type="checkbox"/>
On behalf of your unit or section within an organisation	<input type="checkbox"/>
On behalf of your organisation	<input type="checkbox"/>
<i>Comments</i>	

## 1. Users of the NMDS specifications and NMDS-based data

The Institute is interested in gaining an understanding of the types of organisations that use the NMDS specifications and NMDS-based data. A user is defined as any person who uses the NMDS specifications to either collect or to access and analyse NMDS-based data. In order for us to develop an understanding of who the main user groups are, please indicate the main user group to which you belong.

**Please indicate (X) the main user group to which you belong.**

User group	[X]
State or territory health authority	<input type="checkbox"/>
Other state or territory government department	<input type="checkbox"/>
Australian Government Department of Health and Ageing	<input type="checkbox"/>
Australian Government Department of Veterans Affairs	<input type="checkbox"/>
Other Australian Government department	<input type="checkbox"/>
Australian Institute of Health and Welfare	<input type="checkbox"/>
Public hospital	<input type="checkbox"/>
Private hospital	<input type="checkbox"/>
Other health service provider	<input type="checkbox"/>
University or other research organisation	<input type="checkbox"/>
Private planning consultant	<input type="checkbox"/>
Clinical equipment/therapeutic device company	<input type="checkbox"/>
Pharmaceutical company	<input type="checkbox"/>
Software developer	<input type="checkbox"/>
Interest group	<input type="checkbox"/>
Other, please specify _____	<input type="checkbox"/>

## 2. Use of the NMDS specifications and NMDS-based data

The Institute is interested in obtaining information about the way the NMDS specifications and NMDS-based data are currently being used. This section includes questions on:

- why you use the NMDS specifications or NMDS-based data
- how you access NMDS specifications and NMDS-based data
- how familiar you are with the NMDS specifications and NMDS-based data
- how frequently you use NMDS specifications and NMDS-based data.

**2.1. For what purpose do you use the NMDS specifications and the NMDS-based data? Rate the three most common purposes, where 1 is the most common and 3 is the least common.**

Purpose	[1,2,3]
Planning and monitoring hospital resources	<input type="checkbox"/>
Comparisons and benchmarking	<input type="checkbox"/>
Management and purchasing of hospital services	<input type="checkbox"/>
Policy advice	<input type="checkbox"/>
Health services research	<input type="checkbox"/>
Statistical reporting	<input type="checkbox"/>
Facility planning	<input type="checkbox"/>
Collection and reporting of NMDS-based data	<input type="checkbox"/>
Software development	<input type="checkbox"/>
Other, please specify _____	<input type="checkbox"/>

**2.2. (optional) Please provide more detail about the purpose(s) for which you use the NMDS specifications or NMDS-based data.**

*Example: Investigation of the cost of hospital food supplies by state.*

**2.3. Please indicate (X) at which level you use the data.**

Level	[X]
Data for one hospital only	<input type="checkbox"/>
Data for hospital group (within state/territory or national)	<input type="checkbox"/>
Data for state or territory	<input type="checkbox"/>
National	<input type="checkbox"/>
International	<input type="checkbox"/>

**2.4. Please rate the three most common sources you use to access the NMDS specifications, where 1 is the most common and 3 is the least common.**

Source	[1,2,3]
<i>National health data dictionary</i> publication	[ ]
<a href="#">National Health Data Dictionary</a> publication online	[ ]
<a href="#">The Knowledgebase</a>	[ ]
State/territory data specifications	[ ]
Hospital-based data specifications	[ ]
Other, please specify _____	[ ]
Not applicable, do not access	[ ]

**2.5. Please rate the three most common sources of NMDS-based data you use, where 1 is the most common and 3 is the least common.**

Source	[1,2,3]
<i>AIHW Australian Hospital Statistics</i> publication + Internet tables	[ ]
Other AIHW publications	[ ]
AIHW National Public Hospital Establishments Database (external user, <i>ad hoc</i> data requests)	[ ]
AIHW National Public Hospital Establishments Database (internal, AIHW user)	[ ]
Hospital database	[ ]
State or territory health authorities' hospitals database	[ ]
State or territory publications	[ ]
Department of Health and Ageing <i>State of our Public Hospitals</i> publication	[ ]
Healthwiz	[ ]
Other, please specify _____	[ ]
Not applicable, do not use	[ ]

**2.6. Please rate (X) your overall knowledge of the NMDS specifications or the NMDS-based data.**

Knowledge	NMDS specifications	NMDS-based data
Very familiar	[ ]	[ ]
Familiar	[ ]	[ ]
Unfamiliar	[ ]	[ ]

**2.7. Please indicate (X) how often you use the NMDS specifications or the NMDS-based data.**

Frequency	NMDS specifications	NMDS-based data
Daily	<input type="checkbox"/>	<input type="checkbox"/>
Weekly	<input type="checkbox"/>	<input type="checkbox"/>
Monthly	<input type="checkbox"/>	<input type="checkbox"/>
Occasionally	<input type="checkbox"/>	<input type="checkbox"/>
Never	<input type="checkbox"/>	<input type="checkbox"/>

### 3. Utility

As outlined in the explanatory notes, the main purpose of this survey is to gain an understanding of whether the NMDS is useful and whether it suits your current requirements. In this section, respondents are asked to rate the importance and usefulness of the NMDS overall and each individual data element, and to indicate which data elements should remain unchanged, which should be modified and which deleted. Please note, the data elements are as specified in the *National health data dictionary* version 12.

**3.1. Please indicate (X) the importance and usefulness of the NMDS overall and each individual data element. Please provide comments on whether each data element should remain unchanged, be modified or deleted. Within your comments please indicate why a data element should be modified or deleted and describe the proposed modifications, for example, changes to the name, definition or data domains.**

When assessing **importance**, think of how significant the whole NMDS and each data element is to a *national* collection of data on Public Hospital Establishments. For example, is the NMDS and each data element important for the public good and national interest?

When assessing **usefulness**, consider whether the NMDS and each data element suits your current requirements. Does this data element supply useful information to you or your organisation?

If a data element is highly important and highly useful, it should probably remain unchanged. However, if a data element is highly important, but not useful, it may be a function of the way it is defined, in which case it probably needs to be modified.

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
NMDS for Public Hospital Establishments	<input type="checkbox"/>							
<i>Comments:</i>								
<b>System level expenditure elements (dollars)</b>								
<a href="#">Capital expenditure - gross (accrual accounting)</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Capital expenditure - net (accrual accounting)</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Indirect health care expenditure</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<b>Establishment identification data elements (name/code)</b>								
<a href="#">Establishment identifier</a>	<input type="checkbox"/>							
<i>Comments:</i>								

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
<a href="#">Establishment number</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Establishment sector</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Region code</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">State/Territory identifier</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Establishment type</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Geographical location of establishment</a>	<input type="checkbox"/>							
<i>Comments:</i>								

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
<b>Establishment level expenditure elements (dollars)</b>								
<a href="#">Administrative expenses</a>	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Interest payments</a>	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Depreciation</a>	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Patient transport</a>	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Repairs and maintenance</a>	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Superannuation employer contributions (including funding basis)</a>	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
<a href="#">Salaries and wages</a>	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Salaries and wages</a> - salaried medical officers	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Salaries and wages</a> - registered nurses	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Salaries and wages</a> - enrolled nurses	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Salaries and wages</a> - student nurses	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Salaries and wages</a> - trainee/pupil nurses	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
<a href="#">Salaries and wages</a> - other personal care staff	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Salaries and wages</a> - diagnostic & health professionals	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Salaries and wages</a> - administrative & clerical staff	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Salaries and wages</a> - domestic & other staff	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								
<a href="#">Domestic services</a>	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<i>Comments:</i>								

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
<a href="#">Payments to visiting medical officers</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Drug supplies</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Food supplies</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Medical and surgical supplies</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Other recurrent expenditure</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<b>Services data elements (numbers or yes/no)</b>								
<a href="#">Full-time equivalent staff</a>	<input type="checkbox"/>							
<i>Comments:</i>								

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
<a href="#">Specialised service indicators</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Occasions of service</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Type of non-admitted patient care</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Type of non-admitted patient care (public psych, alcohol &amp; drug)</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Individual/group session</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Group sessions</a>	<input type="checkbox"/>							
<i>Comments:</i>								

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
<a href="#">Number of available beds for admitted patients</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Teaching status</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<b>Revenue data elements (dollars)</b>								
<a href="#">Patient revenue</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Other revenues</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Recoveries</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<b>Supporting data element concepts</b>								
<a href="#">Hospital</a>	<input type="checkbox"/>							
<i>Comments:</i>								

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
<a href="#">Hospital boarder</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Non-admitted patient</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Overnight-stay patient</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Patient</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Same-day patient</a>	<input type="checkbox"/>							
<i>Comments:</i>								
<a href="#">Separation</a>	<input type="checkbox"/>							
<i>Comments:</i>								

#### 4. Areas for development

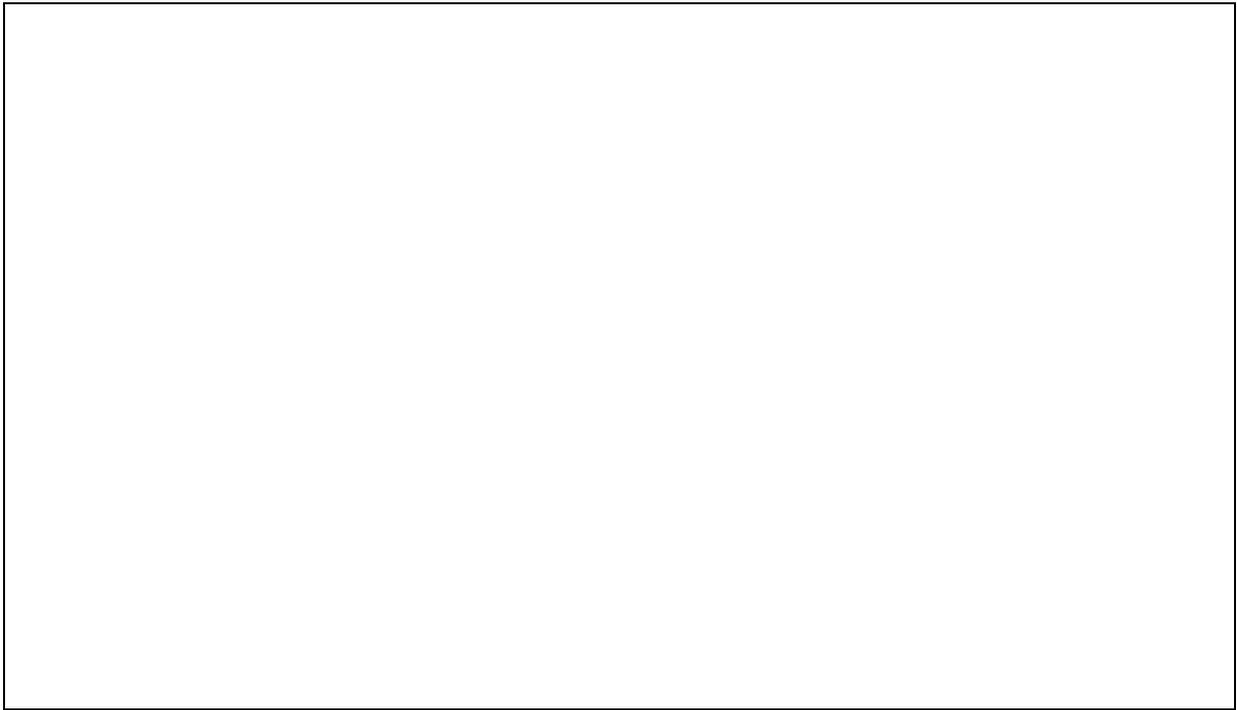
The Institute is interested in obtaining your views on development of the Public Hospital Establishments NMDS, including

- . data elements in the *National health data dictionary* but not included in this NMDS,
- . new data elements that would make the NMDS more useful,
- . priorities for definitional development, and
- . possible changes to the scope of the NMDS.

**4.1. Are there any data elements that should be included in the NMDS? In particular, are there any data elements already in the [National Health Data Dictionary](#), but not in this NMDS, which you believe need to be included in the Public Hospital Establishments NMDS?**

**4.2. What do you see as the priorities for definitional development for data elements, data element concepts or scope? Suggestions could include data elements not yet defined or not yet included in the [National Health Data Dictionary](#).**

**4.3. Do you have any comments on the scope (coverage) of the NMDS?**



**4.4. Who should be consulted about any proposed data development?**



## 5. Other comments

Please provide any additional views or comments you have that may assist the evaluation.



If you would like to provide more detail on any of the questions, please e-mail [susan.windross@aihw.gov.au](mailto:susan.windross@aihw.gov.au).

*Please respond by 13 May 2005*

*Thank you for taking the time to complete this survey.*

## Explanatory notes

This survey seeks your views as users of the National Minimum Data Set for Public Hospital Establishments (referred to from here on as 'the NMDS'), either as a tool for collection of data or as a specification of data for analysis, on its usefulness and whether it suits current requirements. The Australian Institute of Health and Welfare ('the Institute') would like your views on the usefulness of NMDS-based data as a whole, views on individual data elements and data element concepts and areas for development. The Institute also seeks your views on whether data collectors are using the *National health data dictionary* (NHDD) data definitions. Additional comments and recommendations would also be welcome.

Please note that this survey only refers to nationally reportable items that are used at a national level.

### The National Minimum Data Set for Public Hospital Establishments

A National Minimum Data Set is a minimum set of data elements agreed by the National Health Information Management Principal Committee (NHIMPC) for mandatory collection and reporting at a national level. One NMDS may include data elements that are also included in another NMDS.

An NMDS includes agreement on specified data elements (discrete items of information or variables) and supporting data element concepts as well as the scope of the application of those data elements and the statistical units for collection. Definitions of all data elements that are included in NMDS collections in the health sector are included in the *National health data dictionary* (NHDD).

The NMDS for Public Hospital Establishments is a specific set of data that is collected on all public hospitals. It is summarised in Attachment A.

*The scope of the NMDS is public acute and psychiatric hospitals, including alcohol and drug treatment centres. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external Territories are not currently included.*

*The NMDS forms an important part of the National Public Hospital Establishments Database (NPHEd) and informs the annual report Australian hospital statistics; as well as State and Territory-based hospital data collections.*

Data for this set (numerical and in dollars) are collected at the establishment level from administrative record systems and forwarded to the relevant State or Territory health authority on a regular basis. Data for each financial year are then provided to the Institute for national collation, on an annual basis.

The latest data available for reporting is for 2002–03 and is based on version 11 of the NHDD. The data currently being collected is based on the most recent version of the NHDD, Version 12 Supplement. Therefore, the survey seeks comments on the utility of the current version of the NHDD.

### Purpose of the evaluation

The NMDS was first specified in 1989 and has been amended in minor ways since then. However, there have been no comprehensive reviews of the quality and utility of the Public Hospital Establishments NMDS data and data concepts.

As considerable resources are used at the State and Territory and national levels to collect data for the NMDS, a comprehensive evaluation is essential to determine whether the data collection suits current requirements and to take actions to improve data quality and consistency. To this end, the Australian Health Ministers Advisory Council, through the NHIMPC has funded the Institute to conduct an evaluation of the NMDS.

This evaluation follows on from the evaluation of the NMDS for Admitted Patient Care conducted in 2001–02 and the evaluation of the Perinatal NMDS 2002–03. As a result of these evaluations, some changes have been made to improve the quality and usefulness of the data by clarifying definitions of some data elements. Work to consider more substantial changes is underway.

As some data elements apply to more than one NMDS, some Public Hospital Establishments data elements may have already been discussed in other fora. Recommendations from this evaluation will be considered by the groups already reviewing those data elements and it will be important to maintain consistency between the evaluation recommendations and working group recommendations.

The evaluation of the NMDS for Public Hospital Establishments involves:

1. Reviewing the 2002–03 hospital establishments data provided to the Institute by States and Territories, including an assessment of the extent to which data were provided in accordance with the NMDS specifications as published in the *National health data dictionary* version 11.
2. Reviewing the utility of the NMDS through consultation with users and data providers, including an assessment of whether the NMDS suits current requirements, such as informing policy development and reporting on performance.

The evaluation is being done in consultation with Australian Hospital Statistics Advisory Committee which includes representatives from:

- State and Territory health authorities
- Australian Government Department of Health and Ageing
- Australian Government Department of Veterans' Affairs
- Australian Bureau of Statistics
- Private Health Insurance Administration Council
- Australian Healthcare Association
- Australian Private Hospitals Association
- National Centre for Classification in Health.

A report of the evaluation will be prepared for consideration by the Statistical Information Management Committee (SIMC), which reports to the NHIMPC.

## **Follow-up data development**

The results of the evaluation will identify priorities for future development of the NMDS and will form the basis for recommendations to the NHIMPC. Subsequent data element development and other development activities will be undertaken in consultation with the States and Territories and other stakeholders through the Health Data Standards Committee (HDSC) and the SIMC.

As a standing committee of the NHIMPC, the HDSC assesses data definitions proposed for inclusion in the *National health data dictionary* and makes recommendations to the NHIMPC on revisions and additions to each annual version of the Dictionary.

The HDSC uses detailed criteria for determining the eligibility of data element definitions for inclusion in the NHDD (see Attachment B). The process for amending the NMDS is outlined at Attachment C

The SIMC, also a standing committee of the NHIMPC, has responsibility for specifying the content of NMDS. This includes any changes to existing data elements, proposals for new data elements for collection or changes to scope. Changes to an NMDS therefore require approval of both SIMC and HDSC and then endorsement by the NHIMPC.

The NHIMPC meets in December each year to consider proposals affecting National Minimum Data Sets to be implemented or altered in July of the following year. Therefore any proposed changes to the NMDS identified through this evaluation and endorsed by the NHIMPC will be implemented in the jurisdictions in July 2006 at the earliest.

# Outline of the NHDD V12 of the NMDS for Public Hospital Establishments

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## Public Hospital Establishments NMDS

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**Admin. status:** CURRENT 1/07/2000 Version number: 1

**Metadata type:** NATIONAL MINIMUM DATA SET

**Start date:** 1 July 1989

**End date:**

**Latest evaluation date:**

**Scope:** The scope of this dataset is establishment level data for public acute and psychiatric hospitals, including hospitals operated for or by the Australian Government Department of Veterans' Affairs, and alcohol and drug treatment centres.

From version 9 Patient-level data remains in the new NMDS called Admitted patient care. These new NMDS replace the version 8 NMDS called Institutional health care.

Similar data for private hospitals and free standing day hospital facilities is collected by the Australian Bureau of Statistics in the Private Health Establishments Collection.

Hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not currently included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

**Statistical units:** Public hospital establishments.

**Collection methodology:** Data are collected at each hospital from patient administrative and clinical record systems. Hospitals forward data to the relevant state or territory health authority on a regular basis (for example, monthly).

**National reporting arrangements:** State and territory health authorities provide the data to the Australian Institute of Health and Welfare for national collation, on an annual basis.

**Periods for which data are collected and nationally collated:**

Financial years ending 30 June each year.

**Data elements included:**

Administrative expenses, version 1 NHDD V12 page 31

Capital expenditure, version 1 NHDD V12 page 86

Capital expenditure – gross (accrual accounting), version 2 NHDD V12 page 88

Capital expenditure – net (accrual accounting), version 2 NHDD V12 page 90

Depreciation, version 1 NHDD V12 page 181

Domestic services, version 1 NHDD V12 page 193

Drug supplies, version 1 NHDD V12 page 194

Establishment identifier, version NHDD V12 page 211

Establishment type, version 1 NHDD V12 page 215

## Attachment A

Food supplies, version 1 NHDD V12	page 233
Full-time equivalent staff, version 2 NHDD V12	page 243
Geographical location of establishment, version 2 NHDD V12	page 247
Group sessions, version 1 NHDD V12	page 264
Indirect health care expenditure, version 1 NHDD V12	page 303
Individual/group session, version 1 NHDD V12	page 305
Interest payments, version 1 NHDD V12	page 317
Medical and surgical supplies, version 1 NHDD V12	page 341
Number of available beds for admitted patients, version 2 NHDD V12	page 401
Occasions of service, version 1 NHDD V12	page 418
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Other revenues, version 1 NHDD V12	page 430
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Patient transport, version 1 NHDD V12	page 444
Payments to visiting medical officers, version 1 NHDD V12	page 446
Recoveries, version 1 NHDD V12	page 503
Repairs and maintenance, version 1 NHDD V12	page 514
Salaries and wages, version 1 NHDD V12	page 517
Specialised service indicators, version 1 NHDD V12	page 538
Superannuation employer contributions (including funding basis), version 1 NHDD V12	page 548
Teaching status, version 1 NHDD V12	page 552
Type of non-admitted patient care, version 1 NHDD V12	page 607
Type of non-admitted patient care (public psychiatric, alcohol and drug), version 1 NHDD V12	page 611

### *Supporting data elements and data element concepts:*

Australian state/territory identifier, version 4 <sup>∇</sup> .....	page 256
Establishment number, version 4 <sup>∇</sup> .....	page 278
Establishment sector, version 4 <sup>∇</sup> .....	page 279
Hospital, version 1.....	NHDD V12 page 279
Hospital boarder, version 1.....	NHDD V12 page 280
Non-admitted patient, version 1.....	NHDD V12 page 385
Overnight-stay patient, version 3.....	NHDD V12 page 436
Patient, version 1.....	NHDD V12 page 437
Region code, version 2.....	NHDD V12 page 508
Same-day patient, version 1.....	NHDD V12 page 519
Separation, version 3.....	NHDD V12 page 522

◆ new in NMDS this version

∇ modified this version

## Attachment A

**Data elements in common with other NMDS:** See Appendix C, NHDD.

**Scope links with other NMDS:** Episodes of care for admitted patients, which occur partly or fully in designated psychiatric units of public acute hospitals or in public psychiatric hospitals:

- Admitted patient care NMDS, version 1
- Admitted Patient Mental Health Care NMDS, version 1
- Admitted Patient Palliative Care NMDS, version 1

**Source organisation:** National Health Information Group.

**Comments:** Statistical units are entities from or about which statistics are collected or in respect of which statistics are compiled, tabulated or published.

## Criteria used by the Health Data Standards Committee to assess inputs to the National health data dictionary

The following criteria are used by the Health Data Standards Committee as a guide to determining the eligibility of data element definitions submitted for inclusion in the *National health data dictionary*.

To be recommended for inclusion in the dictionary, the submitted data element definitions should:

1. Not duplicate existing data element definitions in the *National health data dictionary* or, where overlap exists, display greater utility than existing definitions.
2. Comply with the principles for developing *National health data dictionary* definitions including presentation according to the specifications for data element definitions and having regard for the key features of a good quality data definition.
3. Be accompanied by evidence that the data element definitions were developed:
  - using a national consultation process involving all relevant jurisdictions and a suitable range of recognised experts in the field, where appropriate
  - with consensus from the parties to that process
  - with all jurisdictions and experts, where possible, having agreed to or endorsing the submitted data definitions
  - taking into account the implications for data collection systems and reporting requirements (for National Minimum Data Sets).
5. Indicate the degree to which the data element definitions have been implemented or have been agreed to be implemented by the constituency.
6. Show evidence of testing for all new data elements being recommended for the first time. Results of pilot testing, where available, should be incorporated into the proposal. Where data element definitions have been developed from well-established data collections, evidence of the feasibility of collection and the utility of the proposed definitions should be included in the proposal.
7. Be accompanied by a recommended process for implementation, review and future development and maintenance of the definitions.

## **Business case template for a new NMDS or a significant change to an existing NMDS**

### **Background**

- Includes:
- origins and rationale for the proposal
  - development process undertaken to date
  - details of national consultation, including details of experts and/or others involved with or consulted during development
  - degree of consensus reached on submitted data elements
  - results of pilot testing completed or proposed testing arrangements.

### **Detailed purpose and objectives**

- Includes:
- how the information will be used
  - fit with national strategic directions
  - the likely benefits at the national level (and the likelihood that they will be realised)
  - if appropriate, the states and territories to advise on the likely benefits at the jurisdiction level (and the likelihood that they will be realised).

### **Details of the NMDS:**

- Includes:
- scope
  - data elements
  - statistical units
  - start date
  - national reporting arrangements
  - other attributes as specified in the NHDD.

### **Implementation issues**

- Includes:
- any plans and timetables for staggered or phased implementation
  - feasibility of collection
  - notes on likely late or non-participation by jurisdictions
  - notes on effects of these on the NMDS
  - if appropriate, the States and Territories to advise the likely internal costs and implementation issues for their systems.

### **Commitment statement**

**Final, binding comments from the states and territories on their willingness and ability to implement the NMDS according to the format and timetable proposed.**

# Appendix 3: Expenditure and revenue questionnaire

## 1. Salary and wages expenditure

Response Codes:	
<b>Y</b>	Yes, the expense shown in the left hand column is included in the expense total for the above category. <i>For example: Yes, workers compensation expenses are included in the reported total expenses for salaried medical officers.</i>
<b>N</b>	No, this cost is not included in the expense total for the above category
<b>NA</b>	Not applicable
<b>U</b>	Unknown
<b>R</b>	This expenditure is netted out against revenue
<b>O</b>	Other (please specify)
<b>SC</b>	See comments

Included in the published <i>salary and wages expenditure</i> for							
	Salaried medical officers	Registered nurses	Enrolled nurses	Other personal care staff	Diagnostic & health professional	Administrative & clerical staff	Domestic & other staff
Worker's compensation premiums							
Workers compensation payments							
Redundancy packages							
Accrual of long-service leave & annual leave							
Payout of leave entitlements on termination							
Recruitment costs							
Salary sacrifice & salary package (eg motor vehicle lease)							
Superannuation							
Fringe benefits tax							
Payroll tax							

## 2. Non-salary expenditure

Response Codes:	
<b>Y</b>	Yes, the expense shown in the left hand column is included in the expense total for the above category. <i>For example: Yes, public liability insurance is included in reported payments to visiting medical officers.</i>
<b>N</b>	No, this cost is not included in the expense total for the above category
<b>NA</b>	Not applicable
<b>U</b>	Unknown
<b>R</b>	This expenditure is netted out against revenue
<b>O</b>	Other (please specify)
<b>SC</b>	See comments

### Included in the published non-salary expenditure for:

	Payments to visiting medical officers	Superannuation payments	Administrative expenses	Interest payments	Depreciation	Repairs & maintenance	Patient transport	Domestic services	Drug supplies	Medical & surgical supplies	Food supplies	Other recurrent expenditure	Indirect health care expenditure...
Public liability insurance													
Building & contents insurance													
Medical indemnity insurance													
Workers compensation premiums													
Workers compensation payments													
Equipment leasing arrangements													
Building/garden maintenance by outside agency (e.g. to preserve heritage)													
Redundancy packages													
Accrual of long-service leave & annual leave													
Payout of leave entitlements on termination													
Recruitment costs													
Salary sacrifice & salary package (eg vehicle lease)													
Superannuation													
Fringe benefits tax													
Payroll tax													

### 3. Revenue

Response Codes:	
<b>Y</b>	Yes, the revenue source in the left hand column is included in the category above. <i>For example, defence force funding is included in patient revenue.</i>
<b>N</b>	No, this revenue is not included in the above revenue/recovery category
<b>U</b>	Unknown
<b>R</b>	This revenue is netted out against expenses
<b>NA</b>	Not applicable
<b>O</b>	Other (please specify)
<b>SC</b>	See comments

	Published revenue categories		
	Patient revenue	Other revenue	Recoveries
<b>Commonwealth Funding:</b>			
Defence force funding			
Dept Veterans' Affairs payments:			
State negotiated (accommodation / DRG payment)			
Payments direct to hospitals			
Payments to hospital doctors or for hospital prostheses			
NHMRC			
Isolated patients transport (Commonwealth)			
Commonwealth Residential aged care subsidies / payments			
Other Commonwealth funding			
<b>Commonwealth/State funding:</b>			
Joint Commonwealth/State funding (e.g. AHMAC)			
<b>State funding:</b>			
State health department funding			
State non-health department funding			
Correctional authorities			
State patient transport services			
Other, please specify _____			
Other State (i.e. not this State)			
<b>Other funding:</b>			
Residential aged care patient co-payments			
Facility fees			
Payments from private hospitals (e.g. for contracted patients)			
Payments from public hospitals (e.g. for contracted patients)			
Investments & interest bearing accounts			
Other business units:			
Car park			
Canteen			
Equipment hire (e.g. patient phone, TV)			
Trust funds			
Private practice			
Charitable			
Other, please specify _____			
Donations			
Building/garden maintenance by outside agency (e.g. Hospital boarders			

#### 4. Group services

<p>If the following services are supplied either by or for another hospital or agency, please indicate how the cost of the service is allocated or consolidated. For example, if the service is supplied by one hospital to another hospital, (a) does the supplying hospital charge the other hospital? (b) is the expenditure "netted out" against revenue, and (c) is the revenue reported? Conversely, if a hospital receives a service, are they charged and do they report the charge as an expense?</p>
a) Linen
b) Ambulance
c) Maintenance
d) Pathology
e) Radiology
f) Food
g) Drug costs
h) Other (please specify).....

# Appendix 4: Survey respondents

ACT Health (Ian Bull)

Australian Government Department of Health and Ageing (Gordon Tomes)

Australian Government Department of Veterans' Affairs (Louise Edmonds)

Australian Institute of Health and Welfare (Jenny Hargreaves and Ian Titulaer)

Australian Institute of Health and Welfare (National Data Development and Standards Unit)

Department of Health and Community Services, Northern Territory (Yuejen Zhao)

Department of Health and Human Services, Tasmania (Peter Mansfield and Kevin Ratcliffe)

Department of Health, Western Australia (Tony Satti and Jag Atrie)

Department of Human Services, South Australia (Paul Basso)

Department of Human Services, Victoria (Neil Powers)

La Trobe University, Lecturer Health Informatics (Heather Grain)

New South Wales Health (Cristalyn Da Cunha)

Private Health Insurance Administration Council (Paul Collins)

Productivity Commission, Secretariat to the Review of Government Service Provision (Julie Toth)

Queensland Health (John Harrington)

# References

ABS 2005. Private hospitals Australia 2003–04. ABS cat. no. 4390. Canberra: ABS.

AIHW 2005. Report on the evaluation of the National Minimum Data Set for Admitted Patient Care. AIHW cat. no. HSE38. Canberra: AIHW.

AIHW 2005. Australian hospital statistics 2003–04. AIHW cat. no. HSE37. Health Services Series no. 23. Canberra: AIHW.

Laws PJ and Sullivan EA 2004. Report on the evaluation of the Perinatal National Minimum Data Set. AIHW cat. no. PER27. Sydney: AIHW National Perinatal Statistical Unit.

NHDC (National Health Data Committee) 2003. National health data dictionary, version 12. AIHW cat. no. HWI76. Canberra: AIHW.

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