Australian Government
Australian Institute of Health and Welfare

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HEALTH SERVICES SERIES
Number 32

Report on the evaluation of the National Minimum Data Sets for Elective Surgery Waiting Times

April 2009

Australian Institute of Health and Welfare
Canberra
Cat. no. HSE 70

The Australian Institute of Health and Welfare is Australia's national health and welfare statistics and information agency. The Institute's mission is *better information and statistics for better health and wellbeing*.

This publication is part of the Australian Institute of Health and Welfare's Health services series. A complete list of the Institute's publications is available from the Institute's website <www.aihw.gov.au>.

ISSN 1036-613X

ISBN 978 1 74024 921 8

Suggested citation

Australian Institute of Health and Welfare 2009. Report on the evaluation of the National Minimum Data Sets for Elective Surgery Waiting Times. Health services series no. 32. Cat. no. HSE 70. Canberra: AIHW.

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Published by the Australian Institute of Health and Welfare

Printed by Blue Star Print Group

Please note that there is the potential for minor revisions of data in this report. Please check the online version at <www.aihw.gov.au> for any amendments.

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Acknowledgments

This report would not have been possible without the valued cooperation of survey respondents from state and territory health authorities and health research facilities. Funding for the evaluation was provided by Australian Health Ministers' Advisory Council through the Statistical Information Management Committee. The Australian Institute of Health and Welfare (AIHW) appreciates the assistance provided by members of the Australian Hospital Statistics Advisory Committee in the preparation of this report. The members of the committee were:

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Abbreviations

ACHI	Australian Classification of Health Interventions
AHMAC	Australian Health Ministers' Advisory Council
AHSAC	Australian Hospital Statistics Advisory Committee
AIHW	Australian Institute of Health and Welfare
DoHA	Department of Health and Ageing
DHS	Department of Human Services (Victoria)
ESWT	Elective Surgery Waiting Times
HDSC	Health Data Standards Committee
MBS	Medicare Benefits Schedule
METeOR	Metadata Online Registry
NEHIPC	National e-Health and Information Principal Committee
NESWTDC	National Elective Surgery Waiting Times Data Collection
NHDD	National health data dictionary
NHIG	National Health Information Group
NHMD	National Hospital Morbidity Database
NHISSC	National Health Information Standards and Statistics Committee
NMDS	National Minimum Data Set
RACS	Royal Australasian College of Surgeons
SIMC	Statistical Information Management Committee
WCWL	Western Canada Waiting List project

Summary

The evaluation of the National Minimum Data Sets (NMDSs) for Elective Surgery Waiting Times (removals data) and Elective Surgery Waiting Times (census data) was conducted by the Australian Institute of Health and Welfare for the Australian Health Ministers' Advisory Council.

The evaluation involved:

- a review of utility, based on consultations with a variety of users of the NMDSs
- a review of compliance; that is, the extent to which data were provided by states and territories in accordance with the specifications in the *National health data dictionary*.

The review also took into account changes in national reporting requirements, such as the reporting requirements for the Elective Surgery Waiting List Reduction Plan, an initiative of the Australian Government.

General recommendations

The evaluation concluded that the NMDSs for Elective Surgery Waiting Times (ESWT) were regarded by users as both highly useful and highly important, and should be retained. General recommendations were to:

- improve the coverage of the NMDSs for ESWT to all public hospitals
- clarify the scope of the collection, primarily through the revision of the Elective care type data element—used to identify patients awaiting elective surgery
- improve the linkage of elective surgery waiting times records to admitted patient records, to allow for measures of waiting times to be routinely related to demographic, diagnosis and other information.
- refine the data element definitions to ensure that the data collected are both relevant and comparable among jurisdictions
- determine whether it is feasible to collect the existing data elements for the census and removals data within a single NMDS for ESWT.

Recommendations for data development

High priorities for data development include the revision of the data elements:

- Indicator procedure, to ensure that relevant procedures are included. For 2006–07, almost 65% of records were not categorised into one of the existing 15 indicator procedures.
- Clinical urgency, to improve comparability among jurisdictions. This data element indicates the urgency with which the patient requires elective surgery—within 30 days, within 90 days or at some time in the future.
- Waiting list removal date, to clarify that this records the date on which the patient was removed from the elective surgery waiting list. For patients admitted for the awaited procedure, this will be the date of admission.
- Waiting time at removal, to clarify that patients who are admitted for surgery on the same day as they are clinically assessed are in scope.

Recommendations

The recommendations arising from the evaluation of utility and the compliance evaluation are presented below. They include general recommendations about the National Minimum Data Sets (NMDSs) as a whole and recommendations for new data elements with priorities for data development. Any proposals arising from these recommendations would be submitted for approval to AHMAC's National Health Information Standards and Statistics Committee (NHISSC).

Further discussion of the recommendations and their background is included in chapters 3 to 6 of this report, and in *Chapter 7*, a range of possible enhancements to the NMDSs for Elective Surgery Waiting Times (ESWT) is presented.

General recommendations

Most survey respondents considered that the NMDSs for Elective Surgery Waiting Times (removals data) and Elective Surgery Waiting Times (census data) were, as a whole, both highly important and highly useful. General recommendations were that:

- the NMDSs for ESWT be retained (both removals and census data)
- the collection of the ESWT removals and census data as two distinct data sets be reviewed, to determine whether it is feasible to collect the existing data elements within a single NMDS for ESWT
- the scope of the NMDSs for ESWT be revised. This would be undertaken primarily through the revision of the data element Elective care waiting list episode—elective care type, to clarify which procedures should define the scope of the waiting times collection
- the coverage of the NMDSs for ESWT be improved
- further work to refine the definition of data elements be undertaken to ensure that the data collected are both relevant and comparable among jurisdictions
- the proportion of elective surgery waiting times records that are provided linked to (or linkable to) the National Hospital Morbidity Database be improved. This could be achieved by the provision of stable patient identifiers that are common to both data sets, and by ensuring that the waiting list removal date and the admission date match on the two data sets.

Recommendations relating to data elements

Summary of data elements recommended for amendment

Information on the purpose of each data element is provided in *Chapter 4* and details of the recommendations follow.

High priority amendments

Elective surgery waiting list episode—indicator procedure

Elective surgery waiting list episode—clinical urgency

Elective care waiting list episode—elective care type

Elective surgery waiting list episode—waiting list removal date

Medium priority amendments

Elective care waiting list episode—listing date for care

Elective surgery waiting list episode—waiting time (at a census date), total days

Elective surgery waiting list episode—waiting time (at removal), total days

Low priority amendments

Establishment—organisation identifier, comprising

- Establishment—Australian state/territory identifier
- Establishment—sector
- Establishment—region identifier
- Establishment—organisation identifier (state/territory)

Elective surgery waiting list episode—surgical specialty (of scheduled doctor)

Elective surgery waiting list episode—extended wait patient indicator

Elective surgery waiting list episode—overdue patient status

Elective surgery waiting list episode—category reassignment date

Hospital census (of elective surgery waitlist patients)—census date

Clinical review

Elective surgery

Non-elective care

Medium priority—proposed new data elements

Demographic elements

Sex (of patient)

Date of birth (of patient)

Indigenous status (of patient)

Area of usual residence (of patient)

Date elements

Date of procedure

Date ready for care/Date not ready for care

Data elements to be retained (without amendment)

Elective surgery waiting list episode—reason for removal from a waiting list

Elective care

Hospital census

Hospital waiting list

Elective surgery waiting list episode—patient listing status, readiness for care

Data elements to be deleted

No data elements were recommended for deletion.

Recommendations for data elements common to both the ESWT (removals data) NMDS and the ESWT (census data) NMDS

Establishment elements

Establishment—organisation identifier

No comments were received from survey respondents, and the provision of Establishment—organisation identifier complies with national standards.

However, the *Report on the evaluation of the National Minimum Data Set for Public Hospital Establishments* (AIHW 2007) recommended the review of Establishment identifier elements. As Establishment identifiers should be identical for individual establishments across different data collections (such as the Public Hospital Establishments NMDS and the ESWT NMDSs), any revision of the data element should be reflected in all NMDSs that refer to it.

Recommendation: Review data element in the context of the *Report on the evaluation of the National Minimum Data Set for Public Hospital Establishments*.

Priority: Low

Date elements

Elective care waiting list episode—listing date for care

The provision of Elective care waiting list episode—listing date for care complies with national standards.

Comments received from survey respondents indicated that there may be variation in the recording of the date that a patient is added to the waiting list.

Recommendation: That Elective care waiting list episode—listing date for care should be reviewed to clarify that the date/time at which a patient is added to a waiting list should be determined by clinical processes rather than by administrative practices.

Priority: Medium

Descriptor elements

Elective surgery waiting list episode—indicator procedure

For most jurisdictions, the provision of Elective care waiting list episode—indicator procedure complies with national standards.

Currently over 60% of elective surgery procedures do not fall into the categories described by the indicator procedure data domain values. Most stakeholders identified the need to revise this data element and that it would be beneficial to be able to map the indicator procedures to Medicare Benefits Schedule (MBS) item numbers and to the Australian Classification of Health Intervention (ACHI) codes. Others felt that the development of a descriptive list of indicator procedures would preclude the need for regular revisions to take account of changes in the MBS and ACHI code lists.

Recommendation: That Elective care waiting list episode—indicator procedure be reviewed to both better specify the current indicator procedures and to identify relevant procedures that are not already included.

Priority: High

Elective surgery waiting list episode—surgical specialty (of scheduled doctor)

For most jurisdictions, the provision of Elective care waiting list episode—surgical specialty (of scheduled doctor) complies with national standards.

Comments received from survey respondents indicated that the data element definition may require clarification, and that the current domain values are not necessarily mutually exclusive.

Recommendation: That Elective care waiting list episode—surgical specialty (of scheduled doctor) be reviewed to clarify that the purpose of this data element is to collect information about the scheduled doctor, not about the procedure being performed.

Priority: Low

Elective surgery waiting list episode—clinical urgency

Data analysis and survey responses indicate that clinical urgency categories may be assigned inconsistently both across and within states and territories.

Recommendation: That Elective care waiting list episode—clinical urgency be reviewed with the aim of standardising the assignment of categories.

Priority: High

The review of this data element will require significant clinical input and may need to be undertaken in conjunction with other activities to improve standardisation of elective surgery waiting times management and reporting. At its April 2008 meeting, the National e-Health and Information Principal Committee (NEHIPC) discussed options for improving the reporting of elective surgery waiting times. The NEHIPC agreed to support preliminary

discussions with the Royal Australasian College of Surgeons (RACS) on options for improving urgency categorisation and alternative elective surgery waiting times measures.

Waiting time elements

Elective surgery waiting list episode—extended wait patient indicator

For most jurisdictions, the provision of Elective care waiting list episode—extended wait patient indicator complies with national standards.

Comments from survey respondents indicated that there was a need to extend the scope of this data element to cover all clinical urgency categories. It was similarly suggested that there was a need to review and probably combine the extended wait patient indicator and the overdue patient status into one data element.

Recommendation: That Elective care waiting list episode—extended wait patient indicator be reviewed to consider its application to clinical urgency categories other than *Category 3,* replacing the overdue patient status.

Priority: Low

Note: The review of the data elements extended wait patient indicator and overdue patient status (below) would result in only one of the recommendations being accepted.

Elective surgery waiting list episode—overdue patient status

For most jurisdictions, the provision of Elective care waiting list episode—overdue patient status complies with national standards.

Comments from survey respondents indicated that there was a need to extend the scope of this data element to apply to *Category 3* patients who were still waiting after 365 days.

Recommendation: That Elective care waiting list episode—overdue patient status be reviewed to consider its application to clinical urgency *Category 3,* replacing the extended wait patient indicator.

Priority: Low

Note: The review of the data elements extended wait patient (above) and overdue patient status would result in only one of the recommendations being accepted.

Recommendations for data elements specific to the ESWT (removals data) NMDS

Date elements

Elective surgery waiting list episode—waiting list removal date

For most jurisdictions, the provision of Elective care waiting list episode—waiting list removal date complies with national standards.

Comments from survey respondents indicated there may be variation in the recording of the date that the patient is removed from the waiting list with suggestions that the removal date may be recorded as the date of admission for the awaited procedure, or as the date that the surgery is performed.

Recommendation: That Elective care waiting list episode—waiting list removal date be reviewed to clarify the date that should be recorded for patients removed from the waiting list for admission for the awaited procedure.

Priority: High

Waiting time elements

Elective surgery waiting list episode – waiting time (at removal), total days

Currently this data element is derived by states and territories from Listing date, Waiting list removal date, Category reassignment date and the number of days 'not ready for care' (derived from Elective care waiting list episode—patient listing status, readiness for care).

For most jurisdictions, the provision of Elective care waiting list episode—waiting time (at removal), total days complies with national standards. Some jurisdictions are unable to provide the total days waited for patients who are transferred from one hospital's waiting list to another.

Comments received from survey respondents indicated that the counting rules for calculating the total days waited needed clarification for cases where patients had multiple changes in clinical urgency category, and for periods where the patient was not ready for care.

Survey respondents also suggested that it should be clarified that the NMDSs include the reporting of patients who were admitted for an elective procedure on the same day as clinically assessed, without being clerically added to a waiting list. There is currently some variation among jurisdictions in the recording of patients with a waiting time of zero days, with some jurisdictions excluding these patients from the collection. This variation affects the comparability of waiting time statistics, with those states and territories reporting waiting times of zero having a lower median waiting time than those that do not.

Recommendation: That Elective care waiting list episode—waiting time (at removal), total days be reviewed to clarify the calculation of total days waited, and the inclusion of patients who were admitted on the same day as clinically assessed.

Priority: Medium

Descriptor element

Elective surgery waiting list episode—reason for removal from a waiting list

The provision of Elective care waiting list episode—reason for removal from a waiting list complies with national standards.

No comments were received from survey respondents.

Recommendation: Retain

Recommendations for data elements specific to the ESWT (census data) NMDS

Date elements

Hospital census (of elective surgery waitlist patients)—census date

The use of Hospital census (of elective surgery waitlist patients)—census date by jurisdictions complies with national standards.

No comments were received from survey correspondents.

If the existing NMDSs for ESWT (census data) and ESWT (removal data) were combined into a single NMDS then census date could be deleted from the NMDS but retained in the *National health data dictionary* (NHDD) as a supporting data element (as these dates are specified in the collection and usage attributes of the NMDS).

Recommendation: Review

Priority: Low

Waiting time elements

Elective surgery waiting list episode—waiting time (at a census date), total days

For most jurisdictions, the provision of Elective care waiting list episode—waiting time (at census date), total days complies with national standards. Some jurisdictions are unable to provide the total days waited for patients who are transferred from one hospital's waiting list to another.

Comments received from survey respondents indicated that the counting rules for calculating the total days waited needed clarification, in particular where the patient had more than one category reassignment or for periods where the patient was not ready for care (see waiting time (at removal) above).

Recommendation: That Elective care waiting list episode—waiting time (at census date) be reviewed to clarify the calculation of total days waited.

Priority: Medium

Recommendations for supporting elements and glossary items

Elective surgery waiting list episode—category reassignment date

This data element is not collected for the NMDSs.

Currently the data element encompasses when a patient changes urgency categories as well as when the patient becomes ready/not ready for care. Survey respondents recommended that separate data elements be developed to cover these two different concepts. However, the addition of category reassignment date data elements to the NMDSs was not preferred (compared to the current approach) due to difficulties in providing data for multiple changes to clinical urgency categories.

Recommendation: That the definition of Elective surgery waiting list episode—category reassignment date be reviewed.

Priority: High

Clinical review

Survey respondents stated that the term clinical review suggests a broader application than in relation to patients who have been added to the waiting list. It was suggested that greater clarity would be achieved by retitling the supporting element as Clinical review—elective surgery.

Recommendation: That the glossary item Clinical review be retitled or refined to clarify that it refers to Clinical review—elective surgery.

Priority: Low

Elective care

Elective care is care that, in the opinion of the treating clinician, is necessary and admission for which can be delayed for at least 24 hours. This glossary item is not collected for the NMDS.

No comments were received from survey correspondents.

Recommendation: Retain

Elective surgery

Elective surgery is elective care where the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule (MBS) book, with the exclusion of specific procedures frequently done by non-surgical clinicians.

Comments received from survey correspondents indicated that a clear definition of this glossary item is required to replace the existing reference to the MBS.

Recommendation: That the elective surgery glossary item be reviewed to create a definition that does not rely on the MBS.

Priority: Low

Hospital census

A point in time count by a hospital of all its admitted patients and/or patients currently on a waiting list.

No comments were received from survey correspondents for this object class.

Recommendation: Retain

Hospital waiting list

A register which contains essential details about patients who have been assessed as needing elective hospital care.

No comments were received from survey correspondents for this glossary item.

Recommendation: Retain

Non-elective care

Non-elective care is care that, in the opinion of the treating clinician, is necessary and admission for which cannot be delayed for more than 24 hours.

Survey respondents suggested that the definition be re-worded to align with the definition of Emergency admission, as presented in the data element Urgency of admission, within the Admitted Patient Care NMDS.

Recommendation: That the Non-elective care glossary item be reviewed.

Priority: Low

Elective surgery waiting list episode—patient listing status, readiness for care

This data element concept is necessary for the derivation of Elective surgery waiting list episode—waiting time (at removal or census date). It is also necessary for determining whether patients are in scope for the NMDSs.

The domain values for this data element are 'ready for care' and 'not ready for care'; the data element does not collect information on the number of days that the patient was not ready for care occurring between the listing date for care and the waiting list removal date (or census date).

Recommendation: Retain

Elective care waiting list episode—elective care type (waiting list category)

This data element concept is necessary for determining whether patients are in scope for the NMDSs. Although the list of excluded procedures has been periodically updated to align with the Australian Classification of Health Interventions (ACHI), the definition has not been reviewed since the introduction of the NMDSs.

Comments from survey respondents indicated that the definition for this data element requires review. This list of 'excluded' procedures needs to be reviewed for relevancy. It has been suggested that it would be beneficial to have the ability to map the included/excluded procedures to MBS item numbers, and ACHI maps would need to be updated in light of any revision of the data element.

Recommendation: That Elective care waiting list episode—elective care type (waiting list category) be reviewed to ensure that the lists of included and excluded procedures are relevant.

Priority: High

Recommendations for proposed new data elements

Demographic elements

The data currently reported to the National Elective Surgery Waiting Times Data Collection (NESWTDC) for the NMDSs for ESWT do not include demographic information such as the age and sex of the patient, the Indigenous status of the patient or their area of usual residence. Therefore measures of equity of access to public hospital elective surgery between population subgroups cannot be routinely assessed using the NESWTDC alone. The inclusion of the following data elements in the NMDSs for ESWT would facilitate more routine reporting of elective surgery waiting times by the age, sex, Indigenous status, remoteness of residence and socio-economic status of the patient:

- Sex (of patient)
- Date of birth (of patient)

- Indigenous status (of patient)
- Area of usual residence (of patient)

Priority: Medium

The routine provision of linked elective surgery/admitted patient data would partially negate the need to add these data elements to the NMDSs for ESWT, as these data would then be available for patients removed for admission for the awaited procedure. The data would not be available for those removed from the waiting list for reasons other than admission to hospital, or for those still on the waiting list.

However, data on Indigenous status will be included in the NMDSs for ESWT from 1 July 2009. Therefore the routine analysis of waiting times by Indigenous status will be possible in the future without requiring linkage to the admitted patient data.

Date elements

Date of procedure

The inclusion of the date of procedure was suggested by some survey correspondents, as this may be different to the date of admission for the awaited procedure. The development of this data element may be dependent on the outcome of the review of the Elective surgery waiting list episode—waiting list removal date.

Priority: Low

Date ready for care/not ready for care

The inclusion of Not ready for care start date /Not ready for care end date was suggested by some correspondents to allow the calculation of the total number of days not ready for care. It would be necessary to allow for multiple start and end dates. However, the addition of 'not ready for care' data elements to the NMDSs was not preferred by others due to difficulties in providing these data for patients with multiple changes.

Priority: Low

Other data elements that could be considered

Cumulative waiting time

It was suggested that a new data element Cumulative waiting time be included in the NMDS. It would cover the length of time on the public hospital waiting list and the length of time waiting to get an outpatient specialist appointment.

Priority: Low

Other data elements

Other data elements suggested for inclusion in the NMDSs included Funding source for hospital patient, Principal diagnosis and Diagnosis related group. The routine provision of linked elective surgery/admitted patient data would partially negate the need to add these data elements to the NMDSs for ESWT because these items can only be provided for patients following admission.

Priority: Low

1 Introduction

Purpose of the evaluation

The Australian Health Ministers' Advisory Council (AHMAC) commissioned the Australian Institute of Health and Welfare (AIHW) to conduct an evaluation of the National Minimum Data Sets (NMDSs) for Elective Surgery Waiting Times (removals data) and Elective Surgery Waiting Times (census data).

The aim of this evaluation was to review the utility of the NMDSs and to assess the compliance of data collected in accordance with NMDS specifications.

Only minor changes have been made to the NMDSs since they were first specified in 1994. There has been no previous comprehensive evaluation of the NMDS-based data. An evaluation of the NMDSs is timely given the considerable resources used at state and territory and national levels to collect data.

Based on conclusions of the evaluation, recommendations for future data development and the assignment of priorities are set out in this report.

Structure of this report

This chapter describes the Elective Surgery Waiting Times (ESWT) NMDSs and outlines the purpose of the evaluation. It also presents background information on some of the limitations of the current data collected to describe elective surgery in Australia.

Chapter 2 describes the methodology of the evaluation.

Chapter 3 describes the results of consultations with NMDS user groups. Information is presented on the users and uses of the NMDSs, the perceived importance and usefulness of the NMDSs and individual data elements and areas for data development.

Chapter 4 presents comments on existing data elements from both the user group consultations and compliance evaluation. It also outlines suggestions for new data elements.

Chapter 5 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 the *National health data dictionary* (NHDD) definitions and domain values.

Chapter 6 presents further information on clinical urgency categorisation, including options to address variations in the reporting of these data.

Chapter 7 presents a discussion of priorities for data development.

The appendixes include a list of data elements in the ESWT NMDSs, the survey of utility and a list of survey respondents.

National Minimum Data Sets (NMDSs) for Elective Surgery Waiting Times (ESWT)

An NMDS 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 an 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 published in the *National health data dictionary* (NHDD) and are available online through the AIHW Metadata Online Registry (METeOR). In the description of an NMDS, the scopes of the application of those data elements and the statistical units for collection of the data are also specified.

The NHDD is published by the AIHW regularly and incorporated into 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 NMDSs; such as the Elective Surgery Waiting Times NMDS. It can be viewed on the internet at <http://meteor.aihw.gov.au>.

The scope of the NMDSs for ESWT is patients removed from waiting lists (removals data) or patients on waiting lists (census data) for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals. This will include private patients treated in public hospitals, and may include public patients treated in private hospitals. Hospitals may also collect information for other care (as defined in the Waiting list category data element), but this does not fall within the scope of the NMDSs for ESWT. Patients on waiting lists or removed from waiting lists managed by hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not currently included, as these hospitals are out of scope for these and other hospital-related NMDSs.

Removals data are collected for patients who have been removed from an elective surgery waiting list for admission to hospital or removed for another reason. This includes patients who were 'ready for care' as well as patients who were 'not ready for care' at the time of removal.

Census data are collected for patients on elective surgery waiting lists that are yet to be removed for admission to hospital or removed from the waiting list for another reason. The scope for the NMDS is patients on elective surgery waiting lists on a census date who are 'ready for care' as defined in the data element Elective surgery waiting list episode—patient listing status, readiness for care.

Data for these NMDSs are collected at public acute hospitals from patient waiting list administrative record systems and are forwarded to the relevant state or territory health authority on a regular basis. Data for each financial year (removals data) and census date (census data) are then provided to the AIHW for national collation and reporting, on an annual basis. An outline of the current version of the NMDSs is provided in *Appendix 1*.

The statistical unit of the NMDSs is the patient removed from a waiting list (for admission or other reason) during each financial year or on a waiting list on a census date.

Nationally comparable data are generated from the NMDSs, such as the AIHW's National Elective Surgery Waiting Times Data Collection (NESWTDC). Data collected in accordance with these NMDSs are presented in the AIHW's annual *Australian hospital statistics* reports as well as being used in state or territory hospital performance reporting.

Issues

As noted in the AIHW report *Elective surgery in Australia: new measures of access* (AIHW 2008a), access to elective surgery can be assessed by considering how much elective surgery occurs, or is supplied, or by considering the demand for elective surgery and the extent to which it differs from supply. The report proposed new measures of access to elective surgery and identified inadequacies in the information currently collected for elective surgery.

The report also noted that information on the size of waiting lists was often used in the past to judge whether access to elective surgery was improving or declining. In the mid-1990s, the focus shifted to waiting times, with recognition that the length of waiting lists was not necessarily related to how long people waited for their elective surgery.

Limitations

The data currently collected for ESWT NMDSs have a number of limitations:

- there is evidence of considerable variation in the assignment of clinical urgency categories
- the total time waited by the patient is not reflected in the data
- national data routinely available on elective surgery do not include comprehensive patient demographics or clinical information that would allow detailed consideration of equity of access
- collection of data on elective surgery waiting times is not complete
- measures are demand-related only, and do not include those that are supply-related
- measures only relate to public elective surgery.

Variation in the assignment of clinical urgency categories

Analyses of clinical urgency categories between financial years 1999–2000 and 2006–07 have shown notable variation in the assignment of these categories, both among and within jurisdictions. This apparent lack of comparability of clinical urgency categories among jurisdictions means that measures based on these categories are not meaningful or comparable between jurisdictions, and therefore have limited application for national elective surgery waiting times statistics. See *Chapter 6* for more information.

Because of the apparent variation, the AIHW has not incorporated urgency categorisation in national reporting on elective surgery waiting times since the 1999–2000 reference year. This follows a decision made by the Australian Health Ministers' Advisory Council in 2001 that the AIHW should present the data without making invalid comparisons of differently-based jurisdictional figures.

Time waited is partial only

The amount of time waited by a patient for admission to elective surgery is currently reported as the number of days between the date of being added to the hospital's waiting list and the date of being removed from the waiting list for admission for the awaited surgery. However, this measure of time may not reflect the total time waited as perceived by patients, as it does not include the time that the patient waits between referral to the surgeon and the appointment with the surgeon, or the time between the appointment with the surgeon and being placed on the waiting list for surgery.

Demographic and clinical information is not used

The data currently reported for the ESWT NMDSs do not include demographic information such as the age and sex of the patient, the Indigenous status of the patient or their area of usual residence. Therefore, equity of access to public elective surgery between population subgroups is not routinely assessed.

The data also do not include clinical information on the patient's diagnoses. This means that there is no routine assessment of equity or appropriateness of access to public elective surgery for patient groups with similar needs, as indicated by diagnosis information. For example, the waiting times for patients awaiting surgery with a cancer diagnosis is not compared by jurisdiction or with the waiting times for patients awaiting the same surgery for other conditions.

Coverage is incomplete

The coverage of the NESWTDC is not complete, with coverage estimated at about 87% of public hospital elective surgery nationally in 2006–07 (AIHW 2008b). Coverage was estimated as complete for New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory. It was estimated at 96% for Queensland, 79% for Victoria, 67% for Western Australia and 64% for South Australia. Coverage also varied by type of hospital, with coverage estimated at 98% for *Principal referral and Specialist women's and children's hospitals*, 77% for *Large hospitals* and 63% for *Medium hospitals*.

This varied coverage may contribute to data being non-comparable between jurisdictions and for populations serviced by the smaller hospitals.

Measures are demand-related only

The measures currently used to assess access to elective surgery relate only to demand for elective surgery, not to how much elective surgery is supplied. It may be important to consider supply-related measures alongside demand-related measures, because demand for elective surgery could be influenced by supply factors. For example, perceptions about the likely supply of services may influence demand for services or clinically assessed need for surgery.

Measures only relate to public elective surgery

Waiting list information is not available for private hospitals. Therefore it has not been possible to assess access to elective surgery in private hospitals. However, the amount of elective surgery undertaken in private hospitals has been of interest in recent years; for example, in the context of access to elective surgery more generally.

2 Method

The method used to evaluate the NMDSs was similar to that used for evaluations of other NMDSs, such as the NMDSs for Admitted Patient Care (AIHW 2003), Perinatal (AIHW: Laws & Sullivan 2004), Admitted Patient Mental Health Care (AIHW 2005) and Public Hospital Establishments (AIHW 2007). Minor adjustments to the survey and assessment system have improved the process.

The methodology was developed in consultation with the Australian Hospital Statistics Advisory Committee (AHSAC) which includes representatives from the:

- state and territory health authorities
- Australian Government Department of Health and Ageing
- Australian Bureau of Statistics
- Australian Government Department of Veterans' Affairs
- Australian Healthcare and Hospitals Association
- Australian Private Hospitals Association
- Private Health Insurance Administration Council
- National Centre for Classification in Health.

The evaluation involved:

- a review of utility, based on consultations with a variety of user groups of the NMDSs
- a review of compliance; that is, the extent to which data for 2005–06 and 2006–07 were provided by states and territories in accordance with the specifications in the *National health data dictionary* (NHDC 2003 and AIHW 2004)
- an evaluation of linked public hospital admitted patient and elective surgery waiting times data.

Evaluating utility

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

In the survey of utility, the AIHW surveyed users of the NMDS specifications and collectors and users of 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 (that the data collected in accordance with the existing definitions met current information requirements). The survey also invited additional comments and suggestions. The responses to the survey were taken into account in formulating the recommendations for data development.

The survey of utility sought comments on the version of the Elective Surgery Waiting Times NMDSs specified within the NHDD version 12 (NHDC 2003). Information on the Health Data Standards Committee (HDSC) and National Health Information Group (NHIG)

processes for changing NMDS items was attached to the survey. It was noted that any changes to data elements would require a business case.

The survey, including explanatory notes, was distributed by email in April 2006. The recipients of the survey included:

- AHSAC members
- Statistical Information Management Committee (SIMC)
- Health Data Standards Committee members
- Public Health Association of Australia
- National Health Performance Committee
- Health Working Group of the Steering Committee for the Review of Government Service Provision
- Health Services Research Association of Australia and New Zealand
- Royal Australasian College of Surgeons

The material was also placed on the AIHW website with an invitation to participate in the survey. Evaluation responses were returned to the AIHW in mid–late 2006.

Evaluating compliance

The NMDSs for ESWT (removals data) and ESWT (census data) are to be collected nationally and reported for all patients within scope, using standard definitions and permissible domain values. The aim of evaluating the compliance of the NMDSs was to assess the quality and consistency of the data provided by states and territories as part of the National Elective Surgery Waiting Times Data Collection (NESWTDC).

The compliance section of the evaluation focused on 2005–06 data and was based on the specifications in the NHDD version 12 (NHDC 2003). Accompanying documentation provided by states and territories with the 2005–06 data was examined to identify where mapping was necessary from the state/territory data. In addition, communications between the AIHW and jurisdictions during the compilation of the 2005–06 NESWTDC were reviewed to identify any variance from the national standards. The data provided for the 2006–07 NESWTDC were also examined for compliance, and a summary is included in *Chapter 5*.

Each data element for 2005–06 and 2006–07 was assessed to determine if data were provided:

- according to NHDD definitions
- using permissible domain values
- for all records in scope for the NMDSs.

Linked public hospital admitted patient and elective surgery waiting times data

For the 2005–06 collection year, Queensland, South Australia, the Australian Capital Territory and the Northern Territory provided elective surgery waiting times data linked to data provided for the National Hospital Morbidity Database, so that the information on

waiting times is linked to the information on the surgery that occurred at the end of the wait. Queensland provided 100% of elective surgery records linked, with South Australia providing over 99% of elective surgery records linked, the Australian Capital Territory providing 82.2% and the Northern Territory providing 66.6%.

Analyses of linked public hospital admitted patient and elective surgery waiting times data can help to inform on the quality of some data elements. In this report, the analysis of linked data has been used to assess the use of the domain values for Elective surgery waiting list episode—indicator procedure by examining the procedure codes reported in the admitted patient records. In particular, the analysis examined the procedure codes reported for elective surgery admissions with an indicator procedure of *Not applicable*.

In addition, the provision of linked public hospital admitted patient and elective surgery waiting times data facilitates the analysis of demographic and diagnosis information in conjunction with information on waiting times, surgical specialty and indicator procedure. A more comprehensive analysis of the linked data for 2004–05 is presented in the AIHW report *Elective surgery in Australia: new measures of access* (AIHW 2008a).

Recommendations for data development

The AIHW has recommended priorities for future development of the NMDSs based on the results of the evaluations of compliance and utility and suggestions received from survey respondents.

These recommendations have been made in consultation with AHSAC, and are consistent with the assessment criteria used by the HDSC for the development of NMDSs (see *Appendix 3*). A future program of data development work will address the high priority recommendations for new data elements or revisions of existing data elements. Submissions to the National Health Information Standards and Statistics Committee (NHISSC) will also be developed as appropriate.

3 Evaluation of utility

This chapter describes the results from the review of utility. This review was conducted as a consultation process involving a survey of NMDS specifications, and discussions with input from collectors and users of NMDS-based data as well as other stakeholders. Information is presented on the users and uses of the NMDSs for ESWT, the importance and usefulness of the NMDSs and individual data elements, and possible areas for data development. Comments provided by respondents on individual data elements are included in *Chapter 4*.

This chapter also includes comments received by further respondents after the initial survey was completed.

Survey respondents

Survey respondents are listed in *Appendix 4*. Altogether 13 responses were received. One response answered the first two questions only and did not supply rankings on data elements. For the remaining 12 responses, a few did not answer all questions and did not supply rankings on all data elements, so the responses may not always total 12.

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

- 8 on behalf of a unit within an organisation
- 1 as an individual
- 4 on behalf of an organisation.

In order to gain an understanding of the types of organisations that use the NMDS specifications and NMDS-based data, respondents were asked to indicate from a list of 15 user groups the main group to which they belonged (or to identify additional user groups). A list of the user groups is presented in Question 1.1 of the survey (*Appendix 3*).

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 state and territory health authority respondents provided comments from both data collector and data provider perspectives. There were responses from two separate sections of the health authority for one jurisdiction.

Responses were also received form the Australian Government Department of Health and Ageing (DoHA) and the Royal Australasian College of Surgeons (RACS). Completed surveys were also received from units within the AIHW, responding as either users of the data, or as collectors of the data.

Uses of the NMDS specifications and NMDS-based data

The survey sought information from respondents about the way the NMDS specifications and NMDS-based data are currently being used, specifically:

- the purpose for which 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 of the NMDS-based data.

Purpose of use

In order to gain an understanding of the way the NMDS specifications and NMDS-based data were being used, respondents were asked to indicate from a list of 11 purposes (or to identify additional purposes) the three most common purposes for which they used the NMDS specifications and/or NMDS-based data. A list of common uses for the NMDS specifications and/or NMDS-based data is presented in Question 2.1 of the survey (*Appendix 3*).

The three most common purposes were (Table 3.1):

1. statistical reporting
2. comparisons and benchmarking
3. health services research.

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

- policy advice
- collection and reporting of NMDS-based data
- management and purchasing of hospital services
- planning and monitoring hospital resources
- facility planning.

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
State or territory health authority (8 responses)	✓	✓	✓	✓	✓	✓	
Australian Government Department of Health and Ageing (1)	✓	✓			✓	✓	✓
Australian Institute of Health and Welfare (3)		✓		✓			✓
University or other research organisation (1)	✓			✓			✓

Respondents from state and territory health authorities mainly used the data specifications for the provision of annual data to the AIHW and to DoHA. NMDS-based data were used in reports to ministers, state or territory parliaments and senior officers in relation to access to elective surgery, and other matters as required. Several respondents used the data as the nationally comparable data source for elective surgery waiting times and noted that the data

are used in the *Report on government services* (SCRGSP 2005). Data were also released in annual publications and disseminated in information to clients. The data were used by the RACS for workforce planning.

Level of use

The majority of respondents indicated that they used the NMDS-data 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 11 surveys, there were 19 indications of use, with the most common level of use 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 the *National health data dictionary*, followed by state/territory data specifications, the *National health data dictionary* publication available online and METeOR. Some users obtained access through hospital-based data specifications.

Source of NMDS-based data

The AIHW's annual *Australian hospital statistics* publications (and internet tables) were 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:

- the Department of Health and Ageing's *State of our public hospitals* report (DoHA 2006)
- state or territory health department publications
- the AIHW's National Elective Surgery Waiting Times Data Collection (external and internal users)
- other AIHW publications.

Knowledge and frequency of use

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

NMDS specifications were used:

- never (one respondent)
- occasionally (four respondents)
- monthly (two respondents)
- weekly (four respondents).

The NMDS based data were used:

- monthly (three respondents)
- weekly (six respondents)
- daily (two respondents).

Utility of the NMDSs

The main purpose of the survey was to gain an understanding of whether the NMDSs are useful and whether they suit the current requirements of users. In order to assess the utility of the NMDSs, survey participants were asked to rate the importance and usefulness of the NMDSs (overall and for each individual data element) and to indicate which data elements should remain unchanged, which should be modified and which deleted.

When assessing importance, respondents were asked to think of how significant they believe the NMDSs and each element are to a national collection of data on elective surgery waiting times. When assessing usefulness, respondents were asked to keep in mind whether the NMDSs and each data element suit their current requirements. Importance was rated as *Not important*, *Important*, *Highly important* or *Unsure* and usefulness was rated as *Not useful*, *Useful*, *Highly useful* or *Unsure*.

A rating of *Highly important* and *Highly useful* suggests that the data element should remain unchanged. If rated *Highly important*, but *Not useful*, the definition may need to be modified. If rated as both *Not important* and *Not useful*, the data element may not be relevant to the collection and may be recommended to be deleted from the NMDS.

Table 3.2 summarises the respondents' ratings of the importance and usefulness of the NMDSs and individual data elements. Not all respondents rated every data element and so the frequencies will not add to the total number of respondents for every data element. Some survey respondents provided comments only, not individual ratings and so the maximum number of responses to each data element is 11. Specific comments on each data element are included in *Chapter 4* of this report.

Eight of the 11 respondents rated the NMDSs as *Highly important* and *Highly useful*. Two respondents considered them to be *Important* and *Useful*. The NMDSs were considered to be useful in time-series analysis and in providing consistent definitions for data collection.

Comments also stated that the NMDSs are a useful source for statistical information about elective surgery waiting times. Some were critical of the timeliness of the data, relevance and the difficulties in comparing data provided by different jurisdictions. One respondent commented that the NMDSs need regular attention as they will continue to grow in importance and therefore need to be kept up-to-date.

Table 3.2: Respondents' rating of the importance and usefulness of the NMDSs and individual data elements and data element concepts

	Importance				Usefulness			
Data elements	**Not important**	**Important**	**Highly important**	**Unsure**	**Not useful**	**Useful**	**Highly useful**	**Unsure**
Data elements common to ESWT (removals data) NMDS and ESWT (census data) NMDS								
Establishment element								
Establishment—organisation identifier (Australian)	0	1	10	0	0	1	10	0
Date element								
Elective care waiting list episode—listing date for care	0	1	10	0	0	2	9	0
Descriptor element								
Elective surgery waiting list episode—indicator procedure	0	3	8	0	0	4	7	0
Elective surgery waiting list episode—surgical specialty (of scheduled doctor)	1	4	6	0	1	5	5	0
Elective surgery waiting list episode—clinical urgency	0	3	8	0	3	2	6	0
Waiting time elements								
Elective surgery waiting list episode—extended wait patient indicator	2	4	5	0	3	4	4	0
Elective surgery waiting list episode—overdue patient status	3	3	5	0	4	3	4	0
Data elements specific to ESWT (removals data) NMDS	0	1	10	0	0	1	10	0
Date element								
Elective surgery waiting list episode—waiting list removal date	0	1	10	0	0	2	9	0
Descriptor element								
Elective surgery waiting list episode—reason for removal from a waiting list	0	2	9	0	0	5	6	0
Waiting time element								
Elective surgery waiting list episode—waiting time (at removal), total days	1	0	10	0	1	1	9	0

Table 3.2 (continued): Respondents' rating of the importance and usefulness of the NMDSs and individual data elements and data element concepts

	Importance				Usefulness			
Data elements	**Not important**	**Important**	**Highly important**	**Unsure**	**Not useful**	**Useful**	**Highly useful**	**Unsure**
Data elements specific to ESWT (census data) NMDS	1	2	8	0	1	2	8	0
Date element								
Hospital census (of elective surgery waitlist patients)—census date	1	1	8	1	1	1	8	1
Waiting time element								
Elective surgery waiting list episode—waiting time (at a census date), total days	0	1	9	0	0	2	8	0
Supporting elements and glossary items								
Elective surgery waiting list episode—category reassignment date	0	3	7	1	1	4	5	1
Clinical review	0	10	1	0	1	9	1	0
Elective care	0	3	8	0	0	7	4	0
Elective surgery	0	2	9	0	0	6	5	0
Establishment—organisation identifier (state/territory)	0	4	7	0	2	4	5	0
Establishment—region identifier	4	1	5	1	4	2	4	1
Establishment—Australian state/territory identifier	1	3	7	0	1	5	5	0
Establishment—sector	3	2	6	0	4	2	5	0
Hospital census	1	5	4	1	2	4	4	1
Hospital waiting list	0	4	6	0	0	6	4	0
Non-elective care	1	4	5	1	2	4	4	1
Elective surgery waiting list episode—patient listing status, readiness for care	0	3	8	0	0	4	7	0
Elective care waiting list episode—elective care type	1	4	4	2	2	3	4	2

Suggestions for data development

Respondents were asked to nominate areas for development of the NMDSs (including new or modified data elements), possible changes to the scope, or any other priorities for the development of definitions. The views of the respondents (other than detailed comments on individual data element and data element concepts) are summarised in this section. *Chapter 4* contains the detailed comments on individual data elements and data element concepts.

Scope of the NMDSs

The scope of the NMDS for Elective Surgery Waiting Times (removals data) as published in the *National health data dictionary* is:

> "…patients removed from waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals. This will include private patients treated in public hospitals, and may include public patients treated in private hospitals.
>
> Hospitals may also collect information for other care (as defined in the Waiting list category data element), but this is not part of the National Minimum Data Set (NMDS) for elective surgery waiting times.
>
> Patients removed from waiting lists managed by hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not currently included.
>
> Removals data:
>
> Data are collected for patients who have been removed from an elective surgery waiting list (for admission or another reason). Patients who were 'ready for care' and patients who were 'not ready for care' at the time of removal are included."

The scope of the NMDS for Elective Surgery Waiting Times (census data) as published in the *National health data dictionary* is:

> "... patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals. This will include private patients treated in public hospitals, and may include public patients treated in private hospitals.
>
> Hospitals may also collect information for other care (as defined in the Waiting list category data element), but this is not part of the National Minimum Data Set (NMDS) for Elective surgery waiting times.
>
> Patients on waiting lists managed by hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not currently included.
>
> Census data:
>
> Data are collected for patients on elective surgery waiting lists who are yet to be admitted to hospital or removed for another reason. The scope is patients on elective surgery waiting lists on a census date who are 'ready for care' as defined in the Elective surgery waiting list episode—patient listing status, readiness for care data element."

Issues raised by survey respondents relating to the scope of hospitals included in the NMDSs

A few respondents commented that the scope of the NMDSs needs to be more specific and objective, in order to improve comparability and consistency in the collection of these data.

It was suggested by one jurisdiction that the scope of the NMDSs should include a qualification which determines which hospitals are considered within scope. For example, the scope could be aligned with a minimal level of elective surgery performed by hospitals. For 2004–05, Victorian establishments that provided elective surgery waiting times data included only those that provided elective surgery separations totalling more than 3,000 Weighted Inlier Equivalent Separations per year (about 79% of total elective surgery for Victoria), whereas the elective surgery data for New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory covered all public hospitals.

Proposed new data elements

Date of procedure

It was suggested that a review of the date items regarding start and end of a waiting list episode may identify the need for additional items. For example, the inclusion of date of procedure may be useful as this may be different to the date of admission for the awaited procedure.

Data elements related to readiness for care

It was noted that a category for 'not ready for care' patients is included as an additional non-standard data domain value in the clinical urgency category for some jurisdictions. It was suggested that consideration be given to including the data element Elective surgery waiting list episode—patient listing status, readiness for care in the NMDSs. This data element is not currently reported to the national collection but is a supporting element. It was also suggested that date elements for 'not ready for care' start date and 'not ready for care' end date should be considered for inclusion in the NMDSs.

Date of birth and sex

It was suggested that these data elements be included in the NMDSs for possible demographic analysis.

Other data elements

It was suggested that a new data element Cumulative waiting time be included in the NHDD and the NMDSs. It would cover the length of time on the public hospital waiting list and the length of time waiting to get an outpatient specialist appointment.

Other data elements suggested for inclusion in the NMDSs included Funding source for hospital patient, Diagnosis related group, Indigenous status and Postcode (or Statistical Local Area) of patient's usual place of residence.

Other issues raised by survey respondents

Other issues raised by respondents tended to be broader than comments on the NMDSs as a whole or the individual data elements. They are included here for completeness.

It was suggested that it be clarified that the NMDSs include the reporting of patients who were admitted for an elective procedure on the same day as clinically assessed, without being clerically added to a waiting list. There is currently some variation among jurisdictions in the recording of patients with a waiting time of zero days, with some jurisdictions excluding these patients from the collection. This variation affects the comparability of waiting time statistics, with those states and territories reporting waiting times of zero having a lower relative waiting time than those that do not.

Data collected for the census data set has not been reported since 1998–99. Although census data encompass both patients who are eventually admitted for their surgery and those who are not, they do not represent the completed waiting time experience of patients, and can be difficult to interpret (AIHW 2001). Some respondents suggested that the census data set be discontinued, with the scope of the ESWT data (removals) broadened to include all patients on waiting lists. Records would be included for all patients added to and/or removed from the waiting list, as well as those not ready for care and those present on the waiting list for the entire collection year.

Respondents commented on the coverage of elective surgery, querying whether:

- private patients of salaried specialists who have limited right of private practice be included in the collection
- the scope of the elective surgery data collection should expand to include all elective medical care.

It was suggested that, given the changes in clinical practice over the past 15 years, there should be a review of what constitutes elective surgery. This review would focus on the NHDD list of excluded procedures as defined in the data element Elective care waiting list episode—elective care type. Further, it was suggested that rather than having a list of excluded procedures, an attempt should be made to identify included procedures.

Respondents commented that the NMDSs need regular attention. As the reporting and monitoring of elective surgery waiting times continue to grow in importance so too will the need to keep the NMDSs up-to-date and policy relevant.

It was also noted that the timeliness of data availability needed improvement.

Other comments indicated that these data may be under-utilised due to a lack of awareness of their availability.

Persons who should be consulted for future data development

Most respondents identified a wide range of stakeholders who should be consulted in relation to data development.

Key organisations, committees and individuals nominated for consultation included:

- state and territory health authorities and their senior data managers/custodians
- senior state and territory data users (for example, senior staff involved in using the data for policy and performance purposes)
- key planning and policy officers in jurisdictions

- national statistical committees, including the National Health Information Standards and Statistics Committee (NHISSC)
- clinicians, either at hospitals or through the RACS
- the Australian Government Department of Health and Ageing
- the Department of Veterans' Affairs.

Respondents noted that it was essential to consult those who are involved in the collection of the data and that all state and territory health authorities must come to agreement before introducing new data elements.

It was suggested that clinical advice is critical to many of the areas mentioned for review and that convening a special working group to look at the issues identified as part of this review should be considered.

Issues raised by other correspondents

A summary of the comments and recommendations compiled from further correspondents, including the Statistical Information Management Committee (SIMC) and the National e-Health and Information Principal Committee (NEHIPC), is presented below.

Because of ongoing concern over the quality of data collected for clinical urgency categories, the SIMC agreed at its March 2008 meeting to continue examining options for improved reporting of patient experience with elective surgery waiting times.

The committee discussed options for addressing the problems with urgency categorisation, including:

- allocating urgency category influenced by the patient's experience of the condition necessitating surgery
- developing waiting time targets for specialties and/or indicator procedures.

At its April 2008 meeting, the NEHIPC discussed options for improving the reporting of elective surgery waiting times. The NEHIPC agreed to support preliminary discussions with the RACS on options for improving urgency categorisation and alternative elective surgery waiting times measures. The RACS noted in June 2007 that the waiting times for patients in the three clinical urgency categories (see *Chapter 4* for classification details) varied among states and territories, and that there was a need to review these categories. The RACS suggested that stratification may be necessary within *Category 2* (RACS 2007).

4 Comments on data elements

This section brings together summary information 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. A summary of usefulness and importance responses for each data element is presented in Table 4.1. Please note that percentages may not always add to the totals due to rounding.

Data elements common to the ESWT (census data) NMDS and the ESWT (removals data) NMDS

Establishment elements

Establishment—organisation identifier

This data element identifies the establishment in which an episode or event occurred. Each separately administered health-care establishment should have a unique identifier at the national level.

Currently, Establishment—organisation identifier is formed as a concatenation of the four separate elements; the state/territory identifier, the sector of the hospital, a region identifier (where applicable) and an organisation identifier (state/territory).

Usefulness and importance

All respondents who assessed the importance and usefulness of this data element rated it as either both highly important and useful (91%) or both important and useful (9%).

Comments

No comments were received on this element from the respondents of the ESWT evaluation survey.

However, the evaluations of the NMDSs for Admitted Patient Care (AIHW 2003) and Public Hospital Establishments (AIHW 2007) recommended that Establishment identifiers should be identical for individual establishments across different data collections such as the NMDSs for Public Hospital Establishments and ESWT.

Date elements

Elective care waiting list episode—listing date for care

This data element is used to record the date on which the hospital accepts notification that the patient requires treatment.

Usefulness and importance

All respondents who provided a rating for the importance of this data element rated it as either important (9%) or highly important (91%). Similarly, all rated it as either useful (18%) or highly useful (82%).

Comments

Some respondents to the survey commented that the patient should be listed when the surgeon examines the patient, determines the procedure is required and assigns urgency, rather than when a hospital performs an administrative task.

Descriptor elements

Elective surgery waiting list episode—indicator procedure

The domain values in this data element were introduced in 1997 to identify a list of common high-volume procedures that were often associated with long waiting periods.

The domain values are cataract extraction, cholecystectomy, coronary artery bypass graft, cystoscopy, haemorrhoidectomy, hysterectomy, inguinal herniorrhaphy, myringoplasty, myringotomy, prostatectomy, septoplasty, tonsillectomy, total hip replacement, total knee replacement and varicose vein stripping and ligation.

Usefulness and importance

All respondents who provided a rating for the importance of this data element rated it as either important (27%) or highly important (73%). Similarly, all rated it as either useful (36%) or highly useful (64%).

Comments

Comments related to this data element stated that it is important to review and update the indicator procedures list regularly, to ensure its current relevance and to reflect changes to the Australian Classification of Health Interventions (ACHI). For 2005–06, almost 65% of removals were categorised as *Not applicable/not stated*. This may indicate that some high-volume procedures are not covered by the current list. It was suggested that the list would be improved by mapping from the Medicare Benefits Schedule (MBS) item numbers.

Elective surgery waiting list episode—surgical specialty (of scheduled doctor)

This data element is used to record the area of clinical expertise held by the doctor who will perform the elective surgery.

Usefulness and importance

Ninety-one per cent of respondents who provided a rating for the importance and usefulness of this data element rated it as either important (36%) or highly important (55%), and useful (45%) or highly useful (45%).

Comments

One respondent commented that this data element is not particularly useful because many procedures can be performed by surgeons from a range of specialties, and there may be considerable differences in the specialties reported both among and within jurisdictions.

Elective surgery waiting list episode—clinical urgency

This data element indicates the urgency with which the patient requires elective hospital care/surgery.

The current code values are:

- *Category 1*—admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency
- *Category 2*—admission within 90 days desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency
- *Category 3*—admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, which is unlikely to deteriorate quickly and which does not have the potential to become an emergency.

Usefulness and importance

All respondents who provided a rating for the importance of this data element rated it as either important (27%) or highly important (73%), and 73% rated it as either useful (18%) or highly useful (55%). Twenty-seven per cent rated it as not useful.

Comments

Although the majority of respondents rated this item as useful, some felt that variation between jurisdictions in the assignment of clinical urgency means that the data element is not useful at a national level. It was suggested that more detailed clinical criteria for each procedure are needed to ensure consistency. Another comment in relation to quality was that codes are assigned differently between and even within jurisdictions, hence data are not comparable.

See *Chapter 6* for more information on variation in clinical urgency categorisation.

Waiting time elements

Elective surgery waiting list episode—extended wait patient indicator

A patient is classified as an extended wait patient if the patient is in clinical urgency *Category 3* at the time of admission (or at a census time) and has been waiting for the elective surgery for more than one year.

Usefulness and importance

Over 80% of respondents who provided a rating for the importance and usefulness of this data element rated it as either important (36%) or highly important (45%), and 72% rated it as either useful (36%) or highly useful (36%).

Comments

It was suggested that the scope of this data element be extended to cover all clinical urgency categories to identify patients still waiting after 365 days.

It was suggested that there was a need to review and probably combine the extended wait patient indicator and the overdue patient status into one data element.

Elective surgery waiting list episode—overdue patient status

A patient is classified as overdue if they are ready for care and the waiting time at admission (or waiting time at a census date) is longer than 30 days for patients in clinical urgency *Category 1,* or 90 days for patients in clinical urgency *Category 2*.

Usefulness and importance

Seventy-two per cent of respondents who provided a rating for the importance of this data element rated it as either important (27%) or highly important (45%), and 63% rated it as either useful (27%) or highly useful (36%).

Comments

It was suggested that the scope of this data element should be extended to include patients who had not been removed from the waiting lists to identify all patients who were on a waiting list for over 365 days.

Other comments received for this data element were the same as for extended wait patient indicator element (see above).

Data elements specific to the ESWT (removals data) NMDS

Date elements

Elective care waiting list episode—waiting list removal date

This data element records the date on which the patient was removed from the elective surgery waiting list.

The guide for use advises that the waiting list removal date will be the same as the admission date for patients admitted as either an elective patient or an emergency patient for the awaited procedure.

Usefulness and importance

All respondents who provided a rating for the importance of this data element rated it as either important (9%) or highly important (91%). Similarly, all rated it as either useful (18%) or highly useful (82%).

Comments

Comments indicated that it may be necessary to review the definition of this data element. It was suggested that further work be undertaken to determine whether removal should occur at admission for the awaited procedure or when the patient has the awaited procedure.

Descriptor element

Elective surgery waiting list episode—reason for removal from a waiting list

This data element records the reason why the patient was removed from the elective surgery waiting list. Reasons include patient admitted for the awaited procedure, patient could not be contacted, patient was treated elsewhere, surgery not required or patient declined surgery, and patient transferred to another hospital's waiting list.

Usefulness and importance

All respondents who provided a rating for the importance of this data element rated it as either important (18%) or highly important (82%), and all rated it as either useful (45%) or highly useful (55%).

Comments

No comments relating to this data element were received.

Waiting time element

Elective surgery waiting list episode—waiting time (at removal), total days

This data element records the time elapsed (in days) for a patient on the elective surgery waiting list from the date they were added to the waiting list for the procedure to the date they were removed from the waiting list.

The guide for use provides advice on the calculation of waiting time, including the subtraction of days 'not ready for care' and for cases where the patient's clinical urgency category is reassigned.

Usefulness and importance

Ninety-one per cent of respondents who assessed the importance of the data element rated it as highly important. Respondents who provided a rating for the usefulness of this data element rated it as either useful (9%) or highly useful (82%).

Comments

Survey respondents noted that there is currently some variation among jurisdictions in the recording of patients with a waiting time of zero days, with some jurisdictions excluding these patients from the collection. This variation affects the comparability of waiting time statistics, with those states and territories reporting waiting times of zero having a lower median waiting time than those that do not. Respondents suggested that the scope of the NMDSs should be revised to include the reporting of patients who were removed for

admission for an elective procedure on the same day as clinically assessed, without being added to a waiting list.

It was also suggested that the definition of waiting time at removal be reviewed to allow for multiple changes in clinical urgency category or for periods where the patient was not ready for care.

Data elements specific to the ESWT (census data) NMDS

Date elements

Hospital census (of elective surgery waitlist patients)—census date

This data element records the date on which the hospital takes a census count of and characterisation of patients on the waiting list. For the purpose of national reporting the census dates are usually declared as 31 March, 30 June, 30 September and 31 December.

Usefulness and importance

Eighty-two per cent of respondents who assessed the importance and usefulness of this data element rated it as both highly important and highly useful (73%) or both important and useful (9%), the others rated it as not important and not useful (9%). The other respondents (9%) were unsure about the importance or usefulness of the element.

Comments

There were no comments related to this data element.

Waiting time element

Elective surgery waiting list episode—waiting time (at a census date), total days

This data element records the time elapsed (in days) for a patient on the elective surgery waiting list from the date they were added to the waiting list to a designated census date.

The guide for use provides advice on the calculation of waiting time, including the subtraction of days 'not ready for care' and for cases where the patient's clinical urgency category is reassigned.

Usefulness and importance

All respondents who provided a rating for the importance and usefulness of this data element rated it as either important (10%) or highly important (90%), and as either useful (20%) or highly useful (80%).

Comments

It was suggested that the definition of waiting time at census be reviewed to allow for multiple changes in urgency status or for periods where the patient was not ready for care.

Supporting elements and glossary items

Elective surgery waiting list episode—category reassignment date

This supporting element records the date on which a patient awaiting elective hospital care is assigned to a different urgency category as a result of clinical review for the awaited procedure, or is assigned to a different patient listing status category. This element is not reported nationally, but is necessary for the calculation of the waiting time at removal (or at census).

Usefulness and importance

Ninety-one per cent of respondents who provided a rating for the importance of this data element rated it as either important (27%) or highly important (64%), with 9% unsure of its importance. Over 80% of respondents rated the data element as either useful (36%) or highly useful (45%). Nine per cent rated it as not useful and the others were unsure of its usefulness (9%).

Comments

Currently this data element includes when a patient changes urgency categories in addition to when the patient becomes ready/not ready for care. Queensland Health commented that these are two quite different and independent concepts, and suggested that there should be a separate data element(s) for capturing when the patient is not ready for care.

Clinical review

The glossary item defines clinical review as the examination of a patient by a clinician after the patient has been added to the elective care waiting list. The clinical review may result in the patient being assigned a different urgency rating from the initial classification.

Usefulness and importance

All respondents who provided a rating for the importance of this data element rated it as either important (91%) or highly important (9%). Over 90% of respondents who provided a rating for the usefulness of this element rated it as either useful (82%) or highly useful (9%). Nine per cent rated it as not useful.

Comments

Queensland Health has indicated that the definition for clinical review is broader than review after a patient has been added to the waiting list, and suggested that the concept should be re-titled to more clearly identify the reason for clinical review is about.

Elective care

The glossary item defines elective care as care that, in the opinion of the treating clinician, is necessary and admission for which can be delayed for at least 24 hours.

Usefulness and importance

All respondents who provided a rating for the importance of this glossary item rated it as either important (27%) or highly important (73%), and all rated it as either useful (64%) or highly useful (36%).

Comments

No comments relating to this data element were received.

Elective surgery

The glossary item defines elective surgery as elective care where the procedures required by patients are listed in the surgical operations section of the MBS book, with the exclusion of specific procedures frequently done by non-surgical clinicians.

Usefulness and importance

All respondents who provided a rating for the importance of this glossary item rated it as either important (18%) or highly important (82%), and as either useful (55%) or highly useful (45%).

Comments

Some respondents felt that the item would benefit from mapping from MBS item numbers.

Establishment—organisation identifier (state/territory)

Used in the formation of the data element Establishment—organisation identifier (Australian).

Usefulness and importance

All respondents who provided a rating for the importance of this data element rated it as either important (36%) or highly important (64%), and over 80% rated it as either useful (36%) or highly useful (45%). Eighteen per cent of respondents rated it as not useful.

Comments

Comments indicated the element should be updated. 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 was suggested that 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 the *Australian hospital statistics* reports, particularly for the types of hospitals that are not assigned a peer group based on activity levels and/or location.

Establishment—region identifier

Used in the formation of the data element Establishment—organisation identifier (Australian).

Usefulness and importance

Fifty-four per cent of respondents who provided a rating for the importance and usefulness of this data element rated it as either important (9%) or highly important (45%), and as either useful (18%) or highly useful (36%). Thirty-six per cent rated it as not important or not useful.

Comments

Some respondents considered that the data element should be removed from the NMDSs as it is not useful for national comparisons. The Department of Human Services, South Australia suggested reporting the Statistical Local Area of an establishment rather than the region code.

Establishment—Australian state/territory identifier

Used in the formation of the data element Establishment—organisation identifier (Australian).

Usefulness and importance

Ninety-one per cent of respondents who provided a rating for the importance and usefulness of this data element rated it as either important (27%) or highly important (64%), and as either useful (45%) or highly useful (45%). Nine per cent rated it as not important or not useful.

Comments

No comments relating to this data element were provided.

Establishment—sector

Used in the formation of the data element Establishment—organisation identifier (Australian).

Usefulness and importance

Seventy-three per cent of respondents who provided a rating for the importance of this data element rated it as either important (18%) or highly important (55%), 63% rated it as either useful (18%) or highly useful (45%). Twenty-seven per cent rated it as not important and 36% as not useful.

Comments

Queensland Health and the Department of Human Services, South Australia indicated that the element is not useful as only public hospital activities are in scope to report for these NMDSs.

Hospital census

A hospital census is defined as a point-in-time count by a hospital of all its admitted patients and/or patients currently on a waiting list.

Usefulness and importance

Over 80% of respondents who provided a rating for the importance of this glossary item rated it as either important (45%) or highly important (36%), 72% rated it as either useful (36%) or highly useful (36%). Nine per cent of respondents rated it as not important and 18% as not useful.

Comments

No comments relating to this glossary item were provided.

Hospital waiting list

A hospital waiting list is defined as a register which contains essential details about patients who have been assessed as needing elective hospital care.

Usefulness and importance

All respondents who provided a rating for the importance of this glossary item rated it as either important (40%) or highly important (60%), and as either useful (60%) or highly useful (40%).

Comments

No comments relating to this glossary item were provided.

Non-elective care

The glossary item defines non-elective care as care that, in the opinion of the treating clinician, is necessary and admission for which cannot be delayed for more than 24 hours.

Usefulness and importance

Over 80% of respondents who provided a rating for the importance of this glossary item rated it as either important (36%) or highly important (45%), 72% rated it as either useful (36%) or highly useful (36%). Nine per cent of respondents rated it as not important and 18% as not useful. The other respondents (9%) were unsure about the importance or usefulness of the element.

Comments

Queensland Health suggested that the definition needs to be reworded to align with the definition of emergency admission as presented in the data element Episode of admitted patient care—admission urgency status (Admitted Patient Care NMDS).

Elective surgery waiting list episode—patient listing status, readiness for care

This data element is not required for reporting to the NMDS, but is necessary for determining whether a patient is in scope for the NMDS. The data element indicates the

person's readiness to begin the process leading directly to being admitted to hospital for the awaited procedure.

Usefulness and importance

All respondents who provided a rating for the importance of this data element rated it as either important (27%) or highly important (73%), and as either useful (36%) or highly useful (64%).

Comments

No comment relating to this data element was provided.

Elective care waiting list episode—elective care type (waiting list category)

This data element is not required for reporting to the NMDSs, but is necessary for determining whether the patient is in scope for the NMDSs. The data element is necessary to distinguish patients awaiting elective surgery from those awaiting other types of elective hospital care.

Usefulness and importance

Seventy-two per cent of respondents who provided a rating for the importance of this data element rated it as either important (36%) or highly important (36%), 63% rated it as either useful (27%) or highly useful (36%). Nine per cent rated it as not important and 18% as not useful. Eighteen per cent of respondents were unsure about the importance or usefulness of the element.

Comments

Some respondents commented that the definition for this element contains a list of procedures that do not constitute elective surgery. It was suggested that this list of 'excluded' procedures should be reviewed for consistency and relevance. It was noted that the comments section of the definition actually refers to a more extensive and detailed listing being made available. It was also suggested that the element would benefit by mapping from/to MBS numbers.

Table 4.1: 'Importance and usefulness': survey responses and percentages by data element

Data element	Importance (per cent)				Usefulness			
	Not important	Important	Highly Important	Unsure	Not useful	Useful	Highly useful	Unsure
Data elements common to the ESWT (census data) NMDS and the ESWT (removals data) NMDS								
Establishment element								
Establishment—organisation identifier	0	9	91	0	0	9	91	0
Date element								
Elective care waiting list episode—listing date for care	0	9	91	0	0	18	82	0
Descriptor elements								
Elective surgery waiting list episode—indicator procedure	0	27	73	0	0	36	64	0
Elective surgery waiting list episode—surgical specialty (of scheduled doctor)	9	36	55	0	9	45	45	0
Elective surgery waiting list episode—clinical urgency	0	27	73	0	27	18	55	0
Waiting time elements								
Elective surgery waiting list episode—extended wait patient indicator	18	36	45	0	27	36	36	0
Elective surgery waiting list episode—overdue patient status	27	27	45	0	36	27	36	0
Data elements specific to the ESWT (removals data) NMDS								
Date element								
Elective care waiting list episode—waiting list removal date	0	9	91	0	0	18	82	0
Descriptor element								
Elective surgery waiting list episode—reason for removal from a waiting list	0	18	82	0	0	45	55	0
Waiting time element								
Elective surgery waiting list episode—waiting time (at removal), total days	9	0	91	0	9	9	82	0

Table 4.1 (continued): 'Importance and usefulness': survey responses and percentages by data element

	Importance (per cent)				Usefulness			
Data element	**Not important**	**Important**	**Highly Important**	**Unsure**	**Not useful**	**Useful**	**Highly useful**	**Unsure**
Data elements specific to the ESWT (census data) NMDS								
Date element								
Hospital census (of elective surgery waitlist patients)—census date	9	9	73	9	9	9	73	9
Waiting time element								
Elective surgery waiting list episode—waiting time (at a census date), total days	0	10	90	0	0	20	80	0
Supporting elements and glossary items								
Elective surgery waiting list episode—category reassignment date	0	27	64	9	9	36	45	9
Clinical review	0	91	9	0	9	82	9	0
Elective care	0	27	73	0	0	64	36	0
Elective surgery	0	18	82	0	0	55	45	0
Establishment—organisation identifier (state/territory)	0	36	64	0	18	36	45	0
Establishment—region identifier	36	9	45	9	36	18	36	9
Establishment—Australian state/territory identifier	9	27	64	0	9	45	45	0
Establishment—sector	27	18	55	0	36	18	45	0
Hospital census	9	45	36	9	18	36	36	9
Hospital waiting list	0	40	60	0	0	60	40	0
Non-elective care	9	36	45	9	18	36	36	9
Elective surgery waiting list episode—patient listing status, readiness for care	0	27	73	0	0	36	64	0
Elective care waiting list episode—elective care type (waiting list category)	9	36	36	18	18	27	36	18

5 Compliance evaluation

This chapter contains a comprehensive compliance evaluation of the data provided for the 2005–06 National Elective Surgery Waiting Times Data Collection (NESWTDC). An abbreviated compliance evaluation of the data provided for the 2006–07 collection is also included.

National summary 2005–06

Scope

The National Minimum Data Sets for Elective Surgery Waiting Times (NMDSs for ESWT) are collections of patient-level information for patients removed from public hospital waiting lists for elective surgery (removals data) or for patients who were on a public hospital waiting lists at a point in time (census data).

The NESWTDC covers public hospitals only. However, some public patients treated under contract in private hospitals in Victoria and Tasmania are included.

For 2005–06, the data collection covered most public hospitals that undertake elective surgery. The coverage of the NESWTDC was highest for the *Principal referral and Specialist women's and children's hospitals* with 78 hospitals reported in this peer group, 34 hospitals in the *Large hospitals* peer group and 51 hospitals in the *Medium hospitals* peer group(Table 5.1). Hospitals that were not included may not have undertaken elective surgery, or may not have had waiting lists. Some hospitals may not have been included because they had different patterns of service delivery compared with other hospitals due to specialists providing elective surgery services visiting these hospitals only periodically.

The AIHW derived estimates of the proportion of elective surgery admissions that were covered by the collection from data provided by the states and territories for the National Hospital Morbidity Database (NHMD) as:

> the number of separations with 'urgency of admission' reported as *elective* and for which a surgical procedure was reported for public hospitals reporting to the NESWTDC as a proportion of the number of separations with 'urgency of admission' reported as *elective* and for which a surgical procedure was reported for all public hospitals reporting to the NHMD.

Separations for cosmetic surgery were excluded from the estimated coverage calculations.

The definition of a surgical procedure used for these estimates is 'a procedure used to define surgical Australian Refined Diagnosis Related Groups version 5.0'. Urgency of admission describes whether the admission was assigned an urgency status and, if so, whether the admission occurred as an *Emergency* (admission should occur within 24 hours), an *Elective*, or as urgency *Not assigned* basis.

Based on the proportions of elective surgery admissions that were covered by the NESWTDC, national coverage was 87% in 2005–06 and ranged from 100% in New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory to 63% in South Australia (Table 5.1). Coverage was highest for the *Principal referral and Specialist women's and children's hospitals* peer groups at 99%, and was progressively lower for the *Large hospitals* and *Medium hospitals* groups.

Table 5.1: Coverage of hospitals in National Elective Surgery Waiting Times Data Collection, by hospital peer group, states and territories, 2005–06

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Principal referral and Specialist women's & children's hospitals									
Number of reporting hospitals[(a)]	28	19	16	4	5	3	1	2	78
Estimated coverage of elective surgical separations (%)[(b)]	100	100	97	100	100	100	100	100	99
Large hospitals									
Number of reporting hospitals[(a)]	14	9	6	2	2	. .	1	. .	34
Estimated coverage of elective surgical separations (%)[(b)]	100	72	100	52	100	. .	100	. .	81
Medium hospitals									
Number of reporting hospitals[(a)]	36	4	7	4	0	. .	. .	. .	51
Estimated coverage of elective surgical separations (%)[(b)]	100	36	86	78	0	. .	. .	. .	62
Total[(c)]									
Number of reporting hospitals[(a)]	100	32	31	11	7	3	2	5	191
Estimated coverage of elective surgical separations (%)[(b)]	100	79	96	76	63	100	100	100	87

Notes:

(a) Number of hospitals reporting to the National Elective Surgery Waiting Times Data Collection.

(b) The number of separations with urgency of admission reported as Elective and a surgical procedure for public hospitals reporting to the National Elective Surgery Waiting Times Data Collection as a proportion of the number of separations with urgency of admission reported as Elective and a surgical procedure for all public hospitals.

(c) Includes data for hospitals not included in the specified hospital peer groups.

. . Not applicable.

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Use of national standard definition, domain values and NMDS scope

The ESWT (removals data and census data) NMDSs contain 10 and 9 data elements respectively, with 7 of these common to both NMDSs. There are 13 supporting elements and glossary items for which data are not collected, and these have not been assessed for compliance. The national standard definitions were used for 11 of the 12 data elements (92%) and standard domain values were used for all data elements (Table 5.2).

Table 5.2: National summary of the use of the *National health data dictionary* definition and domain values and NMDS scope, 2005–06

Data element	NHDD definition used?	NHDD domain values used?	Provided for all records?
Data elements common to ESWT (census data) NMDS and ESWT (removals data) NMDS			
Establishment element			
Establishment—organisation identifier	Yes	Yes	Yes
Date element			
Elective care waiting list episode—listing date for care	Yes	Yes	Yes
Descriptor elements			
Elective surgery waiting list episode—indicator procedure	Yes	Yes	Yes
Elective surgery waiting list episode—surgical specialty (of scheduled doctor)	Yes	Yes	Yes
Elective surgery waiting list episode—clinical urgency	Yes	Yes	Yes
Waiting time elements			
Elective surgery waiting list episode—extended wait patient indicator	Yes	Yes	Yes
Elective surgery waiting list episode—overdue patient status	Yes	Yes	Yes
Data elements specific to ESWT (removals data) NMDS			
Date element			
Elective surgery waiting list episode—waiting list removal date	Yes	Yes	Yes
Descriptor element			
Elective surgery waiting list episode—reason for removal from a waiting list	Yes	Yes	No
Waiting time elements			
Elective surgery waiting list episode—waiting time (at removal), total days	No	Yes	Yes
Data elements specific to ESWT (census data) NMDS			
Date element			
Hospital census (of elective surgery waitlist patients)—census date	Yes	Yes	Yes
Waiting time element			
Elective surgery waiting list episode—waiting time (at a census date), total days	Yes	Yes	Yes

State and territory summary 2005–06

All states and territories used the NHDD definition in at least 75% of data elements (Table 5.3). Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory used the NHDD definitions for all data elements (100%). New South Wales used the NHDD definitions for 92% of data elements. All states and territories had very good to excellent use of NHDD domain values; with 83% of data elements reported using the specified domain values.

All states and territories reported data for at least 99.5% of records for at least 92% of data elements.

Table 5.3: State and territory summary of the use of the *National health data dictionary* definition and domain values and NMDS scope, 2005–06

	NHDD definition used?		NHDD domain values used?		Provided for all records?	
State/territory	Number of data elements	Per cent	Number of data elements	Per cent	Number of data elements	Per cent
New South Wales	11	92	12	100	12	100
Victoria	12	100	12	100	11	92
Queensland	12	100	12	100	12	100
Western Australia	12	100	12	100	11	92
South Australia	12	100	12	100	11	92
Tasmania	9	75	11	92	12	100
Australian Capital Territory	12	100	12	100	11	92
Northern Territory	10	83	10	83	11	92
Australia total	11	75	12	83	11	92

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Assessment of individual data elements 2005–06

This section reports on the evaluation of compliance for each data element in the NMDSs reported by states and territories for 2005–06. It details states' and territories' use of the national standard definition, domain values and coverage (whether provided for all records). It also provides details of the use of non-standard definitions and domain values and non-standard use of scope. Scope and definitions are as defined in the *National health data dictionary version 12* (NHDC 2003). For the purposes of this report, compliance was established for a state or territory where the NHDD definition was used and if at least 99.5% of the total applicable waiting list episodes for the collection year complied with the domain values and scope for the data element.

The order of data elements in this section is identical to the order of the data elements as presented in Table 5.2.

Data elements common to both the ESWT (removals data) NMDS and the ESWT (census data) NMDS

Data element name: Establishment—organisation identifier (Australian)

Evaluation NMDSs: Elective Surgery Waiting Times (removals data) and Elective Surgery Waiting Times (census data)	**Other NMDSs:** Admitted Patient Care Admitted Patient Mental Health Care Non-admitted Patient Emergency Department Care Mental Health Establishments Community Mental Health Care Residential Mental Health Care Public Hospital Establishments	**Collection year:** 2005–06 **METeOR identifier:** 269973 **NHDD Version:** 12
Scope: Patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals.		**Version number:** 2
Definition: The 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/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	No	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	Yes	Yes	Yes
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	Yes	Yes	Yes

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

For 2005–06, New South Wales provided data for two individual establishments under one Establishment—organisation identifier. Therefore a unique organisation identifier was not provided for all New South Wales hospitals.

Do the data supplied cover all applicable records?

Yes.

Was mapping required from state and territory data sets?

Not applicable.

Data element name: Elective care waiting list episode—listing date for care

Evaluation NMDSs:	**Other NMDS:**	**Collection year:** 2005–06
Elective Surgery Waiting Times (removals data) and Elective Surgery Waiting Times (census data)		**METeOR identifier:** 269957
		NHDD Version: 12
Scope: Patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals.		**Version number:** 2
Definition: The date on which a hospital or a community health service accepts notification that a patient/client requires care/treatment.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	Yes	Yes	Yes
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	Yes	Yes	Yes

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

Not applicable.

Do the data supplied cover all applicable records?

Yes.

Was mapping required from state and territory data sets?

No.

Data element name: Elective surgery waiting list episode—indicator procedure

Evaluation NMDSs: Elective Surgery Waiting Times (removals data) and Elective Surgery Waiting Times (census data)	**Other NMDS:**	**Collection year:** 2005–06
		METeOR identifier: 334976
		NHDD Version: 12
Scope: Patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals.		**Version number:** 2
Definition: An indicator procedure is a procedure which is of high volume, and is often associated with long waiting periods.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	Yes	Yes	Yes
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	Yes	No	Yes

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

The NHDD definition for Elective surgery waiting list episode—indicator procedure was used by all jurisdictions for the 2005–06 collection year.

The AIHW allows the category *Not reported/unknown* to be reported to the NESWTDC if Elective surgery waiting list episode—indicator procedure is not known.

Do the data supplied cover all applicable records?

Yes.

Was mapping required from state and territory data sets?

Yes. For the collection year 2005–06, the Northern Territory provided an indicator procedure of *Not reported/unknown* for more than 80% of removals, and the domain value *Not applicable* was not used. For these records, the indicator procedure was mapped from *Not reported/unknown* to *Not applicable* (Table 5.4).

Additional information

A large proportion of removals had an Elective surgery waiting list episode—indicator procedure of *Not applicable* (Table 5.4). Excluding the Northern Territory, the proportion of removals with an Elective surgery waiting list episode—indicator procedure of *Not applicable*

ranged from 60.2% to 74.7% across the states and territories. In 2005–06 and 2006–07, about two-thirds of records had *Not applicable* reported for the indicator procedure (AIHW 2008b).

In addition, very low numbers of separations were reported for some of the existing domain values. This may indicate a need to revise and expand the current list of indicator procedures both to better specify the existing indicator procedures and to identify other high volume procedures for future reporting.

Table 5.4: Removals with an indicator procedure of *Not applicable*, by states and territories, 2005–06

State/territory	Number	Per cent
New South Wales	149,594	62.1
Victoria	101,167	63.3
Queensland	88,901	73.8
Western Australia	42,032	70.6
South Australia	28,824	69.7
Tasmania	13,249	74.7
Australian Capital Territory	6,532	60.2
Northern Territory	5,719	81.2
Total	**436,018**	**66.3**

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Removals from the waiting list for admission to hospital may be linked to their corresponding admitted patient episode in the NHMD. The NHDD provides procedure listings for each indicator procedure, classified within the Australian Classification of Health Interventions (ACHI) 4th edition. The listed procedures are those that are planned by the treating specialist and not necessarily what is actually performed during hospitalisation. However, a comparison of the Elective surgery waiting list episode—indicator procedure against the procedures coded in the admitted patient episode provides some indication of the relevance and currency of the ACHI codes listed for indicator procedures by the NHDD.

For jurisdictions that provided elective surgery data within the admitted patient data in 2005–06 (Queensland, South Australia and the Australian Capital Territory), more than 11% of removals linked to the NHMD did not have a procedure reported in the admitted patient episode which corresponded to the procedure codes listed in the NHDD (version 12) for their indicator procedure (Table 5.5).

None of the removals with an indicator procedure of *Septoplasty* had a procedure coded in the admitted patient episode which was listed by the NHDD (version 12) for that indicator procedure. However, the list of procedures was updated for NHDD version 13 (HDSC 2006) to include code changes in the ACHI classification. Analysis of these linked removals showed that the top five most commonly coded procedures (excluding *General anaesthesia*) for removals for admission with an indicator procedure of *Septoplasty*, were:

- 41671-02 [379] Septoplasty
- 41716-02 [387] Intranasal maxillary antrostomy, bilateral
- 41671-03 [379] Septoplasty with submucous resection of nasal septum

(41671-02, 41716-02 and 41716-03 were added to the NHDD for version 13)

- 41764-01 [370] Sinoscopy
- 41737-03 [386] Ethmoidectomy, bilateral.

Cystoscopy had a large proportion of removals that did not have a corresponding ACHI procedure code coded in the admitted patient episode. The five most commonly coded procedures (excluding *General anaesthesia)* for removals for admission with an indicator procedure of *Cystoscopy* were:

- 36833-01 [1067] Endoscopic removal of ureteric stent
- 36818-00 [1066] Endoscopic ureteric catheterisation with fluoroscopic imaging of upper urinary tract, unilateral
- 36839-00 [1097] Endoscopic destruction of a single lesion of bladder <= 2 cm or tissue of bladder
- 36821-01 [1067] Endoscopic insertion of ureteric stent
- 36839-04 [1100] Endoscopic resection of a single lesion of bladder <= 2cm or tissue of bladder.

Table 5.5: Per cent of removals without a NHDD version 12 listed procedure coded in the admitted patient episode within the NHMD, by indicator procedure, selected linked data, 2005–06

Indicator procedure	Qld	SA	ACT	Total
Cataract extraction	1.6	2.3	0.8	1.7
Cholecystectomy	1.8	2.0	0.0	1.7
Coronary artery bypass graft	6.1	23.1	0.7	9.3
Cystoscopy	31.2	38.4	30.6	33.2
Haemorrhoidectomy	12.0	17.1	5.9	13.8
Hysterectomy	6.1	2.9	2.8	5.3
Inguinal herniorrhaphy	3.6	5.3	1.2	4.0
Myringoplasty	22.5	71.0	0.0	39.3
Myringotomy	9.6	8.0	9.1	9.1
Prostatectomy	13.9	12.5	7.4	13.0
Septoplasty	100.0	100.0	100.0	100.0
Tonsillectomy	2.7	7.1	0.5	3.6
Total hip replacement	13.2	5.1	15.4	11.1
Total knee replacement	9.2	12.3	14.4	10.5
Varicose veins stripping and ligation	5.3	3.3	0.0	4.3
Total	**10.6**	**14.6**	**9.8**	**11.6**

Source: AIHW linked data from the National Hospital Morbidity Database and the National Elective Surgery Waiting Times Data Collection.

The *Not applicable* category was reported for over 66% of all removals (436,018) and for over 72% of separations (108,240) in the linked data provided by Queensland, South Australia and the Australian Capital Territory. Excluding anaesthesia, high volume groups of procedures reported for this category in the linked data included *Dermatological and plastic procedures* (39,003 procedures) and *Gynaecological procedures* (33,193), accounting for 19% and 16% respectively of reported procedures (excluding *Non-invasive, cognitive and other interventions, not elsewhere classified*) (Table 5.6). Within these groupings, for *Dermatological and plastic*

procedures there were 20,679 procedures reported for *Excision of lesion of skin and subcutaneous tissue* (Block 1620), and for *Gynaecological procedures* there were 6,211 procedures for *Curettage of uterus* (Block 1265) and 5,326 procedures for *Destruction/Excision procedures on cervix* (Blocks 1275 and 1276). This information could be used to develop further indicator procedure categories.

Table 5.6: Procedures reported for separations with an indicator procedure of *Not applicable*, selected linked data, 2005–06

ACHI[(a)] procedure chapter	Total
Procedures on nervous system	6,894
Procedures on endocrine system	1,473
Procedures on eye and adnexa	5,888
Procedures on ear and mastoid process	2,397
Procedures on nose, mouth and pharynx	7,316
Dental services	7,873
Procedures on respiratory system	6,199
Procedures on cardiovascular system	12,025
Procedures on blood and blood-forming organs	3,441
Procedures on digestive system	20,784
Procedures on urinary system	9,126
Procedures on male genital organs	4,301
Gynaecological procedures	33,193
Obstetric procedures	356
Procedures on musculoskeletal system	29,528
Dermatological and plastic procedures	39,003
Procedures on breast	5,160
Radiation oncology procedures	198
Non-invasive, cognitive and other interventions, not elsewhere classified	141,294
Imaging services	7,321
Total separations	**108,240**

(a) ACHI—Australian Classification of Health Interventions.

Notes:

1. Procedures reported for elective surgery waiting list removals linked to the National Hospital Morbidity Database for Queensland, South Australia and the Australian Capital Territory with an indicator procedure of *Not applicable*. No procedure was reported for 433 separations.
2. The category *Non-invasive, cognitive and other interventions, not elsewhere classified* included 98,081 procedures for *General or Conduction anaesthesia* (Blocks 1909, 1910) and 30,264 *Allied health interventions* (Block 1916).

Source: AIHW linked data from the national Hospital Morbidity Database and the National Elective Surgery Waiting Times Data Collection.

Data element name: Elective surgery waiting list episode—surgical specialty (of scheduled doctor)

Evaluation NMDSs:	**Other NMDS:**	**Collection year:** 2005–06
Elective Surgery Waiting Times (removals data) and Elective Surgery Waiting Times (census data)		**METeOR identifier:** 270146
		NHDD Version: 12
Scope: Patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals.		**Version number:** 2
Definition: The area of clinical expertise held by the doctor who will perform the elective surgery.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	Yes	Yes	Yes
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	Yes	No	Yes

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

The NHDD definition for Elective surgery waiting list episode—surgical specialty (of scheduled doctor) was used by all jurisdictions for the 2005–06 collection year.

The AIHW allows the category *Not reported/unknown* to be reported if the surgical specialty is not known. It is expected that this category is used only for a relatively small number of cases. For the collection year 2005–06, the Northern Territory provided 5.8% of removals with a surgical specialty of *Not reported/unknown*. South Australia also provided a small number of records with this domain value (Table 5.7).

Do the data supplied cover all applicable records?

Yes.

Was mapping required from state and territory data sets?

No.

Table 5.7: Removals with a surgical specialty of *Other* or *Not reported/unknown*, by states and territories, 2005–06

	Other		Not reported/unknown	
State/territory	**Number**	**Per cent**	**Number**	**Per cent**
New South Wales	3,041	1.3	0	0.0
Victoria	3,818	2.4	0	0.0
Queensland	2,737	2.3	0	0.0
Western Australia	1,518	2.5	0	0.0
South Australia	150	0.4	34	0.1
Tasmania	292	1.6	0	0.0
Australian Capital Territory	656	6.0	0	0.0
Northern Territory	93	1.3	408	5.8
Total	**12,305**	**1.9**	**442**	**0.1**

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Additional information

At the national level, 1.9% of removals were assigned a surgical specialty of *Other*. This may indicate that the current list of domain values is adequate.

Data element name: Elective surgery waiting list episode—clinical urgency

Evaluation NMDSs: Elective Surgery Waiting Times (removals data) and Elective Surgery Waiting Times (census data)	**Other NMDS:**	**Collection year:** 2005–06
		METeOR identifier: 270008
		NHDD Version: 12
Scope: Patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals.		**Version number:** 3
Definition: A clinical assessment of the urgency with which a patient requires elective hospital care.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	Yes	Yes	Yes
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	Yes	Yes	Yes

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

The NHDD definition for Elective surgery waiting list episode—clinical urgency was used by all jurisdictions for the 2005–06 collection year.

The AIHW allows the clinical urgency category of *Not stated due to patient not ready for care* to be reported if the patient was removed and was not ready for care. This category was used for only a relatively small number of removals for some jurisdictions in 2004–05, and was not used in 2005–06.

Do the data supplied cover all applicable records?

Yes.

Was mapping required from state and territory data sets?

Yes. The Australian Capital Territory collects information on five separate clinical urgency categories and maps these to the national standard domain values before providing the data to the NESWTDC (see *Chapter 6*).

Additional information

There was variation in the assignment of clinical urgency among jurisdictions. For a detailed discussion, see *Chapter 6*.

Data element name: Elective surgery waiting list episode—extended wait patient indicator

Evaluation NMDSs:	**Other NMDS:**	**Collection year:** 2005–06
Elective Surgery Waiting Times (removals data) and Elective Surgery Waiting Times (census data)		**METeOR identifier:** 269964
		NHDD Version: 12
Scope: Patients removed from or on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals and are of a clinical urgency where admission at some time in the future is acceptable for a condition causing minimal or no pain, dysfunction or disability, which is unlikely to deteriorate quickly and which does not have the potential to become an emergency category.		**Version number:** 1
Definition: A patient with the lowest level of clinical urgency for an awaited procedure who has been on the waiting list for elective surgery for more than one year.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	Yes	Yes	Yes
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	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.

Do the data supplied cover all applicable records?

This data element is required to be reported only for patients with a clinical urgency category of '3—Admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, which is unlikely to deteriorate quickly and which does not have the potential to become an emergency'. The data supplied cover all records within scope. Some of states and territories provided this data element for records which were not in scope as well.

Was mapping required from state and territory data sets?

No.

Data element name: Elective surgery waiting list episode—overdue patient status

Evaluation NMDSs:	**Other NMDS:**	**Collection year:** 2005–06
Elective Surgery Waiting Times (removals data) and Elective Surgery Waiting Times (census data)		**METeOR identifier:** 270009
		NHDD Version: 12
Scope: Patients in Elective surgery waiting list episode—clinical urgency code categories with specified maximum desirable waiting times.		**Version number:** 1
Definition: An overdue patient is one whose wait has exceeded the time that has been determined as clinically desirable in relation to the urgency category to which they have been assigned.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	Yes	Yes	Yes
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	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.

Do the data supplied cover all applicable records?

This data element is required to be reported only for patients with a clinical urgency category with a specified maximum desirable waiting time (*Category 1* and *Category 2* patients). The data supplied cover all records within scope. However, a number of states and territories provided this data element for records which were not in scope as well (*Category 3*).

Was mapping required from state and territory data sets?

No.

Data elements specific to the ESWT (removals data) NMDS

Data element name: Elective surgery waiting list episode—waiting list removal date

Evaluation NMDS: Elective Surgery Waiting Times (removals data)	**Other NMDS:**	**Collection year:** 2005–06
		METeOR identifier: 270082
		NHDD Version: 12
Scope: Patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals.		**Version number:** 1
Definition: Date on which a patient is removed from an elective surgery waiting list.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	No	Yes	Yes
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	Yes	Yes	Yes

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

NHDD definition and domain values were used by most jurisdictions. The AIHW further specifies that a valid waiting list removal date for a collection year must be within the collection period. For the collection year 2005–06, valid dates were from 1 July 2005 to 30 June 2006.

For Queensland and Tasmania, a small number of removal records were provided with a waiting list removal date outside the scope of the collection year. For Queensland, these resulted from the provision of records for removal linked to the admitted patient care data (for which the collection period is defined by the date of separation).

Do the data supplied cover all applicable records?

Yes.

Was mapping required from state and territory data sets?

No.

Data element name: Elective surgery waiting list episode—reason for removal from a waiting list

Evaluation NMDS: Elective Surgery Waiting Times (removals data)	**Other NMDS:**	**Collection year:** 2005–06
		METeOR identifier: 269959
		NHDD Version: 12
Scope: Patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals.		**Version number:** 2
Definition: The reason why a patient is removed from the elective surgery waiting list.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	No
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	No
South Australia	Yes	Yes	No
Tasmania	Yes	Yes	Yes
Australian Capital Territory	Yes	Yes	No
Northern Territory	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.

Do the data supplied cover all applicable records?

No. Nationally, just under 1% of records had a reason for removal of *Not known*. New South Wales, Queensland and Tasmania provided reason for removal information for at least 99.5% of all records. For the other states and territories, the provision of the *Not known* category ranged from under 1% in Victoria to 19% in the Northern Territory (Table 5.8).

Was mapping required from state and territory data sets?

No.

Table 5.8: Removals with a reason for removal of *Not known*, states and territories, 2005–06

State/territory	Number	Per cent
New South Wales	0	0.0
Victoria	1,314	0.8
Queensland	0	0.0
Western Australia	1,102	1.8
South Australia	1,366	3.3
Tasmania	0	0.0
Australian Capital Territory	128	1.2
Northern Territory	1,311	18.6
Total	5,221	0.8

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Data element name: Elective surgery waiting list episode—waiting time (at removal), total days

Evaluation NMDS: Elective Surgery Waiting Times (removals data)	**Other NMDS:**	**Collection year:** 2005–06
		METeOR identifier: 269960
		NHDD Version: 12
Scope: Patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals.		**Version number:** 1
Definition: The time elapsed (in days) for a patient on the elective surgery waiting list from the date they were added to the waiting list for the procedure to the date they were removed from the waiting list.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	No	Yes	Yes[(a)]
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	No	Yes	Yes

(a) For Tasmania, four records were missing waiting time at removal.

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

For patients who were transferred from a waiting list managed by one hospital to that managed by another, the time waited on the first list is not included in the waiting time reported to the NESWTDC for some states and territories. Therefore, the number of days waited in those jurisdictions reflects the waiting time on the list managed by the reporting hospital only. This has the effect of shortening the reported waiting time compared with the time actually waited by these patients.

For the collection year 2005–06, New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory were able to report the total time waited on all waiting lists. This could have the effect of increasing the reported waiting time for admissions in these states and territories compared with other jurisdictions.

The NHDD domain values were used by all jurisdictions.

Do the data supplied cover all applicable records?

Yes.

Was mapping required from state and territory data sets?

No.

Additional information

Nationally, about 3.8% of removals had a waiting time at removal of zero days, indicating that the patient was admitted for the awaited procedure on the same day they were added to the waiting list. There was some variation in the reporting of zero waiting times by jurisdiction, ranging from 1.2% for the Australian Capital Territory to 6.8% for Queensland (Table 5.9). Western Australia did not report any records with a waiting time of less than one day.

Table 5.9: Removals by waiting time at removal, states and territories, 2005–06

	Waiting time of 1 day or more		Waiting time of zero days	
State/territory	**Number**	**Per cent**	**Number**	**Per cent**
New South Wales	230,313	95.7	10,422	4.3
Victoria	154,572	96.8	5,129	3.2
Queensland	112,216	93.2	8,175	6.8
Western Australia	59,571	100.0	0	0.0
South Australia	40,392	97.6	978	2.4
Tasmania	17,486	98.6	257	1.4
Australian Capital Territory	10,713	98.8	130	1.2
Northern Territory	6,901	98.0	141	2.0
Total	**632,164**	**96.2**	**25,232**	**3.8**

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Data elements specific to the ESWT (census data) NMDS

Data element name: Hospital census (of elective surgery waitlist patients)—census date

Evaluation NMDS: Elective Surgery Waiting Times (census data)	**Other NMDS:**	**Collection year:** 2005–06
		METeOR identifier: 270153
		NHDD Version: 12
Scope: Patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals.		**Version number:** 1
Definition: Date on which the hospital takes a point in time (census) count of and characterisation of patients on the waiting list.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	Yes	Yes	Yes
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	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.

The NHDD specifies the domain values of the data element as the day of a particular month and year. The AIHW further specifies that the census dates are the last day of the quarter; that is 31 March, 30 June, 30 September and 31 December. All states and territories provided census dates according to these specifications.

Do the data supplied cover all applicable records?

Yes.

Was mapping required from state and territory data sets?

No.

Data element name: Elective surgery waiting list episode—waiting time (at a census date), total days

Evaluation NMDS: Elective Surgery Waiting Times (census data)	**Other NMDS:**	**Collection year:** 2005–06
		METeOR identifier: 269961
		NHDD Version: 12
Scope: Patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals.		**Version number:** 1
Definition: The time elapsed (in days) for a patient on the elective surgery waiting list from the date they were added to the waiting list to a designated census date.		

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

State/territory	NHDD definition used?	NHDD domain values used?	Provided for all records?
New South Wales	Yes	Yes	Yes
Victoria	Yes	Yes	Yes
Queensland	Yes	Yes	Yes
Western Australia	Yes	Yes	Yes
South Australia	Yes	Yes	Yes
Tasmania	No	Yes	Yes
Australian Capital Territory	Yes	Yes	Yes
Northern Territory	No	Yes	Yes

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

For patients who were transferred from a waiting list managed by one hospital to that managed by another, the time waited on the first list is not included in the waiting time reported to the NESWTDC for some states and territories. Therefore, the number of days waited in those jurisdictions reflects the waiting time on the list managed by the reporting hospital only. This has the effect of shortening the reported waiting time compared with the time actually waited by these patients. For the collection year 2005–06, New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory were able to report the total time waited on all waiting lists. This could have the effect of increasing the reported waiting time for admissions in these states and territories compared with other jurisdictions.

The NHDD domain values were used by all jurisdictions.

Do the data supplied cover all applicable records?

Yes.

Was mapping required from state and territory data sets?

No.

Compliance summary 2006–07

A summary of the compliance evaluation for the data provided for the 2006–07 NESWTDC is presented here to provide information on the most recently available data. The summary indicates that the quality of the data did not vary substantially between 2005–06 and 2006–07.

National summary 2006–07

Scope

For 2006–07, the coverage of the NESWTDC was highest for the *Principal referral and Specialist women's and children's hospitals* with 82 hospitals reported in this peer group (Table 5.10). The collection covered 30 *Large hospitals* and 52 *Medium hospitals*.

As noted earlier in this chapter, the AIHW derived estimates of the proportion of elective surgery admissions that were covered by the collection from data provided by the states and territories. Based on the proportions of elective surgery admissions that were covered by the NESWTDC, national coverage was 87% in 2006–07 and ranged from 100% in New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory to 64% in South Australia (Table 5.10). Coverage was highest for the *Principal referral and Specialist women's and children's hospitals* peer groups at 98%, and was progressively lower for the *Large hospitals* and *Medium hospitals* groups.

Use of national standard definition, domain values and NMDS scope

For 2006–07, the national standard definitions and national standard domain values were used for all data elements, and provided for all records for 92% of data elements (Table 5.11).

State and territory summary 2006–07

All states and territories used the NHDD definition in more than 83% of data elements (Table 5.11). New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory used the definitions for all data elements (100%). All states and territories had excellent use of NHDD domain values; with at least 83% of data elements reported using the specified domain values.

All states and territories reported data for at least 99.5% of records for at least 92% of data elements.

For the 2006–07 collection year, all states and territories provided elective surgery waiting times data linkable to the National Hospital Morbidity Database. New South Wales provided 97.0% of elective surgery records linked, Victoria 95.1%, Queensland 100.0%, Western Australia 97.4%, South Australia 99.6%, Tasmania 69.1%, the Australian Capital Territory 44.7% and the Northern Territory 62.6%.

Table 5.10: Coverage of hospitals in National Elective Surgery Waiting Times Data Collection, by hospital peer group, states and territories, 2006–07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Principal referral and Specialist women's & children's hospitals									
Number of reporting hospitals[(a)]	29	20	17	5	5	3	1	2	82
Estimated coverage of elective surgical separations (%)[(b)]	100	100	97	84	100	100	100	100	98
Large hospitals									
Number of reporting hospitals[(a)]	12	8	5	2	2	. .	1	. .	30
Estimated coverage of elective surgical separations (%)[(b)]	100	70	100	42	100	. .	100	. .	77
Medium hospitals									
Number of reporting hospitals[(a)]	37	4	7	4	0	. .	. .	. .	52
Estimated coverage of elective surgical separations (%)[(b)]	100	35	81	80	0	. .	. .	. .	63
Total[(c)]									
Number of reporting hospitals[(a)]	99	32	31	13	7	3	2	5	192
Estimated coverage of elective surgical separations (%)[(b)]	100	79	96	67	64	100	100	100	87

Notes:

(a) Number of hospitals reporting to the National Elective Surgery Waiting Times Data Collection.

(b) The number of separations with urgency of admission reported as *Elective* and a surgical procedure for public hospitals reporting to the National Elective Surgery Waiting Times Data Collection as a proportion of the number of separations with urgency of admission reported as *Elective* and a surgical procedure for all public hospitals.

(c) Includes data for hospitals not included in the specified hospital peer groups.

. . Not applicable.

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Table 5.11: State and territory summary of the use of the *National health data dictionary* definition and domain values and NMDS scope, 2006–07

State/territory	NHDD definition used?		NHDD domain values used?		Provided for all records?	
	Number of data elements	Per cent	Number of data elements	Per cent	Number of data elements	Per cent
New South Wales	12	100	12	100	12	100
Victoria	12	100	12	100	11	92
Queensland	12	100	12	100	12	100
Western Australia	12	100	12	100	11	92
South Australia	12	100	12	100	11	92
Tasmania	10	83	12	100	11	92
Australian Capital Territory	12	100	12	100	12	100
Northern Territory	10	83	10	83	11	92
Australia total	12	100	12	100	11	92

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Individual data elements 2006–07

Establishment element

Establishment—organisation identifier (Australian)

Unique organisation identifiers were provided for all hospitals.

Date elements

Elective care waiting list episode—listing date for care

Provided for all records.

Hospital census (of elective surgery waitlist patients)—census date

Provided for all records.

Elective surgery waiting list episode—waiting list removal date

NHDD definition and domain values were used by all jurisdictions, except for Queensland. For the collection year 2006–07, valid dates are from 1 July 2006 to 30 June 2007. Queensland provided 641 removals with a waiting list removal date outside the collection period.

Descriptor elements

Elective surgery waiting list episode—indicator procedure

The AIHW allows the category *Not reported/unknown* to be reported to the NESWTDC if Elective surgery waiting list episode—indicator procedure is not known. For the collection year 2006–07, the Northern Territory provided an indicator procedure of *Not*

reported/unknown for more than 78% of removals, and the domain value *Not applicable* was not used. For these records, the indicator procedure was mapped from *Not reported/unknown* to *Not applicable.*

Elective surgery waiting list episode—surgical specialty (of scheduled doctor)

The AIHW allows the category *Not reported/unknown* to be reported if the surgical specialty is not known. For the collection year 2006–07, the Northern Territory provided 7.8% of removals with a surgical specialty of *Not reported/ unknown*. South Australia also provided a small number of records with this domain value.

Elective surgery waiting list episode—clinical urgency

Provided for all records. There was some variation in the assignment of clinical urgency among jurisdictions (see *Chapter 6*).

Elective surgery waiting list episode—reason for removal from a waiting list

Nationally in 2006–07, under 1% of removals had a reason for removal of *Not known*. As for 2005–06, New South Wales, Queensland and Tasmania did not report any records with a reason for removal of *Not known.* For other states and territories, the proportion of records with a *Not known* reason for removal ranged from almost 21% in the Northern Territory to under 1% in Victoria.

Waiting time elements

Elective surgery waiting list episode—extended wait patient indicator

This information is required to be reported only for records with a clinical urgency of *Category 3*. The Northern Territory provided this data element for all records, including those with clinical urgency of *Category 1* and *Category 2*.

Elective surgery waiting list episode—overdue patient status

This information is required to be reported only for records with a clinical urgency of *Category 1* or *Category 2*. The Northern Territory provided this data element for all records, including those with clinical urgency of *Category 3*.

Elective surgery waiting list episode—waiting time (at a census date), total days

For the collection year 2006–07, New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory were able to report the total time waited on all waiting lists.

Elective surgery waiting list episode—waiting time (at removal), total days

For the collection year 2006–07, New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory were able to report the total time waited on all waiting lists.

6 Clinical urgency

The apparent lack of comparability of clinical urgency categories among jurisdictions, within surgical specialties, and for indicator procedures results in performance indicators that are not meaningful or comparable between jurisdictions, and therefore have limited application for national elective surgery waiting times statistics. The concept of a maximum 'desirable' time for waiting (and therefore the proportion having 'extended waits' or being 'overdue') is also not meaningful or comparable, because it is dependent on the urgency categorisation.

This chapter presents information on the continuing variation in clinical urgency categorisation, and gives a background to the assignment of urgency categories in the states and territories. Information on selected projects to standardise urgency category assignment is included in *Appendix 5*.

Variation in clinical urgency categorisation

Clinical urgency has been a data element in the Elective Surgery Waiting Times National Minimum Data Set since its formation in 1995. The three-tiered clinical urgency categories currently used were first defined in version 6.0 of the *National health data dictionary* (NHDD):

- *Category 1*—admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency
- *Category 2*—admission within 90 days desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency
- *Category 3*—admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, which is unlikely to deteriorate quickly and which does not have the potential to become an emergency.

Analyses of the 2004–05 to 2006–07 data presented below show that there is considerable variation in the reporting of clinical urgency categories. These data indicate apparent lack of comparability of the data among the states and territories, and within surgical specialties and indicator procedures.

Whilst the state variation overall and for individual surgical specialties could be attributed to differing mixes of patients between states and territories, variation at the level of indicator procedure (for which patient mixes would be expected to be relatively uniform) provides evidence that other factors influence the variation. These other factors could include differing financial arrangements for the provision of elective surgery (such as financial incentives or disincentives for provision of elective surgery within the recommended maximum waiting times), and differing interpretation of the urgency category definitions by clinicians, clinician groups or hospitals.

This apparent lack of comparability of clinical urgency categories among jurisdictions means that measures based on clinical urgency categories (including the proportions of patients who are treated 'on time') are not meaningful or comparable between jurisdictions, and therefore have limited application for national elective surgery waiting times statistics. The measures may be more useful for comparisons within jurisdictions over time, or for use at the hospital or other local level.

Because of the apparent variation, the AIHW has not incorporated urgency categorisation in national reporting on elective surgery waiting times since the 1999–2000 reference financial year. This follows a decision made by the Australian Health Ministers' Advisory Council in 2001 that the AIHW should present the data without making invalid comparisons of differently-based jurisdictional figures.

Clinical urgency categorisation in 2004–05

In 2004–05, the proportion of patients admitted from elective surgery waiting lists in *Category 1* varied from 45.4% in Tasmania to 21.3% in Victoria, with substantial variations occurring in all categories (Table 6.1). Variation between jurisdictions also exists in elective surgery waiting times census data. The proportion of patients on elective surgery waiting lists at 30 June 2005 in *Category 1* varied from 11.3% in Tasmania to 1.7% in Victoria (Table 6.2).

Table 6.1: Proportion of patients admitted from waiting lists for elective surgery in each clinical urgency category, by state and territory, 2004–05 (per cent)

Clinical urgency	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Category 1	41.1	21.3	33.6	35.6	33.9	45.4	37.7	42.3	34.1
Category 2	29.0	46.2	45.7	25.3	24.0	33.0	40.0	35.7	36.0
Category 3	29.9	32.6	20.7	39.1	42.1	21.6	22.2	22.0	29.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Sum of category values may differ from total due to rounding.

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Table 6.2: Proportion of patients on elective surgery waiting lists in each clinical urgency category, by state and territory, 30 June 2005 (per cent)

Clinical urgency	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Category 1	10.9	1.7	6.0	8.3	6.7	11.3	2.7	7.1	7.1
Category 2	30.6	43.4	29.1	29.9	20.4	46.6	45.0	34.8	34.0
Category 3	58.6	54.9	65.0	61.8	72.9	42.1	52.3	58.1	59.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Sum of category values may differ from total due to rounding.

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Clinical urgency categorisation in 2005–06

In 2005–06, the proportion of patients admitted from elective surgery waiting lists in *Category 1* varied from 48.9% in the Northern Territory to 22.4% in Victoria, with substantial variations occurring in all categories (Table 6.3).

Variation between jurisdictions also occurred in elective surgery waiting times census data. As shown in Table 6.4 the proportion of patients on elective surgery waiting lists at 30 June 2006 in *Category 1* varied from 9.6% in the Northern Territory to 1.9% in Victoria.

Table 6.3: Proportion of patients admitted from waiting lists for elective surgery in each clinical urgency category, by state and territory, 2005–06 (per cent)

Clinical urgency	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Category 1	40.1	22.4	35.5	35.3	33.9	44.5	29.9	48.9	34.2
Category 2	29.8	46.9	45.4	26.7	26.9	33.8	46.1	32.9	36.8
Category 3	30.2	30.7	19.1	38.0	39.2	21.6	24.0	18.2	29.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Sum of category values may differ from total due to rounding.

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Table 6.4: Proportion of patients on waiting lists for elective surgery in each clinical urgency category, by state and territory, 30 June 2006 (per cent)

Clinical urgency	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Category 1	9.4	1.9	6.3	6.6	8.1	8.8	2.4	9.6	6.5
Category 2	32.0	43.4	31.4	33.1	21.4	46.4	46.1	36.1	35.1
Category 3	58.6	54.7	62.3	60.3	70.6	44.7	51.4	54.3	58.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Sum of category values may differ from total due to rounding.

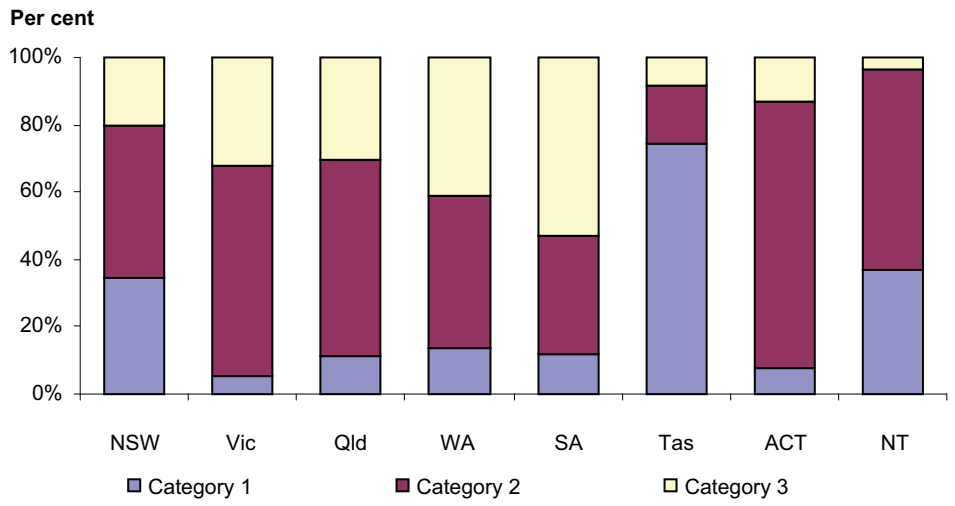
Source: AIHW National Elective Surgery Waiting Times Data Collection.

Clinical urgency categorisation by indicator procedure and surgical specialty

An analysis of clinical urgency categories across indicator procedure and surgical specialty categories and by states and territories indicates that there is some variation in assignment (AIHW 2008a). Overall, for 2005–06 it was found that:

- New South Wales reported the highest proportion of admissions in *Category 1* for two indicator procedures and two surgical specialties
- Victoria reported the lowest proportion of admissions in *Category 1* for eight indicator procedures and four surgical specialties
- Tasmania reported the highest proportion of admissions in *Category 1* for eight indicator procedures and five surgical specialties, and the lowest in one surgical specialty
- The Northern Territory reported the highest proportion of admissions in *Category 1* for four indicator procedures and two surgical specialties.

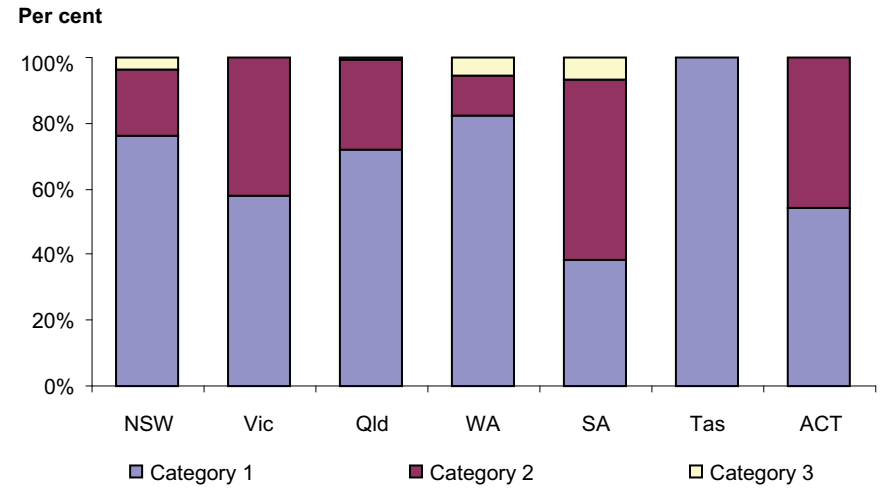
The assignment of clinical urgency categories varied by state and territory for all indicator procedures. The greatest variation across states and territories in the assignment of *Category 1* by indicator procedure occurred for *Myringotomy*, ranging from 5% of removals in Victoria to 74% in Tasmania. *Myringotomy* also showed the greatest variation in the assignment of *Category 2*, ranging from 17% of removals in Tasmania to 80% in the Australian Capital Territory. There was also considerable variation in the assignment of *Category 3*, ranging from 4% in the Northern Territory to 53% in South Australia (Figure 6.1).



Source: AIHW National Elective Surgery Waiting Times Data Collection.

Figure 6.1: Per cent of removals assigned to each clinical urgency category, with an indicator procedure of *Myringotomy*, states and territories, 2005–06

For *Coronary artery bypass graft*, the assignment of *Category 1* ranged from 39% of removals in South Australia to 100% in Tasmania, and the proportion of removals assigned to *Category 2* ranged from 0% in Tasmania to 55% in South Australia (Figure 6.2).

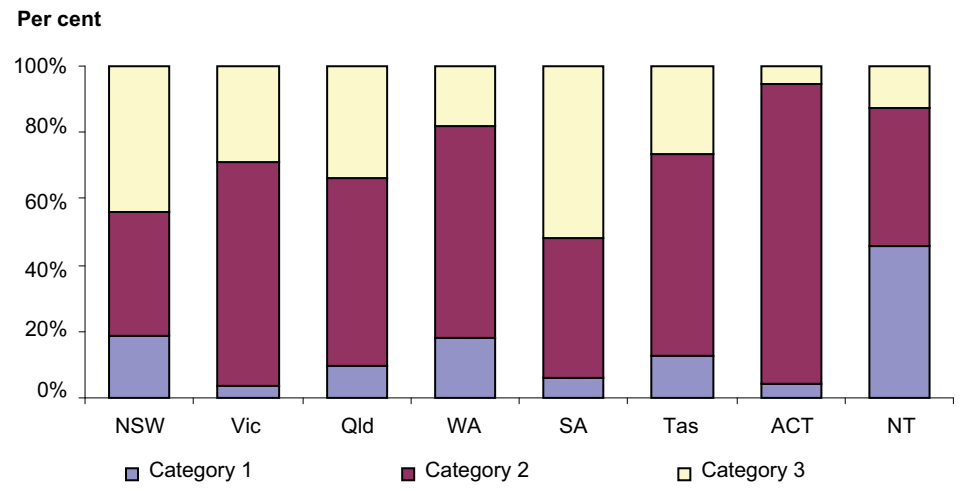


Source: AIHW National Elective Surgery Waiting Times Data Collection.

Figure 6.2: Per cent of removals assigned to each clinical urgency category, with an indicator procedure of Coronary artery bypass graft, states and territories, 2005–06

For *Total hip replacement*, the assignment of *Category 1* ranged from 3% of removals in Victoria to 46% in the Northern Territory, the assignment of *Category 2* ranged from 37% of removals in New South Wales to 91% in the Australian Capital Territory and the proportion of

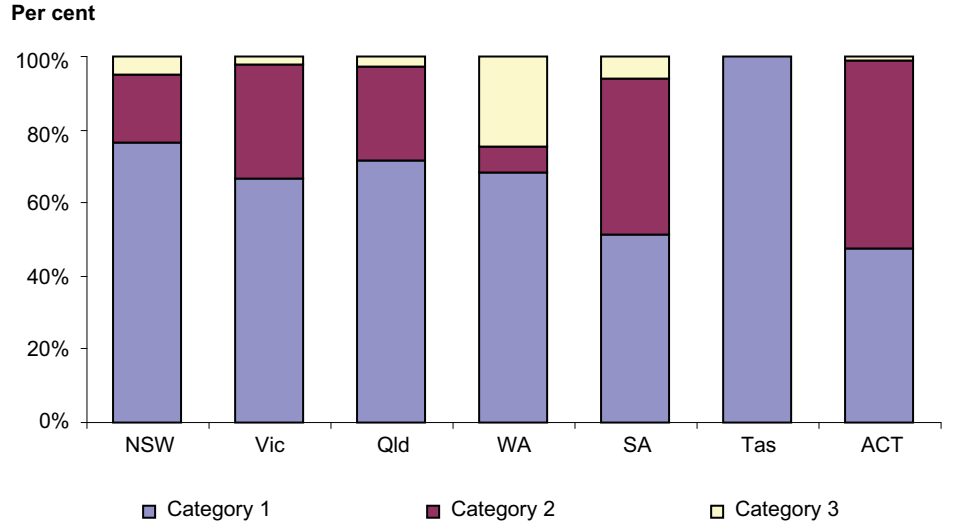
removals assigned to *Category 3* ranged from 5% in the Australian Capital Territory to 52% in South Australia (Figure 6.3).



Source: AIHW National Elective Surgery Waiting Times Data Collection.

Figure 6.3: Per cent of removals assigned to each clinical urgency category, with an indicator procedure of Total hip replacement, states and territories, 2005–06

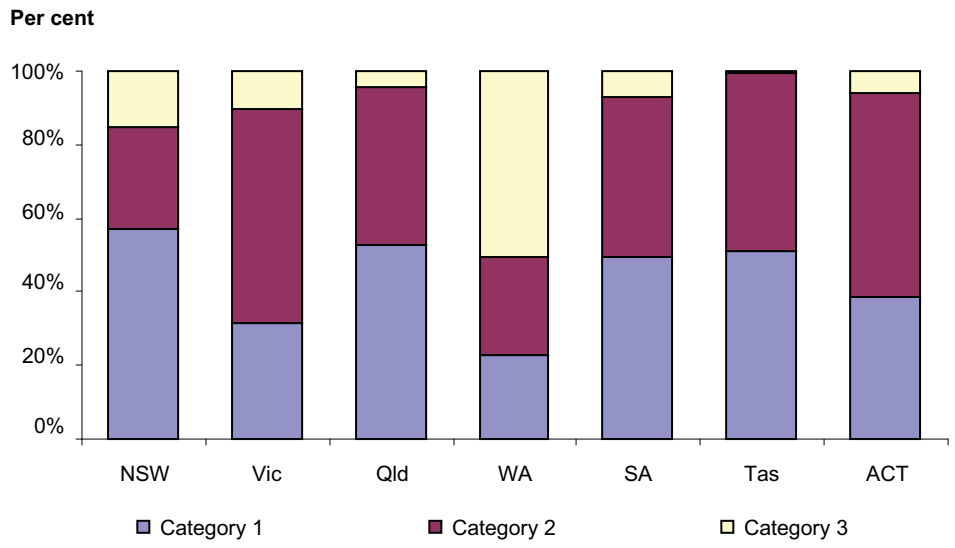
There were also variations between jurisdictions within surgical specialties. For example, the greatest variation across states and territories in the assignment of *Category 1* by surgical specialty occurred for *Cardiothoracic surgery*, ranging from 47% of removals in the Australian Capital Territory to 100% in Tasmania. *Cardiothoracic surgery* also showed the greatest variation in the assignment of *Category 3*, ranging from 0% of removals in Tasmania to 24% in Western Australia (Figure 6.4).



Source: AIHW National Elective Surgery Waiting Times Data Collection.

Figure 6.4: Per cent of removals assigned to each clinical urgency category, with a surgical specialty of Cardiothoracic surgery, states and territories, 2005–06

The greatest variation in the assignment of *Category 3* occurred for *Neurosurgery* (Figure 6.5), ranging from under 1% of removals in Tasmania to 51% in Western Australia. There was also considerable variation in the assignment of *Category 1*, ranging from 23% in Western Australia to 57% in New South Wales.



Source: AIHW National Elective Surgery Waiting Times Data Collection.

Figure 6.5: Per cent of removals assigned to each clinical urgency category, with a surgical specialty of Neurosurgery, states and territories, 2005–06

Clinical urgency categorisation in 2006–07

There was variation in the assignment of clinical urgency among jurisdictions. The proportion of patients admitted who were *Category 1* was lowest for Victoria (22.7%) and highest for the Northern Territory (42.0%). The proportion of *Category 2* patients ranged from 26.7% in South Australia to 48.4% in the Australian Capital Territory and the proportion of *Category 3* patients ranged from 20.4% in Queensland to 41.8% in South Australia.

Table 6.5: Proportion of patients admitted from waiting lists for elective surgery in each clinical urgency category, by state and territory, 2006–07 (per cent)

Clinical urgency	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Category 1	29.5	22.7	35.9	29.9	31.5	38.2	26.2	42.0	29.6
Category 2	31.6	47.8	43.7	30.2	26.7	38.2	48.4	35.2	37.8
Category 3	38.8	29.5	20.4	39.9	41.8	23.6	25.4	22.8	32.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Sum of category values may differ from total due to rounding.

Source: AIHW National Elective Surgery Waiting Times Data Collection.

Variation between jurisdictions also occurred in elective surgery waiting times census data. As shown in Table 6.6, the proportion of patients on elective surgery waiting lists at 30 June 2007 in *Category 1* varied from 8.7% in the Northern Territory to 2.3% in Victoria.

Table 6.6: Proportion of patients on waiting lists for elective surgery in each clinical urgency category, by state and territory, 30 June 2007 (per cent)

Clinical urgency	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Category 1	4.7	2.3	8.1	6.1	7.7	7.3	2.7	8.7	5.2
Category 2	28.4	44.2	34.9	36.0	22.6	48.0	50.7	39.6	35.3
Category 3	66.9	53.5	57.0	57.9	69.7	44.7	46.6	51.6	59.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Sum of category values may differ from total due to rounding.

Source: AIHW National Elective Surgery Waiting Times Data Collection.

State and territory policies and procedures

Currently all states and territories provide elective surgery waiting times data to the AIHW and the Department of Health and Ageing (DoHA) by clinical urgency category using three clinical urgency categories. However, there are jurisdiction-specific variations as to the internal requirements and policies for clinical urgency category data collection. Different clinical urgency category guidelines and policies within jurisdictions may contribute to variations at the national reporting level.

New South Wales

For New South Wales, clinical urgency categories are assigned using categories that are slightly different from the ones specified in the NHDD. The clinical urgency categories are outlined in Table 6.7.

Table 6.7: New South Wales clinical priority categories

Clinical priority category—a clinical assessment of the priority with which a patient requires elective admission	
Category 1	Admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency
Category 2	Admission within 90 days desirable for a condition which is not likely to deteriorate quickly or become an emergency
Category 3	Admission within 365 days acceptable for a condition which is unlikely to deteriorate quickly and which has little potential to become an emergency
Category 4	Patients who are either clinically not ready for admission (staged) and those who have deferred admission for personal reasons (deferred)

Source: NSW Health 2006.

New South Wales has developed a reference list of recommended clinical priority categories with the assistance of specialist groups to ensure that patients with similar conditions are prioritised in a similar way (NSW Health 2006). The clinical priority *Category 1* is recommended for most cardiovascular procedures and for procedures dealing with malignancies, such as the removal of skin lesions (for melanoma and squamous and basal cell carcinomas) and for biopsies of the breast or prostate. *Category 3* is recommended for total hip or knee replacements and for removal of non-malignant skin lesions. It is assumed that patients who have, or are suspected of having, a malignancy will generally be

considered to require urgent categorisation. Clinical priority categories are assigned based on clinical need, and once categorised, patients are selected for surgery in chronological order of their listing date.

Victoria

Victoria collects and supplies elective surgery waiting times data by clinical urgency category using the NHDD categories. Victoria's 'Elective surgery access policy' requires the scheduling of patients for surgery according to (DHS 2005):

- clinical urgency
- the length of time the patient has waited for their surgery in comparison with similar patients
- resource availability (for example, availability of theatre time, the surgeon, equipment and hospital capacity)
- whether the hospital has previously postponed the patient's surgery.

Victoria's key performance indicators for elective surgery are:

- target of 100% of *Category 1* elective patients admitted within 30 days
- target of 80% of *Category 2* patients waiting less than 90 days
- target of 90% of *Category 3* patients waiting less than 365 days.

Victoria's Bonus Funding Framework provides quarterly incentive grants to health services for improving access for elective patients. The grants are based on waiting list targets, with the maximum grants applicable for 100% of elective surgery patients admitted within the recommended time for their assigned urgency category (DHS 2007).

Queensland

Clinical urgency categories (as defined in the NHDD) have been adopted for use in all elective surgery undertaken in Queensland public hospitals. In the report *Policy framework for elective surgery services*, Queensland Health (2005) states that 'treatment of patients from the elective surgery waiting list will be prioritised primarily on the basis of clinical urgency'.

The framework also states that 'within each clinical urgency category, a number of factors should be considered in selecting patients from the waiting list'. These include assigning priority within categories for patients who have waited longer than the recommended time or longer than other patients in the same urgency category.

Other factors that may influence selection of patients from the elective surgery waiting list include (Queensland Health 2005):

- the type of surgery required
- patient comorbidities
- medication requirements
- patient social and community support
- patient access factors (for example, distance of residence from the treatment centre, availability of transport and accommodation)
- availability and appropriateness of day surgery
- the need for other treatments while awaiting surgery.

Western Australia

The Department of Health, Western Australia developed a set of key performance indicators in the document *Elective surgery access policy – public and private patients* (Department of Health, Western Australia 2006). The policy includes target dates for achieving reductions in the maximum waiting times, and in performing surgery within the recommended times for all urgency categories.

Australian Capital Territory

For the Australian Capital Territory, clinical urgency categories are assigned using categories that are slightly different from the ones specified in the NHDD. The clinical urgency categories are outlined in Table 6.8. In the Australian Capital Territory, the 'Waiting time and elective patient management policy' has been developed 'to promote clinically appropriate, consistent and equitable management of elective patients and waiting lists in public hospitals'. The following criteria are also considered when choosing patients from the waiting list for admission (ACT Health 2007):

- clinical priority
- the length of time the patient has waited in comparison with similar category patients
- previous postponements
- pre-admission assessment issues/factors (for example, elderly people living alone or those having to travel long distances)
- resource availability (for example, theatre time, staffing, equipment and hospital capacity).

Table 6.8: Australian Capital Territory clinical priority categories

Clinical priority category—a clinical assessment of the priority with which a patient requires elective admission	
Category 1	Admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency
Category 2a	Admission within 60 days (ACT definition) desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency
Category 2b	Admission within 90 days desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency
Category 3a	Admission within 120 days (ACT definition) desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency
Category 3b	Admission within 365 days acceptable for a condition which is unlikely to deteriorate quickly and which has little potential to become an emergency

Source: ACT Health 2007.

Information for other states and territories has not been made available.

7 Future directions

This report has focused on an evaluation of the current data elements in the NMDSs for Elective Surgery Waiting Times (ESWT). Recommendations based on comments from respondents to the survey and comments from other interested parties have been identified including that:

- the NMDSs for ESWT (removals and census data) be retained
- the scope of the NMDSs for ESWT (removals and census data) be reviewed
- coverage of the NMDSs for ESWT be improved
- further work to refine the definition of data elements be undertaken to ensure that the data collected are both relevant and comparable among jurisdictions. High priorities for data development include revision of:
  - clinical urgency categorisation
  - indicator procedures
  - elective care type
  - listing date for care
  - waiting list removal date and waiting time at removal/census date.

The AIHW report *Elective surgery in Australia: new measures of access* (AIHW 2008a) also outlined a number of inadequacies that were identified in the national data currently available for elective surgery. The report proposed new measures of access and suggested a range of data improvements that could be investigated, including:

- routinely providing linked elective surgery/admitted patient data
- adding information on the total time waited by the patient.

Standardisation of clinical urgency categorisation

The standardisation of clinical urgency categories could be attempted by incorporating more detail into the urgency category definitions, and creating detailed guidelines for them. Some work has been undertaken at jurisdiction level to attempt to standardise categorisation, and also in some other countries (see *Appendix 5*). However, most attempts to standardise categorisation have focused on specific procedures rather than on elective surgery as a whole. It could be reasonable to aim to standardise urgency categorisation for the indicator procedures only. Urgency-category-based measures of access to elective surgery could then be regarded as comparable for each of the indicator procedures, but probably not between indicator procedures, and not for other elective surgery.

Routine provision of linked elective surgery and admitted patient data

As noted earlier, all states and territories provided elective surgery waiting times data linkable to the National Hospital Morbidity Database for 2006–07. The proportion of elective surgery records that were either provided linked or were linkable to the admitted patient data ranged from 44.7% for the Australian Capital Territory to 100% for Queensland

(see *Chapter 5*). There is a need to improve the provision of linkable data to enable meaningful analyses of the linked data.

The routine provision of linked elective surgery/admitted patient data would allow the development of:

- supply-related measures of elective surgery provision, using the approach that measurement of access to services can be measured as levels of provision of service at the population level
- demand-related measures, incorporating demographic information, to assist in assessing access to elective surgery by different patient groups
- diagnosis-based disaggregation of separations for the assessment of relative waiting times experiences. Such development could include suitable waiting times benchmarks, requiring clinical and stakeholder input, but would not replace clinical urgency categorisation at the local level
- the analysis of adverse events, particularly with the use of the Condition onset flag that will be part of the NMDS for Admitted Patient Care from the 2008–09 reference year.

The 2008 report presents examples of supply-related measures, demand-related measures and the analysis of adverse events (AIHW 2008a). The supply-related and demand-related measures are discussed in more detail below.

Alternatively, demographic and diagnosis information could be added to the ESWT NMDSs, or information indicating admission from an elective surgery waiting list could be added to the NMDS for Admitted Patient Care.

Total time waited

The addition of the amount of time waited by a patient between referral to the surgeon and the appointment with the surgeon, or the time between the appointment with the surgeon and being placed on the waiting list for surgery would allow the calculation of the total time waited as perceived by the patient. Such measurement would need to take into account the fact that surgery may not be the most appropriate treatment or the first treatment to be pursued for patients referred to surgeons.

Improving the coverage of the NMDSs

The current national collection of elective surgery waiting times data does not include data for all public hospitals, and does not include information on private hospital elective surgery waiting times.

Hospitals for which elective surgery waiting times data are not reported

For 2006–07, the national coverage of the NMDSs for ESWT was approximately 87% for public hospitals, ranging from 100% in New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory to 64% in South Australia. This varied coverage may contribute to data being non-comparable between jurisdictions and for populations serviced by smaller non-reporting hospitals.

Private elective surgery

There is no routine national reporting of information on private elective surgery that could contribute to the assessment of the accessibility of elective surgery overall. Given that private elective surgery comprises about 61% of elective surgery overall (AIHW 2008a), this could be useful if, for example, levels of demand for or supply of public elective surgery is influenced by the level of supply of private elective surgery.

Alternative measures of access to elective surgery

Because of the variation in the assignment of clinical urgency categories (as noted in *Chapter 6*), there may be benefits in using alternative indicators of access to elective surgery. The AIHW report *Elective surgery in Australia: new measures of access* (AIHW 2008a) presented new measures related to the demand and the supply of elective surgery that were not dependent on the use of the clinical urgency category data.

In general terms, access to elective surgery can be assessed by considering how much elective surgery occurs, or is supplied, or by considering the demand for elective surgery and the extent to which it differs from supply.

Measures of access to elective surgery that are based on waiting lists and waiting times depend on the level of demand for public elective surgery, and can be influenced by levels of supply of public and private elective surgery and other factors. They do not provide information on how much elective surgery is being provided, and they do not take into account the time that patients may need to wait before they are placed on a waiting list.

Measures of the supply of elective surgery include population rates of elective surgery provision. Such measures can be used to gauge whether the amount of public elective surgery is increasing or decreasing. However, these measures do not provide information on the amount of time waited for elective surgery.

New supply-related measures

Supply-related measures use the approach that measurement of access to services can be measured as levels of provision of service at the population level. This approach incorporates an assumption that levels of 'need' are the same, on average, for different populations, or that variation in need can be accounted for using data analysis methods (such as age standardisation).

Supply-related measures could include:

- age-standardised separation rates for elective surgery, by remoteness area, socioeconomic status, Indigenous status and sex of the patient
- age-standardised separation rates and rate ratios for elective surgery by surgical specialty and for indicator procedures, by remoteness area, socioeconomic status, Indigenous status and sex of the patient.

Separation rates may be a useful measure of accessibility as they do not rely on clinical urgency categorisation and so are not limited by non-comparability of the categorisation.

However, the need for public hospital elective surgery can also be affected by differences in health status in the population, private health insurance coverage and access to and

availability of private hospital services and non-surgical treatment. The interpretation of these measures would therefore need to take such factors into account.

New demand-related measures

The new demand-related measures presented in the report (AIHW 2008a) incorporate demographic and diagnosis information on the patients that may assist in assessing access to elective surgery by different patient groups. These measures are not dependent on the apparently non-comparable data on the clinically-assessed condition of the patient.

Demand-related measures could include:

- median waiting times and proportions of patients waiting longer than 365 days by surgical specialty and for indicator procedures, by remoteness area, socioeconomic status, Indigenous status, age and sex of the patient
- median waiting times and proportions of patients waiting longer than 365 days for selected principal diagnoses, by surgical specialty and for indicator procedures. Appropriate specification of diagnosis categories for each surgical specialty, and each indicator procedure, would need to be developed with clinical and stakeholder advice.

Appendix 1: List of data elements in the ESWT NMDSs

Elective Surgery Waiting Times (removals data) NMDS

- Elective care waiting list episode—listing date for care
- Elective surgery waiting list episode—surgical specialty (of scheduled doctor)
- Elective surgery waiting list episode—indicator procedure
- Elective surgery waiting list episode—clinical urgency
- Elective surgery waiting list episode—extended wait patient indicator
- Elective surgery waiting list episode—overdue patient status
- Elective surgery waiting list episode—reason for removal from a waiting list
- Elective surgery waiting list episode—waiting list removal date
- Elective surgery waiting list episode—waiting time (at removal), total days
- Establishment—organisation identifier (Australian)

Elective Surgery Waiting Times (census data) NMDS

- Elective care waiting list episode—listing date for care
- Elective surgery waiting list episode—surgical specialty (of scheduled doctor)
- Elective surgery waiting list episode—indicator procedure
- Elective surgery waiting list episode—clinical urgency
- Elective surgery waiting list episode—extended wait patient indicator
- Elective surgery waiting list episode—overdue patient status
- Elective surgery waiting list episode—waiting time (at a census date), total days
- Establishment—organisation identifier (Australian)
- Hospital census (of elective surgery waitlist patients)—census date

Appendix 2: National Minimum Data Sets for Elective Surgery Waiting Times

More information on the National Minimum Data Sets (NMDSs) for Elective Surgery Waiting Times (EWST) is available on the AIHW website at <http://meteor.aihw.gov.au>.

Elective surgery waiting times (removals data) NMDS

Identifying and definitional attributes

Metadata item type:	Data Set Specification
METeOR identifier:	273057
Registration status:	National Health Information Group (NHIG), Standard 01/03/2005
Data Set Specification type:	National Minimum Data Set (NMDS)
Definition:	**Scope** The scope of this minimum data set is patients removed from waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals. This will include private patients treated in public hospitals, and may include public patients treated in private hospitals. Hospitals may also collect information for other care (as defined in the Waiting list category data element), but this is not part of the National Minimum Data Set (NMDS) for elective surgery waiting times. Patients removed from waiting lists managed by hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not currently included. Removals data: Data are collected for patients who have been removed from an elective surgery waiting list (for admission or another reason). Patients who were 'ready for care' and patients who were 'not ready for care' at the time of removal are included. **Statistical units** Patients removed from waiting lists (for admission or other reason) during each financial year.

Collection and usage attributes

Collection methods:	Elective care waiting list episode—category reassignment date, DDMMYYYY is not required for reporting to the NMDS, but is

necessary for the derivation of Elective surgery waiting list episode—waiting time (at a census date), total days N[NNN]. Elective care waiting list episode—elective care type, code N and Elective surgery waiting list episode—patient listing status, readiness for care code N are not required for reporting to the NMDS, but are necessary for determining whether patients are in scope for the NMDS. These data elements should be collected at the local level and reported to state and territory health authorities as required.

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 for removals data.

Comments:

There are two different types of data collected for this national minimum data set (census data and removals data) and the scope and list of data elements associated with each is different.

For the purposes of this NMDS, public hospitals include hospitals which are set up to provide services for public patients (as public hospitals do), but which are managed privately.

The inclusion of public patients removed from elective surgery waiting lists managed by private hospitals will be investigated in the future.

Statistical units are entities from or about which statistics are collected or in respect of which statistics are compiled, tabulated or published.

Source and reference attributes

Submitting organisation: National Health Information Group

Metadata items in this Data Set Specification

Metadata item	*Obligation*	*Max occurs*
Elective care waiting list episode—listing date for care, DDMMYYYY	Mandatory	1
Elective surgery waiting list episode—clinical urgency, code N	Mandatory	1
Elective surgery waiting list episode—extended wait patient indicator, code N	Mandatory	1
Elective surgery waiting list episode—indicator procedure, code NN	Mandatory	1
Elective surgery waiting list episode—overdue patient status, code N	Mandatory	1
- Elective surgery waiting list episode—reason for removal from a waiting list, code N	Mandatory	1

- Elective surgery waiting list episode—surgical specialty (of scheduled doctor), code NN	Mandatory	1
- Elective surgery waiting list episode—waiting list removal date, DDMMYYYY	Mandatory	1
- Elective surgery waiting list episode—waiting time (at removal), total days N[NNN]	Mandatory	1
- Establishment—organisation identifier (Australian), NNX[X]NNNNN	Mandatory	1

Elective surgery waiting times (census data) NMDS

Identifying and definitional attributes

Metadata item type:	Data Set Specification
METeOR identifier:	273042
Registration status:	NHIG, Standard 01/03/2005
Data Set Specification type:	National Minimum Data Set (NMDS)
Definition:	**Scope** The scope of this minimum data set is patients on waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals. This will include private patients treated in public hospitals, and may include public patients treated in private hospitals. Hospitals may also collect information for other care (as defined in the Waiting list category data element), but this is not part of the National Minimum Data Set (NMDS) for Elective surgery waiting times. Patients on waiting lists managed by hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not currently included. Census data: Data are collected for patients on elective surgery waiting lists who are yet to be admitted to hospital or removed for another reason. The scope is patients on elective surgery waiting lists on a census date who are 'ready for care' as defined in the Elective surgery waiting list episode—patient listing status, readiness for care code N data element. **Statistical units** Patients on waiting lists on census dates.

Collection and usage attributes

Collection methods:	Elective care waiting list episode—category reassignment date, DDMMYYYY is not required for reporting to the NMDS, but is necessary for the derivation of Elective surgery waiting list episode—waiting time (at a census date), total days N[NNN]. Elective care waiting list episode—elective care type, code N and Elective surgery waiting list episode—patient listing status, readiness for care code N are not required for reporting to the NMDS, but are necessary for determining whether patients are in scope for the NMDS. These data elements should be collected at the local level and reported to state and territory health authorities as required.

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

Census dates are 30 September, 31 December, 31 March and 30 June.

Comments:

There are two different types of data collected for this national minimum data set (census data and removals data) and the scope and list of data elements associated with each is different.
For the purposes of this NMDS, public hospitals include hospitals which are set up to provide services for public patients (as public hospitals do), but which are managed privately.
The inclusion of public patients removed from elective surgery waiting lists managed by private hospitals will be investigated in the future.
Statistical units are entities from or about which statistics are collected or in respect of which statistics are compiled, tabulated or published.

Source and reference attributes

Submitting organisation: National Health Information Management Group

Metadata items in this Data Set Specification

Metadata item	*Obligation*	*Max occurs*
Elective care waiting list episode—listing date for care, DDMMYYYY	Mandatory	1
Elective surgery waiting list episode—clinical urgency, code N	Mandatory	1
Elective surgery waiting list episode—extended wait patient indicator, code N	Mandatory	1
Elective surgery waiting list episode—indicator procedure, code NN	Mandatory	1
Elective surgery waiting list episode—overdue patient status, code N	Mandatory	1
Elective surgery waiting list episode—surgical specialty (of scheduled doctor), code NN	Mandatory	1
Elective surgery waiting list episode—waiting time (at a census date), total days N[NNN]	Mandatory	1
Establishment—organisation identifier (Australian), NNX[X]NNNNN	Mandatory	1
- Hospital census (of elective surgery waitlist patients)—census date, DDMMYYYY	Mandatory	1

Appendix 3: Survey documentation

Survey of users and data collectors of the National Minimum Data Sets (NMDS) for Elective Surgery Waiting Times

Background

The National Minimum Dataset for Elective Surgery Waiting time commenced in July 1994 with data being reported in Australian Hospital Statistics. It consists of two parts, one for data on patients removed from waiting lists during the financial year (removals data) and one for data on potential patients on the waiting list at the end of each quarter (census data). From the commencement of the METeOR system it has been regarded as two National Minimum Data Sets Elective surgery waiting times (census data) NMDS and Elective surgery waiting times (removals data) NMDS. This survey will cover both.

Please feel free to circulate this survey, a link to which is:
<http://www.aihw.gov.au/hospitals/Survey ESWT NMDS Evaluation LH.doc>.

Supporting material

Attached to this survey are a number of supporting material including:

- Attachment 1. Explanatory notes.
- Attachment 2. Outline of the current version of the National Minimum Data Sets for Elective surgery waiting times.
- Attachment 3. Criteria used by the Health Data Standards Committee to assess inputs to the *National health data dictionary*.

Note: in this report, Attachment 2 is presented in Appendix 2, while attachments 1 and 3 are presented in this appendix as Attachment 3.1 and Attachment 3.2.

Contact details

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.

Name: _____

Position/job title: _____

Unit/section: _____

Organisation: _____

Address: _____

City/town: _____ **State:** _____ **Postcode:** _____

Telephone: _____ **Fax:** _____

E-mail address: _____

Date this survey was completed: _____

For whom are you responding? Please indicate (X) all that apply.

Respondent	
On behalf of yourself	[ ]
On behalf of your unit or section within an organisation	[ ]
On behalf of your organisation	[ ]
Comments	

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. This information will also help us interpret responses to the more specific questions that follow.

1.1 Please indicate (X) the main user group to which you belong.

User group	[X]
State or territory health authority	[ ]
Other state or territory government department	[ ]
Australian Government Department of Health and Ageing	[ ]
Australian Government Department of Veterans' Affairs	[ ]
Other Australian Government department	[ ]
Australian Institute of Health and Welfare	[ ]
Public hospital	[ ]
Private hospital	[ ]
Other health service provider	[ ]
University or other research organisation	[ ]
Private planning consultant	[ ]
Clinical equipment/therapeutic device company	[ ]
Pharmaceutical company	[ ]
Software developer	[ ]
Interest group	[ ]
Other	[ ]
Please specify _____	

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	[ ]
Comparisons and benchmarking	[ ]
Management and purchasing of hospital services	[ ]
Policy advice	[ ]
Health services research	[ ]
Statistical reporting	[ ]
Facility planning	[ ]
Collection and reporting of NMDS-based data	[ ]
Software development	[ ]
Other, please specify _____	[ ]

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 access to hip replacements by state

2.3 Please indicate (X) at which level you use the data.

Level	[X]
Data for one hospital only	[ ]
Data for hospital group (within state/territory or national)	[ ]
Data for state or territory	[ ]
National	[ ]
International	[ ]

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]
National health data dictionary publication	[ ]
National health data dictionary publication online	[ ]
METeOR	[ ]
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]
AIHW *Australian hospital statistics* publication + Internet tables	[ ]
Other AIHW publications	[ ]
AIHW National Elective Surgery Waiting Times Data Collection (external user, *ad hoc* data requests)	[ ]
AIHW National Elective Surgery Waiting Times Data Collection (internal, AIHW user)	[ ]
Hospital database	[ ]
State or territory health authorities' hospitals database	[ ]
State or territory publications	[ ]
Department of Health and Ageing *State of our public hospitals* publication	[ ]
Department of Health and Ageing elective surgery waiting times data sets	[ ]
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	[ ]	[ ]
Weekly	[ ]	[ ]
Monthly	[ ]	[ ]
Occasionally	[ ]	[ ]
Never	[ ]	[ ]

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 13 (in press) and in METeOR (Elective surgery waiting times (census data) NMDS and Elective surgery waiting times (removals data) NMDS.

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 waiting times for elective surgery. 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.

Note: Where variables are listed in both NMDSs they are listed twice (one in each) as there may be differing utility across the different NMDSs.

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
Elective surgery waiting times (census data) NMDS	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
Establishment items								
Establishment—organisation identifier (Australian), NNX[X]NNNNN	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Date items								
Elective care waiting list episode—listing date for care, DDMMYYYY	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hospital census (of elective surgery waitlist patients)—census date, DDMMYYYY	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Descriptor elements								
Elective surgery waiting list episode—indicator procedure, code NN	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
Elective surgery waiting list episode—surgical specialty (of scheduled doctor), code NN	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective surgery waiting list episode—clinical urgency, code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Waiting Time elements								
Elective surgery waiting list episode—extended wait patient indicator, code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective surgery waiting list episode—overdue patient status, code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective surgery waiting list episode—waiting time (at a census date), total days N[NNN]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
Elective surgery waiting times (removals data) NMDS	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
Establishment items								
Establishment—organisation identifier (Australian), NNX[X]NNNNN	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Date items								
Elective surgery waiting list episode—waiting list removal date, DDMMYYYY	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective care waiting list episode—listing date for care, DDMMYYYY	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Descriptor elements								
Elective surgery waiting list episode—clinical urgency, code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
Elective surgery waiting list episode—indicator procedure, code NN	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective surgery waiting list episode—surgical specialty (of scheduled doctor), code NN	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective surgery waiting list episode—reason for removal from a waiting list, code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Wait elements								
Elective surgery waiting list episode—extended wait patient indicator, code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective surgery waiting list episode—overdue patient status, code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
Elective surgery waiting list episode—waiting time (at removal), total days N[NNN]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Supporting Elements and Glossary items

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
Elective care waiting list episode—category reassignment date, DDMMYYYY	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Clinical review	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective care	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective surgery	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
Establishment—organisation identifier (state/territory)	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Establishment—region identifier	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Establishment—Australian state/territory identifier, code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Establishment—sector, code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hospital census	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hospital waiting list	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Data element	Importance				Usefulness			
	Not important	Important	Highly important	Unsure	Not useful	Useful	Highly useful	Unsure
Non-elective care	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective surgery waiting list episode—patient listing status, readiness for care code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Elective care waiting list episode—elective care type, code N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

4. Areas for development

The Institute is interested in obtaining your views on possible areas for development of the NMDS, including new data elements that you feel would make the NMDS more useful, possible changes to the scope, or any other priorities for definitional development.

4.1 Are there any new data elements that should be included in the NMDS?

4.2 Do you have any comments on the scope of the NMDS?

4.3 What do you see as the priorities for definitional development (data elements, data element concepts, scope)?

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 ian.titulaer@aihw.gov.au.

Thank you for your time in completing this survey.

Attachment 3.1: Explanatory notes

This survey seeks your views as users of the National Minimum Data Set for Elective Surgery Waiting Times (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. We 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 AIHW 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 for analysis and planning.

The National Minimum Data Set for Elective Surgery Waiting Times

A National Minimum Data Set is a minimum set of data elements agreed by the National Health Information Group 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 version 13* (in press) and in METeOR (Elective surgery waiting times (census data) NMDS and Elective surgery waiting times (removals data) NMDS.)

The NMDS for Elective Surgery Waiting Times are specific sets of data that are collected on all patients who have either been removed from public hospital waiting lists for elective surgery or are on public hospital waiting lists at a point in time (census data). Census dates are 30 September, 31 December, 31 March and 30 June.

The scope of this NMDS is patients on waiting lists or removed from waiting lists for elective surgery (as defined in the Waiting list category data element) which are managed by public acute hospitals. This will include private patients treated in public hospitals, and may include public patients treated in private hospitals.

Hospitals may also collect information for other care (as defined in the Waiting list category data element), but this is not part of the National Minimum Data Set (NMDS) for Elective surgery waiting times.

Patients on waiting lists or removed from waiting lists managed by hospitals operated by the Australian Defence Force, corrections authorities and Australia's external territories are not currently included.

Census data:

- Data are collected for patients on elective surgery waiting lists who are yet to be admitted to hospital or removed for another reason. The scope is patients on elective surgery waiting lists on a census date who are 'ready for care' as defined in the Elective surgery waiting list episode—patient listing status, readiness for care data element.

Removals data:

- Data are collected for patients who have been removed from an elective surgery waiting list (for admission or another reason). Patients who were 'ready for care' and patients who were 'not ready for care' at the time of removal are included.

Data for these NMDSs are collected at hospitals from patient waiting list, administrative and clinical record systems and forwarded to the relevant state or territory health authority on a regular basis. Data for each financial year and census date are then provided to the AIHW for national collation, on an annual basis. An outline of the current version of the NMDS is provided in *Appendix 2*.

The NMDS forms an important part of the AIHW National Elective Surgery Waiting Times Data Collection (NESWTDC) and informs the annual report *Australian hospital statistics*; as well as state and territory-based hospital data collections.

The latest data available for reporting is for 2003–04 and is based on version 12 of the NHDD. The data currently being collected is based on the most recent version of the NHDD version 13 (HDSC 2006). 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 1994 and has been amended in relatively minor ways since then. However, there have been no comprehensive reviews of the quality and utility of the 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 NHIG has funded the AIHW 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 NMDS for Admitted Patient Mental Health Care conducted in 2003–04 and the evaluation of the NMDS for Public Hospitals Establishments in 2004–05. 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 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 Elective Surgery Waiting Times involves:

Reviewing the 2004–05 Elective Surgery Waiting Times data provided to the AIHW 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 12* and *version 13* (NHDC 2003, HDSC 2006) and in METeOR (Elective surgery waiting times (census data) NMDS and Elective surgery waiting times (removals data) NMDS).

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 the AIHW's 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).

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 SIMC. 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 NHIG, the HDSC assesses data definitions proposed for inclusion in the *National health data dictionary* and makes recommendations to the NHIG 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 (*Attachment 3.2*).

The SIMC, also a standing committee of the NHIG, 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 NHIG.

The NHIG 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 NHIG will be implemented in the jurisdictions in July 2008 at the earliest.

Attachment 3.2: 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:

- not duplicate existing data element definitions in the *National health data dictionary* or, where overlap exists, display greater utility than existing definitions.
- comply with the principles for developing National health data dictionary definitions. This includes presentation according to the specifications for data element definitions and having regard for the key features of a good quality data definition.
- 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).
- indicate the degree to which the data element definitions have been implemented or have been agreed to be implemented by the constituency,
- 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,
- 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 4: Survey respondents

Survey respondents included representatives from:

- ACT Health
- Australian Government Department of Health and Ageing
- Australian Institute of Health and Welfare (Asthma and Arthritis Unit)
- Australian Institute of Health and Welfare (Hospitals Unit)
- Department of Health and Human Services, Tasmania
- Department of Health, Western Australia
- Department of Human Services, South Australia
- Department of Human Services, Victoria
- New South Wales Health
- Queensland Health
- Royal Australasian College of Surgeons

Appendix 5: Projects to standardise the assignment of clinical urgency category

The management of public hospital waiting lists requires that patients with the most urgent need are prioritised to ensure that they receive treatment in a timely manner. However, as noted in *Chapter 6*, the assignment of clinical urgency categories varies among states and territories. Some of the approaches that have aimed to standardise clinical urgency category assignment are summarised below.

Canada

In Canada, issues relating to waiting times and waiting lists were identified as a major problem facing the health system for a number of decades (WCWL 2001). In response to this, a major study involving surveys of hospitals and regional health authorities, along with a review of published and unpublished literature, was conducted under the auspices of Health Canada. The study identified that the absence of standardised criteria and methods to prioritise patients waiting for care resulted in patients being placed and prioritised on waiting lists based on a range of clinical and non-clinical criteria that may have varied across institutions, health regions and provinces (WCWL 2001). Therefore, it was determined that the standardisation of assessment criteria was the best strategy to address these issues (McDonald et al. 1998). As a result, in 1999, the Health Transition Fund of Health Canada sponsored the Western Canada Waiting List (WCWL) Project—a collaborative project that involved 20 partners who effectively represented all provincial and federal governments, medical associations, regional health authorities and researchers in the Western region (Noseworthy & McGurran, 2004).

Western Canada Waiting List Project

The overall objective of the WCWL Project was 'to improve the fairness of the system so that Canadians' access to appropriate and effective medical services is prioritised on the basis of need and potential to benefit' (WCWL 2001). It involved the production of physician-scored point-count tools for assigning priority to patients on waiting lists. The project aimed to develop priority criteria in five significantly different clinical areas: cataract surgery; general surgery procedures; hip and knee replacement; magnetic resonance imaging (MRI) scanning; and children's mental health (WCWL 2001). The priority criteria and scoring systems for these five areas were developed through 'extensive clinical input from panel members and several stages of empirical work assessing their validity and reliability' (WCWL 2001).

In the development phase for the priority tools, the panellists selected criteria items that were considered to be appropriate and relevant when assessing a patient's urgency and potential to benefit from surgery or treatment. The final selected criteria items were (WCWL 2001):

- major clinical factors or criteria relevant to judgments of patients' relative urgency (e.g. degree of pain), as well as clinically appropriate levels within each criterion (e.g. non, mild, moderate, severe) reflecting different degrees of severity
- personal and social role measures designed to be physician-scored, such as ability to work, ability to care for self or dependants, and ability to live independently

- a 10-centimetre visual analogue scale and a category rating item, in which a patient's relative urgency was compared with the average in the clinician's practice, were included to serve as indicators of overall clinical urgency
- a point-count scoring system for the tools; that is, maximum weighted scores on the total of all the criteria would sum to 100 points for each tool. The weights were assigned to each criterion and were based on the criterion's significance in determining a patient's urgency for treatment, and were therefore different for each of the five clinical areas.

Evaluation and refinement of the criteria tools involved numerous validity and reliability tests, pilot testing and public focus groups. Priority tools for the five chosen clinical areas were released in March 2001, with the aim of implementing the tools into at least two regional health authorities (Noseworthy & McGurran, 2004).

The WCWL released a final report in 2005 which discussed the progress and findings in relation to the three aims, including the implementation and evaluation of the priority criteria tools in Western Canada (WCWL 2005). The report outlined a number of characteristics that were found to be associated with successful implementation and evaluation initiatives, including:

- receptive management and steering committees
- familiarity with the tools
- clinical and management champions to promote the use of tools
- belief the tools could be useful in addressing specific aspects of waiting list management
- provincial health authority leadership to develop waitlist management strategies, including use of priority-setting tools
- provincial reports identifying access to services as a priority.

Acceptance of the priority criteria scoring system from clinicians and other staff was identified as one of the key factors in determining the success of the priority system. This includes clinician understanding and acknowledgment that patients need to be prioritised and that the priority criteria tools could do this more effectively than the previous system, along with ensuring that the priority tools would not be an additional burden on staff's work (WCWL 2005). The issue of how to manage patients who were assigned low-priority scores was also recognised in the implementation and evaluation phase of the project, identifying the need to formulate maximum acceptable waiting times for all urgency levels (WCWL 2005). The development of maximum waiting times was therefore incorporated into phase two of the project, with the aim of further developing, validating and modifying the maximum waiting times so that they could be applied to all clinical areas in the future.

In 2006, following the WCWL Project, Canadian Health Ministers issued waiting times benchmarks for seven procedures based on the amount of time that clinical evidence showed as appropriate to wait for a particular procedure. These benchmarks included (CIHI 2006):

- surgical repair of hip fracture within 48 hours
- cardiac bypass surgery within 2 weeks, depending on how urgently care was required
- hip replacements within 26 weeks
- knee replacements within 26 weeks
- surgery to remove cataracts within 16 weeks for high-risk patients.

New Zealand Priority Criteria Project

As part of major health reforms in New Zealand, in 1992 the National Advisory Committee on Health and Disability proposed the replacement of waiting lists with booking systems (Ministry of Health 2000). This led to the formation of the New Zealand Priority Criteria Project, which had as its aim, the development of standardised sets of criteria to assess the extent of benefit expected from elective surgery procedures (Hadorn & Holmes 1997).

The project used a number of methods in the development of the clinical priority assessment criteria. These included a literature review; professional advisory groups for each procedure, selection and weighting of the criteria; and pilot testing and refinement of weights based on test results (Hadorn & Holmes 1997). As a result, standardised clinical priority criteria were developed for five common elective surgery procedures, to serve the following purposes (Hadorn & Holmes 1997):

- ensure that the process used to define priority was fair and consistent across New Zealand
- permit the assessment and comparison of need, casemix and severity
- assist the regional health authorities in developing new booking strategies, including target booking times for patients with defined levels of priority
- permit comparison of waiting times across regional health authorities
- ensure that social values were integrated in the decision making process in an appropriate and transparent manner
- provide the framework for the national health committee to define maximum acceptable waiting times for patients with defined levels of priority, as well as core levels of each service
- make possible national studies on the health outcomes experienced by patients who did and did not receive the services.

The assessment criteria varied depending on the factors that influenced the urgency and need for treatment. Similar to the WCWL priority scores, scores could not be compared across the clinical areas due to differences in indicators and weights.

The clinical priority assessment criteria (CPAC) played a role in the wider project reforming elective surgery waiting list management in New Zealand. Essentially, this could be seen as a system to create uniformity of urgency assignment for specific procedures, to inform a commitment to treatment within a specific time frame (6 months).

CPAC were developed for 23 specialties including cardiac surgery, cardiology, diabetes, endocrinology, gastroenterology, general medicine, general surgery, gynaecology, haematology, dental and oral maxillo-facial surgery, neurosurgery, oncology, ophthalmology, orthopaedics, otolaryngology (ENT [ear, nose and throat])/head and neck surgery, paediatric medicine, paediatric surgery, plastic and reconstructive surgery, renal medicine, respiratory medicine, rheumatology, thoracic surgery and urology.

Western Australia Waiting List Urgency Project

The Western Australian project focused on reviewing and modifying the national clinical urgency categories. The overall aim of the project was to develop urgency guidelines for patients awaiting elective surgery that would further clarify requirements for assigning urgency for each indicator procedure (Department of Health, Western Australia 1996). The

urgency guidelines were based on the results from a project study that examined the practices of assigning urgency categories to patients on elective surgery waiting lists in five Perth teaching hospitals over the last 6 months of 1995 (Department of Health, Western Australia 1996). As with the Canadian and New Zealand projects, urgency guidelines were developed under the support and direction of relevant health professionals. Other methods utilised were pilot studies, pre-tests and general discussion groups.

As an outcome, specific guidelines for 15 indicator procedures were developed to assist in the assignment of one of the three national clinical urgency categories, for utilisation in Western Australian public hospitals. These guidelines incorporated the upper waiting time limits specified in the NHDD definitions.

Table A5.1 presents the guidelines for hysterectomy. The first and last dot points illustrate the basic components of the guidelines developed for most of the other indicator procedures. However, for hysterectomy, specific guidelines pertaining to carcinomas were also included as they were of particular importance when determining a patient's urgency for hysterectomy. The guidelines developed for the other indicator procedures do not give specific guidance in urgency assignment based on the presence of a particular condition or aspect of functioning.

Table A5.1: Recommended guidelines for hysterectomy, Western Australia

Patients assigned an urgency category while on waiting list for hysterectomy may be:	
Category 1	Admission desirable within 30 days
Category 2	Admission desirable within 90 days
Category 3	Admission desirable within 1 year

- The guidelines are based on factors such as degree of pain, dysfunction and disability caused by the condition and its ability to deteriorate into an emergency.
- If the hysterectomy is being performed for invasive carcinoma of the uterus, unless strongly indicated by other factors, assign Category 1.
- If the hysterectomy is for non-invasive carcinoma of cervix or uterus, unless strongly indicated by other factors, assign Category 2.
- If not admitted within 1 year, there should be a clinical review of the patient.

Source: Department of Health, Western Australia 1996

It is of note that all of the guidelines (except coronary artery bypass graft which advises to only assign *Category 1*) refer to the degree of pain, dysfunction and disability caused by the condition (as in the NHDD specification). This reflects the broad clinical and social components that were incorporated into the priority criteria tools developed by the Canadian and New Zealand projects (Department of Health, Western Australia 1996).

The Orthopaedic Waiting List Project (Victoria)

The Victorian Department of Human Services Orthopaedic Waiting List Project summary report recognised that previous prioritisation methods were not necessarily sensitive to the need of the individual patient and that high-priority patients may not receive timely treatment (DHS 2006).

The initial phase of the project resulted in the development of the Multi-attribute Arthritis Prioritisation Tool (MAPT) and a service delivery model for the management of patients while awaiting hip and knee replacement surgery. The service delivery model involved a multidisciplinary team and provided for regular monitoring and continuity of care from the time of initial referral to the time of surgery.

The second phase of the project included piloting the MAPT at four Victorian hospital sites, with a view to future implementation across the Victorian health-care system. The pilot implementation of the MAPT and the service delivery model identified a range of benefits including (Osborne et al. 2007):

- more appropriate use of services, including the use of conservative management for patients not requiring surgery
- early assessment and regular monitoring to achieve timely referral to appropriate care
- prioritisation to match patient need
- improved patient satisfaction.

The MAPT and the service delivery have also been implemented in South Australia in the Repatriation General Hospital which undertakes about 40% of all hip and knee arthroplasty procedures in that state. The benefits identified included (Clarke et al. 2007):

- conservative management of the patient's condition while waiting
- management of comorbidities—resulting in less cancellation of surgery due to unfitness of the patient
- a reduction in the number of specialist consultations (per patient)
- a reduction in average length of stay (in hospital).

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