National Hospital Morbidity Database Data Quality Statement: 2010-11

Identifying and definitional attributes

Metadata item type: Quality Statement

Synonymous names: NHMD

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Registration status:
- AIHW Data Quality Statements, Superseded 05/07/2013

Data quality

Quality statement summary:

The National Hospital Morbidity Database (NHMD) is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals. It is a comprehensive dataset that has records for all episodes of admitted patient care from essentially all public and private hospitals in Australia.

The data supplied are based on the National Minimum Data Set (NMDS) for Admitted patient care and include demographic, administrative and length of stay data, as well as data on the diagnoses of the patients, the procedures they underwent in hospital and external causes of injury and poisoning.

In 2010–11, diagnoses and external causes of injury and poisoning were recorded using the seventh edition of the International statistical classification of diseases and related health problems, 10th revision, Australian Modification (ICD-10-AM). Procedures were recorded using the seventh edition of the Australian Classification of Health Interventions (ACHI).

The counting unit for the NHMD is the ‘separation’. Separation is the term used to refer to the episode of admitted patient care, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute care to rehabilitation).

The NHMD contains records from 1993–94 to 2010–11. For each reference year, the NHMD includes records for admitted patient separations between 1 July and 30 June.

Summary of key issues

• The National Hospital Morbidity Database (NHMD) is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.

• A record is included for each separation, not for each patient, so patients who separated more than once in the year have more than one record in the NHMD.

• For 2010–11, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private day hospital facilities in the ACT, the single private free-standing day hospital facility in the NT, and a small private hospital in Victoria.

• Hospitals may be re-categorised as public or private between or within years.

• There is apparent variation between states and territories in the use of statistical discharges and associated assignment of care types.

• There was variation between states and territories in the reporting of separations for Newborns (without qualified days):

– For 2010–11, private hospitals in Victoria did not report most Newborn episodes without qualified days, therefore the count of newborn episodes will be underestimated.

– South Australian private hospitals are not required to provide records for Newborn episodes without qualified days.

– For Tasmania, where a newborn's qualification status was considered qualified at any point during the episode of care, the entire episode was reported as qualified days. As a consequence, the average length of stay for Newborn episodes with qualified days only in Tasmanian public hospitals is not directly comparable with that in other states.

• Data on state of hospitalisation should be interpreted with caution because of cross-border flows of patients. This is particularly the case for the Australian Capital Territory. In 2010–11, about 23% of separations for Australian Capital Territory hospitals were for patients who resided in New South Wales.

• Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.

• Caution should be used in comparing diagnosis, procedure and external cause data over time, as the classifications and coding standards for those data can change over time. In particular, in 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics and imaging procedures.

Institutional environment:

The Australian Institute of Health and Welfare (AIHW) is a major national agency set up by the Australian Government under the Australian Institute of Health and Welfare Act 1987 to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent statutory authority established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health and Ageing portfolio.

The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.

The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.

One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.

The Australian Institute of Health and Welfare Act 1987, in conjunction with compliance to the Privacy Act 1988, (Commonwealth) ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.

For further information see the AIHW website <www.aihw.gov.au>

Data for the NHMD was supplied to the AIHW by state and territory health authorities under the terms of the National Health Information Agreement (see the following link).

<http:// /content/index.phtml/itemId/182135>

The state and territory health authorities received these data from public and private hospitals as stated below. States and territories use these data for service planning, monitoring and internal and public reporting. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

Timeliness:

The reference period for this data set is 2010–11. This includes records for admitted patient separations between 1 July 2010 and 30 June 2011.

States and territories provided a first version of 2010–11 data to the AIHW at the end of December 2011. The data were published on 30 April 2012. Data provision and publication were in accordance with agreed timetables.

Accessibility:

The AIHW provides a variety of products that draw upon the NHMD. These include the Australian hospital statistics suite of products with associated Excel tables which can be accessed on the AIHW website http://www.aihw.gov.au/hospitals/.

Interpretability:

Metadata information for the National Minimum Data Sets that are the basis for the AIHW National Hospital Databases and for the National Healthcare Agreement Performance Indicator 'Healthcare-associated Staphylococcus aureus (including Methicillin Resistant Staphylococcus aureus (MRSA)) bacteraemia in acute care hospitals' are published in the AIHW's online metadata repository—METeOR, and the National health data dictionary.

METeOR and the National health data dictionary can be accessed on the AIHW website:

</content/index.phtml/itemId/181162>

<http://www.aihw.gov.au/publication-detail/?id=6442468385>

Relevance:

The purpose of the NHMD is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NHMD is episodes of care for admitted patients in all public and private acute and psychiatric hospitals, free standing day hospital facilities and alcohol and drug treatment centres in Australia. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia’s off-shore territories are not in scope but some are included.

The hospital separations data do not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments. Patients in these settings may be admitted subsequently, with the care provided to them as admitted patients being included in the NHMD.

The NHMD is the source of information for 12 performance indicators for the National Healthcare Agreement and other national performance reporting.

Although the NHMD is a valuable source of information on admitted patient care, the data have limitations. For example, variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions (such chemotherapy and endoscopies).

Accuracy:

States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. Where possible, data in individual data sets are checked with data from other data sets. Potential errors are queried with jurisdictions, and corrections and resubmissions may be made in response to these edit queries. The AIHW does not adjust data to account for possible data errors or missing or incorrect values, except as stated.

Although there are national standards for data on admitted patient care, statistics may be affected by variations in admission and reporting practices across states and territories.

There is apparent variation between states and territories in the use of statistical discharges and associated assignment of care types.

For 2010–11, principal diagnosis information was not provided for 882 public hospital separations and 3,306 private hospital separations.

There was variation between public and private hospitals and, for private hospitals, between states and territories in the timing of the implementation of the seventh edition ICD-10-AM coding standards for obstetrics cases in 2010–11. Therefore, the principal diagnosis data for obstetrics cases are not comparable between public and private hospitals, and are not comparable over time.

There was variation between states and territories in the reporting of separations for Newborns (without qualified days):

• For 2010–11, private hospitals in Victoria did not report most Newborn episodes without qualified days, therefore the count of newborns will be underestimated.

• South Australian private hospitals are not required to provide records for Newborn episodes without qualified days.

• For Tasmania, where a newborn's qualification status was considered qualified at any point during the episode of care, the entire episode was reported as qualified days. As a consequence, the average length of stay for Newborn episodes with qualified days only in Tasmanian public hospitals is not directly comparable with that in other jurisdictions.

The quality of the data reported for Indigenous status are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA and NT (public hospitals only). National totals include these six jurisdictions only. Indigenous status data reported for public hospitals in Tasmania and the ACT should be interpreted with caution until further assessment of Indigenous identification is completed.

Not all states provided information on the area of usual residence of the patient in the form of a Statistical Local Area (SLA) code for all presentations. In addition, not all states and territories provided the version of SLA specified in the NMDS.

Where necessary, the AIHW mapped the supplied area of residence data for each presentation to the same SLA and to remoteness area categories based on the ABS ASGC Remoteness Structure for 2006. This mapping was done on a probabilistic basis. Because of the probabilistic nature of the mapping, the SLA and remoteness areas data for individual records may not be accurate; however, the overall distribution of records by geographical area is considered useful.

Socioeconomic status is based on the reported area of usual residence of the patient. The SEIFA categories for socioeconomic status are assigned at the national level, not at the individual state/territory level.

Coherence: The NHMD includes data for each year from 1993–94 to 2010–11.

The data reported for 2010–11 are broadly consistent with data reported for the NHMD for previous years.

Time series presentations may be affected by changes in admission practices, particularly for same-day activity such as dialysis, chemotherapy and endoscopy.

Between 2009–10 and 2010–11:

• there was a decrease in private hospital separations for Victoria due to the reclassification of some same-day mental health care as non-admitted patient activity (which was previously classified as admitted patient activity)

• there was a decrease in separations (and patient days) for psychiatric care reported for Tasmanian public hospitals due to the categorisation of some care as residential care. In previous years, this care was categorised as admitted patient care.

Changes in the ICD-10-AM/ACHI classifications and the associated Australian Coding Standards may affect the comparability of the data over time. In particular, in 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics and imaging procedures.

Data products

Implementation start date: 17/01/2013

Relational attributes

Related metadata references: Has been superseded by Data quality statement: National Hospital Morbidity Database 2011–12

- AIHW Data Quality Statements, Superseded 02/05/2014

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