National Agreement performance information 2008-09

National Healthcare Agreement

Steering Committee
for the Review of
Government
Service Provision

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Steering Committee for the
Review of Government
Service Provision

Mr Paul McClintock AO
Chairman
COAG Reform Council
Level 24, 6 O'Connell Street
SYDNEY NSW 2000

Dear Mr McClintock

In accordance with Schedule C of the *Intergovernmental Agreement on Federal Financial Relations* I am pleased to submit to you the Steering Committee's report on the performance data for the *National Healthcare Agreement*.

This report is one of four Steering Committee reports that provide performance data on the National Agreements related to healthcare, affordable housing, disability and Indigenous reform. A separate appendix provides additional contextual information to assist in interpreting the information in this report.

This report was produced with the assistance of Australian, State and Territory Government departments and agencies, and a number of statistical bodies. The Steering Committee would like to record its appreciation for the efforts of all those involved in the development of this report.

Yours sincerely

Gary Banks.

Gary Banks AO
Chairman

24 December 2009

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This Report

The Steering Committee for the Review of Government Service Provision was requested by COAG to collate information relevant to the performance indicators in the National Agreements, and to provide it to the COAG Reform Council (CRC). The CRC subsequently requested the Steering Committee to include information on all categories of performance information set out in each National Agreement, including those variously referred to as performance indicators, progress measures, outputs, benchmarks and targets.

The information in this report is an input to the COAG Reform Council's analysis. To facilitate the COAG Reform Council's work, this report contains the following information:

- background and roles and responsibilities of various parties in National Agreement performance reporting
- contextual information relevant to the *National Healthcare Agreement*
- overview of the outputs, progress measures, performance benchmarks key issues in performance reporting for the *National Healthcare Agreement*
- individual indicator specifications and summaries of data issues
- attachment tables containing the performance data. Attachment tables are also available in excel format.

The original data quality statements provided by data collection agencies are also provided as an attachment to this report.

Steering Committee

This Report was produced under the direction of the Steering Committee for the Review of Government Service Provision (SCRGSP). The Steering Committee comprises the following current members:

Mr Gary Banks AO	Chairman	Productivity Commission
Mr Ron Perry	Aust. Govt	Department of Prime Minister and Cabinet
Ms Sue Vroombout	Aust. Govt	Department of the Treasury
Mr John Ignatius	Aust. Govt	Department of Finance and Administration
Ms Nazli Munir	NSW	Department of Premier and Cabinet
Mr Mark Ronsisvalle	NSW	Department of Treasury
Ms Katy Haire	Vic	Department of the Premier and Cabinet
Mr Tony Bates	Vic	Department of Treasury and Finance
Ms Sharon Bailey	Qld	Department of the Premier and Cabinet
Mr John O'Connell	Qld	Department of Treasury
Ms Lyn Genoni	WA	Department of the Premier and Cabinet
Mr David Christmas	WA	Department of Treasury and Finance
Mr Ben Wilson	SA	Department of the Premier and Cabinet
Mr David Reynolds	SA	Department of Treasury and Finance
Ms Rebekah Burton	Tas	Department of Premier and Cabinet
Ms Pam Davoren	ACT	Chief Minister's Department
Ms Anne Coleman	NT	Department of the Chief Minister
Mr Tony Stubbin	NT	NT Treasury
Mr Trevor Sutton		Australian Bureau of Statistics
Dr Penny Allbon		Australian Institute of Health and Welfare

People who also served on the Steering Committee during the production of this Report include:

Ms Penelope McKay	Vic	Department of Treasury and Finance
Ms Rebecca Brown	WA	Department of Treasury and Finance

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Box 1 **Attachment tables**

Data for the performance indicators in this report are presented in a separate set of attachment tables. Attachment tables are identified in references throughout this report by an ‘NHA’ suffix (for example, table NHA.3.1).

About this report

Background to National Agreement reporting

In November 2008, the Council of Australian Governments (COAG) endorsed a new Intergovernmental Agreement on Federal Financial Relations (IGA) (COAG 2009a). The Ministerial Council for Federal Financial Relations has general oversight of the operations of the IGA [para. A4(a)].

The IGA included six new National Agreements (NAs):

- *National Healthcare Agreement*
- *National Education Agreement*
- *National Agreement for Skills and Workforce Development*
- *National Affordable Housing Agreement*
- *National Disability Agreement*
- *National Indigenous Reform Agreement.*

COAG has also agreed to a new form of payment — National Partnership (NP) payments — to fund specific projects and to facilitate and/or reward states and territories that deliver on nationally significant reforms.

Five of the NAs are associated with a national Specific Purpose Payment (SPP) that can provide funding to the states and territories for the sector covered by the NA. These five SPPs cover schools, vocational education and training, disability services, healthcare and affordable housing. The *National Indigenous Reform Agreement* is not associated with a specific SPP, but draws together Indigenous elements from the other NAs and is associated with several NP agreements.

Under the reforms, each NA contains the objectives, outcomes, outputs and performance indicators (also referred to as progress measures) for each sector, and clarifies the respective roles and responsibilities of the Commonwealth and the states and territories in the delivery of services. The Agreements also contain a range of categories of performance information, variously named ‘outputs’, ‘progress measures’, ‘performance indicators’, ‘performance benchmarks’ and ‘targets’. The performance of all governments in achieving mutually agreed outcomes and benchmarks specified in each NA will be monitored and assessed by the COAG Reform Council (CRC).

National Agreement reporting roles and responsibilities

The IGA states that:

> The performance reporting framework for the National Agreements is based on:
>
> (a) high-level performance indicators for each National Agreement;
>
> (b) the Steering Committee for the Review of Government Service Provision (the Steering Committee) having overall responsibility for collating the necessary performance data; and
>
> (c) the [CRC] publishing performance data relating to National Agreements, and National Partnerships to the extent that they support the objectives in National Agreements, within three months of receipt from the Steering Committee, along with a comparative analysis of this performance information that:
>
> i. focuses on the high-level National Agreement performance indicators;
>
> ii. highlights examples of good practice;
>
> iii. highlights contextual differences between jurisdictions which are relevant to interpreting the data; and
>
> iv. reflects COAG’s intention to outline transparently the contribution of both levels of government to achieving performance benchmarks and to achieving continuous improvement against the outcomes, outputs and performance indicators. [para. C5]

The IGA further specifies that:

> The *Steering Committee* will provide the agreed performance information to the COAG Reform Council, desirably within three months and no later than six months after the reporting period to which the data relates. [para. C10]
>
> Performance information in respect of the education and training sectors will be on a calendar year basis, commencing with performance information for 2008, and for all other sectors will be on a financial year basis, commencing with performance information for 2008-09. [para. C11]
>
> … the *Steering Committee* will comment on the quality of the performance indicator data using quality statements prepared by the collection agencies which set out the quality attributes of the data using the Australian Bureau of Statistics' Quality Framework. [para. C12]

Role of the CRC

The IGA states that:

> … the [CRC] will report to the Prime Minister … on:
>
> a) the publication of performance information for all jurisdictions against National Agreement outcomes and performance benchmarks;
>
> b) production of an analytical overview of performance information for each National Agreement, and National Partnership to the extent it supports the objectives in a National Agreement, noting that the [CRC] would draw on a range of sources, including existing subject experts;
>
> c) independent assessment of whether predetermined performance benchmarks have been achieved before an incentive payment to reward nationally significant reforms under National Partnerships is made;
>
> d) monitoring the aggregate pace of activity in progressing COAG's agreed reform agenda; and
>
> e) other matters referred by COAG. [para. A11]

The IGA further specifies that:

> The [CRC] will provide annual reports to COAG containing the performance data. It will also report its own comparative analysis of the performance of governments in meeting the objectives of the National Agreements. The reports will also highlight examples of good practice and performance so that, over time, innovative reforms or methods of service delivery may be adopted by other jurisdictions. The parties [to the IGA] will provide the [CRC] the information necessary for it to fulfil its role, as directed by COAG. [para. C14]
>
> The [CRCs] reports should be provided to COAG no later than three months after receiving the performance information from the *Steering Committee*. [para. C15]

> In preparing its performance information reports, the [CRC] may draw upon other data collection agencies and subject experts it considers relevant to its work. [para. C16]

Role of the Steering Committee

The Steering Committee is required to report twice yearly to the CRC on performance under the National Agreements. The IGA could be read to imply a further role for the Steering Committee in providing information on performance data for 'National Partnerships to the extent that they support the objectives in National Agreements' [IGA, para. C5(c)]. Pending clarification of the Steering Committee's role in relation to NP reporting, performance indicators from NP agreements have not been included in this first tranche of reporting.

Reports from the Steering Committee to the CRC are required:

- by end-June on the education and training sector (*National Education Agreement* and the *National Agreement for Skills and Workforce Development*), commencing with performance information for 2008
- by end-December on the other sectors (*National Healthcare Agreement*, the *National Affordable Housing Agreement*, the *National Disability Agreement* and the *National Indigenous Reform Agreement*), commencing with performance information for 2008-09
- including the provision of quality statements prepared by the collection agencies (based on the Australian Bureau of Statistics' (ABS) data quality framework).

Role of Ministerial Councils and COAG Working Groups

The IGA states that:

> The role of relevant Ministerial Councils, other than the Ministerial Council for Federal Financial Relations, and relevant COAG Working Groups with respect to [the IGA] includes recommending to COAG on:
>
> a) development of objectives, outcomes, outputs and performance indicators for National Agreements; and
>
> b) proposing new specific projects and reforms which could be supported by National Partnerships. [para. A9]

Ministerial Councils may also be consulted by the Ministerial Council for Federal Financial Relations, in relation to its roles in:

- maintaining a register of the national minimum data sets [para. C28]

- oversighting progress in improving the quality and timeliness of indicator data and the coordination of improvements in data collection processes, data quality and the timeliness of performance reporting for the National Performance Reporting System [para. C29].

Role of data collection agencies

Data collection agencies are responsible for providing the required data to the Steering Committee, with its responsibility under the IGA for collating the NA performance data. In addition, the data collection agencies are also responsible for preparing data quality statements '… which set out the quality attributes of the data using the ABS' Quality Framework' [para. C12].

As noted above, data collection agencies may also be called upon by the CRC, as the CRC prepares its performance information reports [para. C16].

Data collection agencies may also be consulted by the Ministerial Council for Federal Financial Relations, in relation its roles in:

- maintaining a register of the national minimum data sets [para. C28]
- oversighting progress in improving the quality and timeliness of indicator data and the coordination of improvements in data collection processes, data quality and the timeliness of performance reporting for the National Performance Reporting System [para. C29].

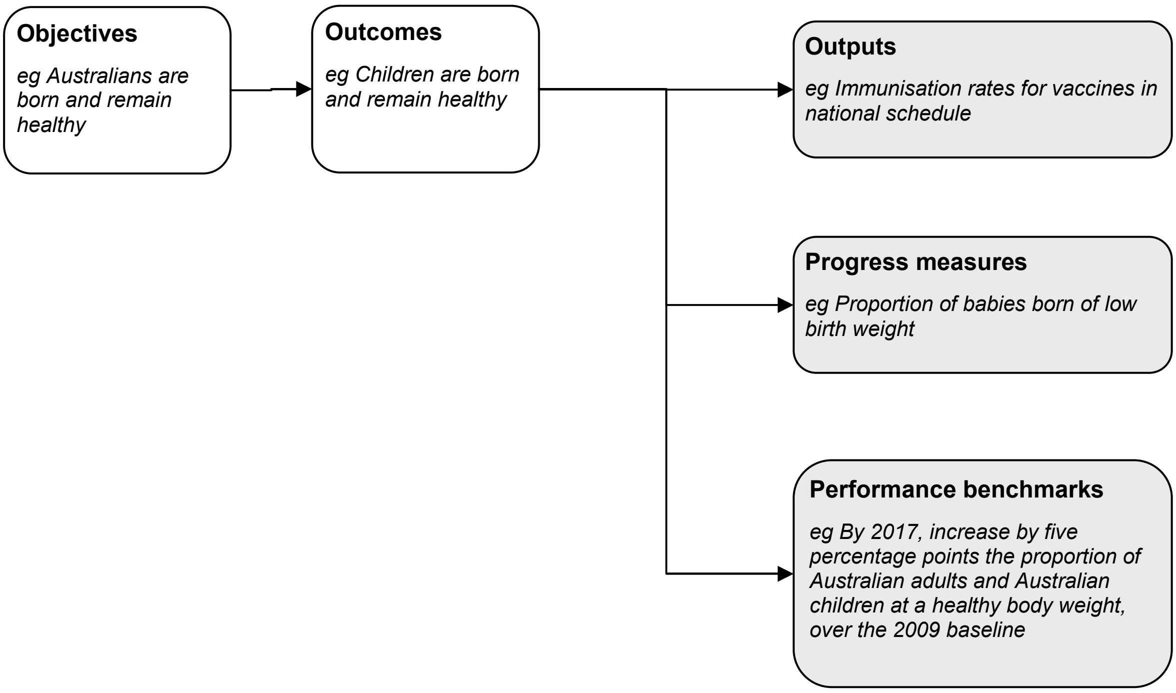
Performance reporting

The Steering Committee is required to collate performance information for the *National Healthcare Agreement* (NHA) (COAG 2009b) and provide it to the CRC no later than 31 December 2009 (and annually thereafter).

The IGA states that the Steering Committee has responsibility for collating the necessary performance data for the reporting against the NAs [IGA para. C5(b)]. The CRC requested the Steering Committee to provide information on all performance categories in the National Agreements (variously referred to as outputs, progress measures, performance indicators, performance benchmarks and targets).

The NHA includes the performance categories of outputs, progress measures and performance benchmarks (the performance indicators in this report are the measures that have been selected to inform outputs and progress measures). The links between the objectives, outcomes and associated performance categories in the NHA are illustrated in figure 1.

Figure 1 **Performance reporting**[a]



[a] Shaded boxes indicate performance information included in this report. Only one item is listed as an example of the relevant performance categories.

This report includes available data for:

- baseline information for NHA performance benchmarks
- baseline information for NHA performance indicators.

Data are in respect of the baseline reporting period of the 2008-09 financial year (where 2008-09 data are not available, data for the most recent reporting period have been included).

In addition, this report includes comment by the Steering Committee on the quality of the reported data based on the data quality statements, and identifies areas for development of NHA outputs, progress measures and performance benchmarks. Box 2 identifies the key issues in reporting on the performance categories in the NHA. This report contains the original data quality statements (DQSs) completed by relevant data collection agencies.

A separate appendix (*National Agreement performance information 2008-09: Appendix — Health, Affordable housing, Disability and Indigenous Reform*) provides general contextual information about each jurisdiction, to assist interpretation of the performance data. Contextual information is provided on population size and trends, family and household characteristics, socioeconomic status and general economic indicators.

Box 2 **Key issues in reporting against the NHA**

General comments

- There is a large number of indicators in the NHA (70 in total). Development of a conceptual framework that links high level health outcomes with health system outputs would assist in understanding whether the NHA has achieved the objectives agreed by COAG, and provide the potential for rationalisation of indicators.
- Further work is required to improve disaggregation of data by Indigenous status and socioeconomic status (SES). Improving reporting on Indigenous people and for SES will assist in informing social inclusion beyond the indicators identified under the social inclusion objective.
- There are limited data on private hospitals, and in many cases comparisons can only be made for peer group A and B public hospitals. Further work is required to ensure hospital data are representative of all hospitals.

Performance benchmarks

- Of the nine performance benchmarks, three could not be reported against, as measures have yet to be developed or appropriate data sources were not available.

(Continued next page)

Box 2 **(continued)**

- The six performance benchmarks that are fully or partly reported against relate to performance indicators (and five source data from related performance indicator attachment tables).

Performance indicators (progress measures and outputs)

- Of the 70 performance indicators, 13 were unable to be reported against, as measures were yet to be agreed or appropriate data sources were not available.
- Of the 57 indicators reported against, 29 were reported against using interim or proxy indicators.
- Of the 57 indicators reported against, nine sourced data from hospital data collections that did not include all public and private hospitals. Further work is required to expand the scope to all hospitals, or to construct an appropriate method to ensure data are representative of all hospitals.
- Assessing and improving the quality of reporting by Indigenous status and SES is a priority:
  - 21 of 57 reported indicators could not be reported by Indigenous status
  - 23 of 57 reported indicators could not be reported by SES.
- Indigenous identification in Medicare (MBS) data (relevant to eight indicators) is voluntary. The data significantly underestimate Indigenous utilisation and data disaggregated by Indigenous status were not available for this report. The Steering Committee was advised that, for future reports, an adjustment factor should be available to apply to the data to enable reporting by Indigenous status.
- Of the 57 performance indicators reported against, 10 indicators did not have any annual data available for reporting. Baseline data (2008 or 2008-09) was not available for 44 indicators, though 2007-08 data were available for 23 of these indicators. Further work is required to ensure availability of more timely data.
- Data from sample surveys where the sample is relatively small can provide results which are not meaningful. For example, the ABS National Health Survey (NHS) can sometimes result in nil or confidentialised returns for disaggregations in the NT. Examination of the sample sizes in such surveys may need to be undertaken.
- Of the 57 reported indicators, nine used sample surveys where the relative standard errors (RSEs) were greater than 25 per cent for some disaggregations. A RSE of less than 25 per cent is generally regarded as an acceptable standard for estimates at a particular point in time. However this might not be adequate for measuring change over time. Small year to year movements may be difficult to detect if the size of the standard errors is large compared to the size of the difference between the estimates.
- Multiple data sources have been used to construct measures for some indicators in this report. Comments on the comparability of different data sources within a measure have been provided where applicable.

Context for National Healthcare Agreement performance reporting

The overarching objective of the NHA is 'improving health outcomes for all Australians and the sustainability of the Australian health system' [NHA para. 12]. The NHA identifies the long-term objectives of Commonwealth, State and Territory governments as:

(a) Prevention: Australians are born and remain healthy

(b) Primary and community health: Australians receive appropriate high quality and affordable primary and community health services

(c) Hospital and related care: Australians receive appropriate high quality and affordable hospital and hospital related care

(d) Aged care: Older Australians receive appropriate high quality and affordable health and aged care services

(e) Patient experience: Australians have positive health and aged care experiences which take account of individuals circumstances and care needs

(f) Social inclusion and Indigenous health: Australia's health system promotes social inclusion and reduces disadvantage, especially for Indigenous Australians

(g) Sustainability: Australians have a sustainable health system [NHA para. 13].

Underlying these objectives are a number of outcomes [NHA para. 16]:

- Prevention
  - Children are born and remain healthy
  - Australians have access to the support, care and education they need to make healthy choices
  - Australians manage the key risk factors that contribute to ill health
- Primary and community health
  - The primary healthcare needs of all Australians are met effectively through timely and quality care in the community
  - People with complex care needs can access comprehensive, integrated and coordinated services
- Hospital and related care
  - Australians receive high quality hospital and hospital related care that is appropriate and timely

- Aged care
  - Older Australians receive high quality, affordable health and aged care services that are appropriate to their needs and enable choice and seamless, timely transition within and across sectors
- Patient experience
  - All Australians experience best practice care suited to their needs and circumstances informed by high quality health information
  - Patients experience seamless and safe care when transferring between settings
- Social inclusion and Indigenous health
  - Indigenous Australian and those living in rural and remote areas or on low incomes achieve health outcomes comparable to the broader population
- Sustainability
  - Australians have a sustainable health system that can respond and adapt to future needs.

An overview of health services in Australia can be found in the *Report on Government Services 2009*, Health Preface (SCRGSP 2009b) (the 2010 Report, due for release on 29 January 2010, will contain updated information). The Health Preface outlines government roles and responsibilities, funding arrangements, and the size and scope of the health sector. It also provides some context for Indigenous health issues.

Due to the large size and scope of the health sector, the information provided in the remainder of this section focuses on a broad overview of the key factors that should be considered in interpreting the performance of the health sector. These factors are categorised according to the seven objectives of the NHA.

Prevention

The long-term objective of prevention in the NHA is that ‘Australians are born and remain healthy’ [NHA para. 13]. Prevention in relation to healthcare is defined as ‘action to reduce or eliminate the onset, causes, complications or recurrence of disease’ (Russell et. al 2008). It represents the investment made in people’s health with the aim of reducing illness, disease and injury, and the associated costs and reduced productivity, for the longer term. However, the health of individuals and populations is influenced and determined by many factors, which act in various combinations (AIHW 2008b).

The determinants of health can be analysed from the point of view of ‘risk factors’ and/or ‘protective factors’. Risk factors are factors that increase the risk of ill health (for example, tobacco smoking), while protective factors are factors that decrease the risk of ill health (for example, good nutrition).

The Minister for Health and Ageing, the Hon Nicola Roxon, launched the report of the National Preventative Health Taskforce on 1 September 2009. The taskforce recommended a range of interventions aimed at reducing the chronic disease burden associated with three lifestyle risk factors — obesity, tobacco and alcohol. The Strategy set a number of ambitious targets to be achieved by 2020:

- halt and reverse the rise in overweight and obesity
- reduce the prevalence of daily smoking to 10 per cent or less
- reduce the proportion of Australians who drink at short-term risky/high-risk levels to 14 per cent, and the proportion of Australians who drink at long-term risky/high-risk levels to 7 per cent
- contribute to the ‘Close the Gap’ target for Indigenous people, reducing the life expectancy gap between Indigenous and non-Indigenous people (NPHT 2009).

The Strategy complements the COAG *National Partnership Agreement on Preventive Health* (COAG 2008a). The National Partnership Agreement has been established to address the rising prevalence of lifestyle related chronic diseases, by:

- laying the foundations for healthy behaviours in the daily lives of Australians through social marketing efforts and the national roll out of programs supporting healthy lifestyles; and
- supporting these programs and the subsequent evolution of policy with the enabling infrastructure for evidence-based policy design and coordinated implementation (COAG 2008a).

The indicators for the prevention objective in the NHA focus on understanding and managing the key risk factors that are modifiable, including early detection. For example, although age is a major risk factor for many health conditions, it is not modifiable, whereas tobacco smoking is modifiable. However, it can be difficult for some Australians to make healthy choices in the way they live their lives because of their socioeconomic circumstances or their living environment (NHHRC 2009).

There are numerous links between preventative healthcare and other objectives of the NHA that are informed by other indicators. For example, trends in potentially preventable hospitalisations and children’s hearing loss can inform whether prevention is having a longer term impact.

Primary and community health

The long-term objective of primary and community health is that 'Australians receive appropriate high quality and affordable primary and community health services' [NHA para. 13]. The primary and community health sector is the part of the healthcare system most frequently used by Australians. It contributes to preventative health care, and is important in the detection and management of illness and injury, through direct service provision and referral to acute (hospital) or other healthcare services as appropriate (SCRGSP 2009b). Efficiency of the health care system is heavily dependent on primary health care to ensure that individuals progress to other parts of the system only when required (Duckett 2007).

The indicators in the NHA focus on access to primary and community health services, and the impact of those services on other health services. For example, access to and quality of service provided by GPs could influence presentations to hospital emergency departments and potentially preventable hospitalisations. Ultimately, the effectiveness of primary and community health services will affect the community's health outcomes, and be reflected in measures such as life expectancy and infant/young child mortality.

More information on government roles and responsibilities, funding arrangements, and size and scope of the primary and community health sector can be found in the *Report on Government Services 2009*, chapter 11, Primary and community health (SCRGSP 2009b).

Hospital and related care

The long-term objective of hospital and related care is that 'Australians receive appropriate high quality and affordable hospital and hospital related care' [NHA para. 13]. Hospitals are key health institutions in Australia, accounting for around one-third of health expenditure, and also providing professional education (Duckett 2007).

As at June 2008 the Australian hospital sector comprised of:

- 1314 hospitals, of which 762 were public, 280 were private and 272 were private day surgery facilities
- 742 public acute hospitals varying from large metropolitan hospitals with a wide variety of specialist services to small remote community hospitals
- 20 public psychiatric hospitals providing mental health services

- private hospitals included for-profit and not-for-profit organisations, ranging both in size and services available
- 84 235 beds (in 2007-08), 67 per cent of which were in public hospitals and 33 per cent in private hospitals. This means there were 2.5 public and 1.3 private hospital beds per 1000 people in the population (DoHA 2009b).

Hospitals provide different services depending on where they are located, their size, and the way in which they are funded (DoHA 2009b). Further, the nature of acute health services is changing (for example, patients being cared for in the community with hospital support, and previously complex procedures no longer requiring overnight stays), and defining the concept of a 'hospital' has become more difficult. Public hospitals can be broadly categorised into similar groups called peer groups. These peer groups are based on a range of factors including the range of admitted patient activity and geographical location. Examining peer groups allows for more meaningful comparisons (AIHW 2008a).

Most hospital resources are used to provide care for admitted patients. On average, around 20 000 Australians a day are admitted to hospital. There are also around 124 000 non-admitted services provided per day on average (such as provision of emergency departments and outpatient clinics) (AIHW 2008b). Non-admitted patient care accounted for around 19 per cent of hospital expenditure in 2007-08 (AIHW 2009a).

The *Report on Government Services 2009*, chapter 10, Public hospitals (SCRGSP 2009b), contains more information on government roles and responsibilities, funding arrangements, and size and scope of public hospitals (the *Report on Government Services 2010* is due to be released on 29 January 2010). *Australian Hospital Statistics 2007-08* (AIHW 2009b) contains additional descriptive information on Australia's public and private hospitals.

Aged care

The long-term objective of aged care is that 'older Australians receive appropriate high quality and affordable health and aged care services' [NHA para. 13]. There are two types of formal aged care services provided under the Australian aged care system — residential aged care homes and community care services.

- Residential aged care homes provide full time care in purpose-built aged care homes owned by the care provider.
- Community care services provide older people with care in their own homes from visiting care providers. Community care services include Home and

Community Care (HACC) program services (which also provide services to young people with disability), Community Aged Care Packages (CACPs), the Extended Aged Care at Home (EACH) program, the EACH Dementia program, the Transition Care Program (TCP), the Department of Veterans' Affairs Veterans' Home Care (VHC) and Community Nursing programs (DoHA 2008; SCRGSP 2009b).

These 'formal' care services are separate to the 'informal' care and support provided by family and friends.

The Productivity Commission (PC 2005) found that there were four factors that will influence the level of government expenditure on aged care services in the future:

- growth in the number of aged persons (in particular, the number of people over 80 years)
- disability levels within the aged population
- changes in the care mix from institutional residential care to care in the community (formal and informal)
- changes in the average cost of care per person.

The Commonwealth Treasury estimates that aged care spending by the Australian Government will increase from 0.8 per cent of GDP in 2006-07 to 2.0 per cent in 2046-47. This is largely due to expected increased spending on residential aged care, driven primarily by an expected trebling of the number of people aged over 80, as the use of formal aged care services increases rapidly beyond this age (Commonwealth of Australia 2007).

Currently, approximately two million people are aged 70 years and over, with this figure projected to double by 2029 (ABS 2009). On average, the number of operational residential aged care places has been increasing by 1 per cent per year. However, this growth has not matched the rate of growth in the aged population, meaning that residential aged care is progressively catering for a smaller proportion of the elderly (AIHW 2004).

In 2005, the OECD reported that the future demand for long-term residential care will not only be driven by the ageing population, but a number of other factors (OECD 2005). These factors — which include levels of informal care, levels of health, rates of disability and life expectancy — could improve the capacity of ageing people to live independently or within their community and consequently change the current demographic projections for future needs. *Australia's Health 2008* (AIHW 2008b) contains additional information on the nature of these factors in the Australian context.

More information on government roles and responsibilities, funding arrangements, and size and scope of the aged care sector can be found in the *Report on Government Services 2009,* chapter 13, Aged care services (SCRGSP 2009b).

Patient experience

The long-term patient experience objective is that ‘Australians have positive health and aged care experiences which take account of individual circumstances and care needs’ [NHA para 13].

While the objective and outcomes identified in the NHA refer to patient ‘experience’, the progress measure refers to patient ‘satisfaction’. Although the terms are often used interchangeably, they represent different concepts.

Patient experience usually refers to patients’ self-evaluation of the quality of care they received, based on patients’ perceptions of what happened to them, rather than how satisfied they were with what happened. There is considerable evidence that patient experience data provide more meaningful information about the quality of healthcare delivery than patient satisfaction data (Jenkinson et al. 2002).

Patient experience surveys currently in use include the Commonwealth Fund International Health Policy Survey (Commonwealth Fund Survey), the Picker Survey, and various surveys designed to meet the needs of specific stakeholders such as State and Territory governments and private health insurers (box 3).

Meeting the healthcare needs of individuals is complex, and several aspects of care influence patient health and wellbeing outcomes. Measuring performance around specific aspects of care allows identification of areas for improvement, while global measures provide higher level information about general experience. For the purposes of NA reporting, with its focus on high level outcomes, global measures of experience may be more relevant, potentially supported by a limited number of measures of key aspects of care. Table 1 provides information on the overall views of respondents on their healthcare systems in Australia and internationally.

In order to improve specific aspects of service delivery, the aspects of care for which patient experience should be measured should be based on criteria such as:

- what aspects of care are key contributors to patient outcomes
- what aspects of care are readily modified
- what experiences of the key aspects of care are associated with improved patient outcomes.

Box 3 Patient experience surveys

The **Commonwealth Fund Survey** collects internationally comparable data on patient experience of overall care and key aspects of care. Data are collected every three years through a general population survey, most recently in 2007. The current sample size does not support reliable estimates at State and Territory level (n=1000 in 2007; n=2000 planned for 2010), but the estimates will allow for some reporting at the national level. The Australian Commission on Safety and Quality in Health Care (ACSQHC) is partnering with the Commonwealth Fund on the 2010 survey.

States and territories are increasingly using patient experience surveys, many based on the **Picker Survey** (for example, NSW). State and Territory surveys tend to sample service users rather than the general population, and include only services for which State and Territory governments are responsible (excluding, for example, private hospitals and general practitioners). Use of surveys remains inconsistent across states and territories and cannot provide nationally comparable data.

The ABS **Patient Experience Survey**, due for publication in July 2010, will provide national data on access and barriers to, as well as satisfaction with, a range of health care services including general practitioners, specialists and other health professionals, imaging and pathology, after hours care and hospital/emergency visits. The ABS is currently redeveloping the survey to encompass a broader range of satisfaction indicators for publication in early 2012.

Source: Commonwealth Fund (2007).

Table 1 Overall view of the healthcare system, 2007 (per cent)[a]

Per cent reported	*Aust*	*Can*	*Ger*	*Neth*	*NZ*	*UK*	*US*
Only minor changes needed	24	26	20	42	26	26	16
Fundamental changes needed	55	60	51	49	56	57	48
Rebuild completely	18	12	27	9	17	15	34

Aust = Australia. Can = Canada. Ger = Germany. Neth = Netherlands. NZ = New Zealand. UK = United Kingdom. US = United States.

[a] Data in Schoen et al (2007) sourced from the 2007 Commonwealth Fund International Health Policy Survey.

Source: Schoen et al (2007).

The Picker Survey lists eight key areas for measuring patient experience: access to care; respect for patients' preferences; information and education; physical comfort; emotional support; involvement of family and friends; continuity of transition; and, coordination of care. Table 2 provides information on patients' experiences of coordination of care in Australia and internationally. Information on the additional seven areas is available from the 2007 Commonwealth Fund Survey (Commonwealth Fund 2007).

Table 2 **Patient experience of coordination of care, 2007 (per cent)**[a]

Per cent reported in past two years	*Aust*	*Can*	*Ger*	*Neth*	*NZ*	*UK*	*US*
Test results or records not available at time of appointment	11	11	8	7	9	10	15
Duplicate tests: doctor ordered test that had already been done	10	5	15	4	6	5	14
Per cent with either coordination problem	18	15	19	9	12	13	23

Aust = Australia. Can = Canada. Ger = Germany. Neth = Netherlands. NZ = New Zealand. UK = United Kingdom. US = United States.

[a] Data in Schoen et al (2007) sourced from the 2007 Commonwealth Fund International Health Policy Survey.

Source: Schoen et al (2007).

Social inclusion and Indigenous health

The long-term objective of social inclusion and Indigenous health is that ‘Australia’s health system promotes social inclusion and reduces disadvantage, especially for Indigenous Australians’ [NHA para. 13]. Social inclusion can be broadly defined as ‘the opportunity to: secure a job; access services; connect with family, friends, work, personal interests and local community; deal with personal crisis; and [for people] to have their voices heard’ (Gillard 2007).

In Australia there are significant health inequalities across population groups based on factors including gender, geography, ethnicity and socioeconomic status. Across groups, exposure to risk factors known to influence health — including smoking, high blood pressure, the use of health and illness prevention services, and health knowledge, attitudes and behaviours — varies significantly (ASIB 2009). A range of factors is associated with these health inequalities, the most significant including disadvantages in relation to education level, occupation, income, employment status and area of residence (ASIB 2009).

Health inequalities exist over a range of outcomes including incidence of illness and injury, life expectancy and mortality rates. In particular, Indigenous people experience higher rates of physical and mental illness and disability relative to non-Indigenous people. More contextual information on Indigenous health issues can be found in the *Overcoming Indigenous Disadvantage — Key Indicators 2009*, chapter 7, Healthy lives (SCRGSP 2009a). The Steering Committee report on the *National Indigenous Reform Agenda* also provides additional contextual information on Indigenous Australians.

Sustainability

A long-term objective of the NHA is that ‘Australians have a sustainable health system’ [NHA para. 13]. In this context, sustainability refers to having adequate resources to meet the needs of the population today and into the future.

A range of factors can affect the long-term sustainability of the health system, including community demographics, the burden of disease, models of delivering care, community expectations and the health workforce (DoHA 2009a; NHHRC 2009). The most significant pressures on the sustainability of the system are likely to be from demographic changes (increased fertility and migration, and the ageing of the population), the increasing incidence of chronic disease and shortages of health professionals. Appropriate preventative health care can improve sustainability by reducing levels of preventable illness and disease.

Governments may be able to directly affect health outcomes by changing the level of resources in the health care system. However, the extent to which increases in resources lead to improvements in health outcomes is not certain (Commonwealth of Australia 2009). Financial indicators in the NHA focus on the significance of program, and research and development expenditure in recurrent health expenditure, and government capital expenditure on health and aged care facilities.

Resources also encompass human resources, through adequate future supply of practitioners. Workforce indicators focus on growth in the health workforce and clinical training positions.

Performance benchmarks

The CRC has requested the Steering Committee to report against the performance benchmarks identified in the NAs. For the NHA, the performance benchmarks are grouped into four areas:

1. Prevention
   - (a) reduce the age-adjusted prevalence rate for Type 2 diabetes to 2000 levels (equivalent to a national prevalence rate for people aged 25 years and over of 7.1 per cent) within 15 years
   - (b) by 2018, reduce the national smoking rate to 10 per cent of the population and halve the Indigenous smoking rate
   - (c) by 2017, increase by five percentage points the proportion of Australian adults and Australian children at a healthy body weight, over the 2009 baseline
2. Primary care
   - (a) by 2014-15, improve the provision of primary care and reduce the proportion of potentially preventable hospital admissions by 7.6 per cent over the 2006-07 baseline to 8.5 per cent of total hospital admissions
3. Hospital and related care
   - (a) within five years implement a nationally consistent approach to activity-based funding for public hospital services, which also reflects the Community Service Obligations for small and regional hospital services
   - (b) by 2012, 80 per cent of emergency department presentations are seen within clinically recommended triage times as recommended by the Australian College of Emergency Medicine
   - (c) the rate of Staphylococcus aureus (including MRSA) bacteraemia is no more than 2.0 per 10 000 occupied bed days for acute care public hospitals by 2011-12 in each State and Territory
4. Social inclusion and Indigenous health
   - (a) close the life expectancy gap for Indigenous Australians within a generation
   - (b) halve the mortality gap for Indigenous children under five within a decade [NHA para. 29].

The ability to provide baseline data for these performance benchmarks varies. Some indicators are clearly defined, readily measurable and have available data. Other indicators require further work on concepts and definitions or data are not currently available.

The boxes below contain the performance benchmarks, any associated issues and where available, baseline data. Links are provided to the related objective and, where relevant, to the related performance indicator/s.

Performance benchmark — Prevention: reduce the age-adjusted prevalence rate for Type 2 diabetes to 2000 levels (equivalent to a national prevalence rate, for people aged 25 years and over, of 7.1 per cent) within 15 years

Objective:	Australians are born and remain healthy
Measure:	Proportion of people with type 2 diabetes The measure is defined as: • *numerator* — number of people with type 2 diabetes aged 25 years and over • *denominator* — number of people aged 25 years and over and is expressed as a *percentage*
Related performance indicator/s:	Performance indicator 17: Proportion of people with diabetes with HbA1c below 7 per cent Performance indicator 30: Proportion of people with diabetes who have a GP annual cycle of care
Data source:	Nil
Data provider:	Nil
Data availability:	Nil
Baseline:	15 years from 2008-09
Cross tabulations provided:	Nil

Box 4 **Comment on data quality**

The prevalence rate of 7.1 per cent is sourced from the AusDiab study (AusDiab 2001), which was conducted in 1999-2000, and was based on measured levels of diabetes, that is, diagnosed and previously undiagnosed cases.

It is important to capture both diagnosed and undiagnosed cases for comparative reporting of total type 2 diabetes prevalence. The AusDiab study found that for every diagnosed case of type 2 diabetes there was just over one undiagnosed case (a ratio of 1 : 1.1) but it is not known if this ratio still applies. In the ten years since that study was conducted, greater awareness of diabetes and greater use of diagnostic tests might have reduced the proportion of undiagnosed cases.

Apparent or reported prevalence rates will increase (without any actual increase in the numbers or proportions affected) when previously unidentified cases are diagnosed. Actual prevalence will increase when identified cases are managed optimally and survival improves. Since early diagnosis and better self-management and clinical management are cornerstones of diabetes control, prevalence would be expected to increase significantly over the next decade and beyond if these strategies are successful.

The Australian Government Department of Health and Ageing is currently planning to implement an ongoing National Health Risk Survey Program. The National Health Risk Survey (HRS) is likely to be the vehicle for reporting on this performance benchmark in the future. The HRS will collect measured data, which will include information on diabetes status. The first HRS is anticipated to be conducted in the period 2010-11 and will focus on the Australian population aged 2 years and over.

Performance benchmark — Prevention: by 2018, reduce the national smoking rate to 10 per cent of the population and halve the Indigenous smoking rate

Objective: Australians are born and remain healthy

Measure: Proportion of adults who are daily smokers

The measure is defined as:
numerator —
- number of adults who are a daily smoker
- number of Indigenous adults who are a daily smoker

denominator —
- number of adults in the population
- number of Indigenous adults in the population

and is expressed as an *age standardised rate (per cent)*

Related performance indicator/s: Performance indicator 6: Proportion of adults who are daily smokers

Data source: *Numerator and denominator* — ABS National Health Survey (NHS). Data are collected every three years. ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS). Data are collected every six years.

Data provider: *Numerator and denominator* — ABS

Data availability: (Total population) 2007-08 (NHS)

(Indigenous status) 2008 NATSISS/2007-08 NHS

Baseline: 2007-08

For the Indigenous smoking rate, the baseline rate to be halved is for 2008

Cross tabulations provided: State and Territory, by:
- Indigenous status
- remoteness
- SEIFA quintiles

Box 5 **Results**

Nationally in 2007-08, 19.1 per cent of adults (age standardised) were daily smokers.

Results are available by State and Territory, remoteness and SEIFA in table NHA.6.1.

Nationally in 2008, 47.7 per cent of Indigenous adults (age standardised) were daily smokers. This is the Indigenous smoking rate that is to be halved by 2018.

Results are available by State and Territory in table NHA.6.2.

Attachment tables

Table NHA.6.1	Proportion of adults who are daily smokers, 2007-08
Table NHA.6.2	Proportion of adults who are daily smokers, by Indigenous status, 2007-08

Box 6 **Comment on data quality**

Further information on the quality of the data used to inform this performance benchmark is contained in the comment on data quality for performance indicator 6 in the next section on ‘Performance indicators’.

Performance benchmark — Prevention: by 2017, increase by five percentage points the proportion of Australian adults and Australian children at a healthy body weight, over the 2009 baseline

Objectives:	Australians are born and remain healthy
Measure:	Proportion of adults and children who are in the 'normal' BMI category

The measure is defined as:
numerator —
- number of people aged 18 years and over with a normal BMI (greater or equal to 18.5 and less than 25)
- number of children aged 5–17 years outside healthy weight/height/age body weight (BMI) norms

denominator —
- number of people aged 18 years or over
- number of children aged 5–17 years

and is expressed as an *age standardised rate (per cent)*

Related performance indicator/s:	Performance indicator 5: Proportion of persons obese
Data source:	National Health Survey (NHS). Data are collected every three years.
Data provider:	ABS
Data availability:	2007-08
Baseline:	Baseline data for 2009 are not available. A baseline for 2007-08 is reported
Cross tabulations provided:	State and Territory

Box 7 **Results**

In 2007-08, 36.7 per cent of adults (age standardised), and 67.5 per cent of children, were measured as having a healthy weight (normal BMI).

Results are available by State and Territory in table NHA.5.6.

Table NHA.5.6	Proportion of adults and children in BMI categories, 2007-08

Box 8 **Comment on data quality**

A healthy body weight is defined as a BMI in the ‘normal’ range.

This performance benchmark can be reported against every three years from the NHS.

Further work is required to specify clearly the ‘five percentage point’ increase from the baseline measure.

Further information on the quality of the data used to inform this performance benchmark is contained in the comment on data quality for performance indicator 5 in the next section on ‘Performance indicators’.

Performance benchmark — Primary care: by 2014-15, improve the provision of primary care and reduce the proportion of potentially preventable hospital admissions by 7.6 per cent over the 2006-07 baseline to 8.5 per cent of total hospital admissions

Objective:	Australians receive appropriate high quality and affordable primary and community health services[1]
Measure:	There are two parts to this performance benchmark: (1) Improved provision of primary care (2) Reduced potentially preventable hospital admissions For part (1) the measure is under development For part (2), the measure is defined as: • *numerator* — number of potentially preventable hospitalisations, divided into the following three categories and total: – vaccine-preventable conditions (for example, tetanus, measles, mumps, rubella); – potentially preventable acute conditions (for example, ear, nose and throat infections, dehydration/gastroenteritis) – potentially preventable chronic conditions (for example, diabetes, asthma, angina, hypertension, congestive heart failure and chronic obstructive pulmonary disease) – all potentially preventable hospitalisations • *denominator* — total hospital separations and is expressed as *percentage*
Related performance indicator/s:	Performance indicator 22: Selected potentially preventable hospital admissions
Data source:	*Numerator and denominator* — Admitted Patient Care National Minimum Data Set. Data are collected annually.
Data provider:	AIHW
Data availability:	2006-07 (baseline) and 2007-08
Baseline:	2006-07
Cross tabulations provided:	State and Territory (by categories groups and total)

Box 9 **Results**

Nationally in 2007-08, 9.3 per cent of hospital admissions were potentially preventable. This was higher than the national baseline of 9.2 per cent in 2006-07 (table 3).

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[1] This is the objective for ‘Primary and community health’.

Table 3 Selected potentially preventable hospitalisations, 2006-07 and 2007-08

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
2006-07									
Vaccine-preventable conditions ('000)	4.4	3.0	2.5	1.1	0.9	0.2	0.1	0.4	12.5
Potentially preventable acute conditions ('000)	86.1	72.2	53.7	27.1	23.3	5.3	3.3	3.7	274.7
Potentially preventable chronic conditions ('000)	115.1	99.3	78.7	71.0	32.2	11.8	3.3	4.2	417.2
Total PPH ('000)	204.7	173.8	134.3	98.7	56.0	17.3	6.7	8.1	699.8
Total hospital separations ('000)	2 306.2	2 057.4	1 501.3	740.1	614.5	159.2	90.1	97.3	7 602.9
PPH/Total hospital separations (%)	**8.9**	**8.4**	**8.9**	**13.3**	**9.1**	**10.8**	**7.5**	**8.4**	**9.2**
2007-08									
Vaccine-preventable conditions ('000)	4.9	3.7	3.2	1.4	1.3	0.2	0.2	0.5	15.4
Potentially preventable acute conditions ('000)	87.8	76.9	57.8	27.7	25.0	5.6	3.4	3.7	288.2
Potentially preventable chronic conditions ('000)	116.3	103.6	83.9	78.7	31.4	11.9	3.3	4.2	433.6
Total PPH ('000)	208.0	183.5	144.3	107.3	57.4	17.7	6.9	8.2	733.8
Total hospital separations ('000)	2 369.9	2 135.5	1 584.4	784.1	607.8	167.5	94.3	100.4	7 873.9
PPH/Total hospital separations (%)	**8.8**	**8.6**	**9.1**	**13.7**	**9.4**	**10.6**	**7.4**	**8.2**	**9.3**

Source: AIHW (unpublished) National Hospital Morbidity Database.

Box 10 Comment on data quality

This performance benchmark can be reported against annually.

Further information on the quality of the data used to inform this performance benchmark is contained in the comment on data quality for performance indicator 22 in the next section on ‘Performance indicators’.

Performance benchmark — Hospital and related care: within five years implement a nationally consistent approach to activity-based funding for public hospital services, which also reflects the Community Service Obligations for small and regional hospital service

Objective:	Australians receive appropriate high quality and affordable hospital and hospital related care
Measure:	No measure has been agreed for this performance benchmark. The Steering Committee has included in this report some relevant contextual information relating to the implementation of the national Activity Based Funding initiative.
Related performance indicator/s:	Nil
Data source:	To be developed
Data provider:	To be determined
Data availability:	To be developed
Baseline:	2008-09
Cross tabulations provided:	To be developed

Box 11 **Comment on data quality**

The implementation of an activity based funding (ABF) system is in accordance with timeframes outlined in the *National Partnership Agreement on Hospital and Health Workforce Reform* (COAG 2008b). A National ABF Framework and Implementation Plan was approved by the Commonwealth Minister for Health and Ageing, Nicola Roxon MP, on 4 June 2009.

Development of an ABF methodology is due to be completed by 2013-14. Subject to COAG agreement, use of an activity based funding model would begin from 2014-15, with evaluation undertaken in the first year.

Performance benchmark — Hospital and related care: by 2012, 80 per cent of emergency department presentations are seen within clinically recommended triage times as recommended by the Australian College of Emergency Medicine

Objective:	Australians receive appropriate high quality and affordable hospital and hospital related care
Measure:	Percentage of patients who are treated within national benchmarks for waiting times for each triage category in public hospital emergency departments For each triage category, the measure is defined as: *numerator* — the number of presentations to public hospital emergency departments that were treated within benchmarks for each triage category *denominator* — total presentations to public hospital emergency departments and is expressed as a *percentage* Calculated overall and separately for each triage category Triage categories are: • triage category 1: seen within seconds, calculated as less than or equal to 2 minutes • triage category 2: seen within 10 minutes • triage category 3: seen within 30 minutes • triage category 4: seen within 60 minutes • triage category 5: seen within 120 minutes Includes records with a Type of visit of *Emergency presentation* or *Not reported* Excludes where episode end status is either *Did not wait* or *Dead on arrival*, or if the Waiting time to service is invalid Limited to public hospitals in peer groups A and B
Related performance indicator/s:	Performance indicator 35: Waiting times for emergency department care
Data source:	*Numerator and denominator* — AIHW National Non-admitted Patient Emergency Department Database. Data are collected annually.
Data provider:	AIHW
Data availability:	2007-08
Baseline:	2007-08
Cross tabulations provided:	State and Territory, by Triage category, by: • peer group • Indigenous status • remoteness • SEIFA quintiles

Box 12 **Results**

Nationally in 2007-08, the proportion of patients who were treated within national benchmarks for waiting times for each triage category in public hospital emergency departments in peer group A and B hospitals were:

- triage category 1 — 100 per cent
- triage category 2 — 75 per cent
- triage category 3 — 62 per cent
- triage category 4 — 64 per cent
- triage category 5 — 86 per cent.

Results are available by State and Territory in table NHA.35.1.

Attachment tables

Table NHA.35.1	Patients treated within national benchmarks for emergency department waiting time, 2007-08

Box 13 **Comment on data quality**

A baseline can be reported for 2007-08. This performance benchmark can be reported annually.

Further information on the quality of the data used to inform this performance benchmark is contained in the comment on data quality for performance indicator 35 in the next section on ‘Performance indicators’.

Performance benchmark — Hospital and related care: the rate of *Staphylococcus aureus* (including MRSA) bacteraemia is no more than 2.0 per 10 000 occupied bed days for acute care public hospitals by 2011-12 in each State and Territory

Objective:	Australians receive appropriate high quality and affordable hospital and hospital related care
Measure:	A measure has yet to be determined for this performance benchmark.
Related performance indicator/s:	Performance indicator 39: Healthcare-associated *Staphylococcus aureus* (including MRSA) bacteraemia in acute care hospitals
Data source:	To be developed
Data provider:	AIHW
Data availability:	To be developed
Baseline:	2008-09
Cross tabulations provided:	To be developed

Box 14 Comment on data quality

The data on Staphylococcus aureus bacteraemia (SAB) presented for Indicator 39 pre-dated specification of the national indicators. These data were not collected in a consistent manner for 2008-09, and were reported according to different definitions and levels of hospital involvement in different jurisdictions.

The Australian Commission on Safety and Quality in Health Care (ACSQHC) has consulted with infectious disease and surveillance specialists to develop a standard definition of health-care associated SAB in acute care hospitals to apply nationally. This definition was endorsed by the ACSQHC's Inter-Jurisdictional Committee on 22 October 2009. Since then, jurisdictions have been making changes to their surveillance programs in hospitals nationwide in order to standardise data collection for future reporting.

Reporting against this benchmark is not recommended in this first report, as it would not give a true indication of where jurisdictions sit in relation to the benchmark, which is to be measured in 2011-12. Work is proceeding to get national consistency in the collections and the benchmark comparison should be much clearer for 2009-10.

Performance benchmark — Social inclusion and Indigenous health: close the life expectancy gap for Indigenous Australians within a generation

Objective:	Australia's health system promotes social inclusion and reduces disadvantage, especially for Indigenous Australians
Measure:	Difference between Indigenous and non-Indigenous life expectancies at birth Life expectancy — the average number of years a person could expect to live from the day they are born if they experienced mortality rates at each age that are currently experienced by the relevant population Calculated by direct estimation of life expectancy at birth for all Australians, Indigenous and non-Indigenous Australians using the estimated population at a single point and the number of deaths registered in the 3 years centred on that population point. Presented as *number of years*
Related performance indicator/s:	Performance indicator 18: Life expectancy
Data source:	ABS Population Census and Post Enumeration Survey and ABS mortality data provided by State and Territory Registrars of Births, Deaths and Marriages. Census data are collected every five years. Mortality data are collected annually.
Data provider:	ABS
Data availability:	2005–2007 (calculated for 3 year periods)
Baseline:	2005–2007. A generation is defined as 25 years
Cross tabulations provided:	State and Territory, by: • Indigenous status by sex (only available for selected states and territories) • sex

Box 15 **Results**

The life expectancy gap between Indigenous and non-Indigenous Australians was 11.5 years for males and 9.7 for females in 2005–2007.

Results are available for NSW, Queensland, WA and the NT in table NHA.18.2.

Attachment tables

Table NHA.18.2	Estimated life expectancies at birth, by Indigenous status and sex, 2005–2007

Box 16 **Comment on data quality**

This performance benchmark can be reported against every five years (based on three year averages).

Further information on the quality of the data used to inform this performance benchmark is contained in the comment on data quality for performance indicator 18 in the next section on ‘Performance indicators’.

Performance benchmark — Social inclusion and Indigenous health: halve the mortality gap for Indigenous children under five within a decade

Objective:	Australia's health system promotes social inclusion and reduces disadvantage, especially for Indigenous Australians
Measure:	Difference in the mortality rate between Indigenous children aged 0–4 years and non-Indigenous children aged 0–4 years The mortality rate for children aged 0–4 years is defined as: • *numerator* — Number of deaths among children aged 0–4 years • *denominator* — population aged 0–4 years and is expressed as a *rate (per 1000 population)*
Related performance indicator/s:	Performance indicator 19: Infant/young child mortality
Data source:	*Numerator* — ABS Mortality data *Denominator* — ABS Post Enumeration Survey, Estimated Resident Population (total population), Experimental Indigenous estimates and projections (Indigenous population) Data are available annually
Data provider:	ABS
Data availability:	2005–2007 (3 year average for general population) 2003–2007 (5 year average for disaggregations by Indigenous status)
Baseline:	2005–2007 (3 year average for general population) 2003–2007 (5 year average for disaggregations by Indigenous status)
Cross tabulations provided:	States and Territory, by: • Indigenous status

Box 17 **Results**

The mortality gap between Indigenous children and non-Indigenous children aged 0–4 years was 1.2 deaths per 1000 population (national total for 2003–2007) (table NHA.19.4).

Results are available for NSW, Queensland, WA, SA and the NT and Australia in table NHA.19.4.

Attachment tables

Table NHA.19.4	All causes child 0–4 mortality, by Indigenous status, NSW, Queensland, WA, SA, NT and Australia, 2003–2007

Box 18 **Comment on data quality**

This performance benchmark can be reported against annually. However, an assessment of year to year changes on an annual basis requires single year data. Further work is required to determine the appropriateness of more regular reporting relative to a more aggregated average for reliable results.

Data for Indigenous deaths are not of sufficient quality for reporting in Victoria, Tasmania and the ACT (though these jurisdictions are included in the Australian total). Further work is required to improve the quality of Indigenous deaths data to enable reporting by all states and territories.

Further work is also required to determine whether the gap is most appropriately assessed using a rate ratio or percentage point difference.

Further information on the quality of the data used to inform this performance benchmark is contained in the comment on data quality for performance indicator 19 in the next section on ‘Performance indicators’.

Performance indicators

The NHA has 26 progress measures and 15 outputs, which are reported against using 70 performance indicators (table 4).

Data for the performance indicators in this report are presented in the attachment tables.

Table 4 **Performance indicators in the National Healthcare Agreement**[a]

Progress measure or output	*Performance indicator*	*Page no.*
	PREVENTION	
Progress measure — proportion of babies born of a low birth weight	1. Proportion of babies born with low birthweight	41
Progress measure — incidence/prevalence of important preventable diseases	2. Incidence of sexually transmissible infections and blood-borne viruses	43
	3. Incidence of end-stage kidney disease	45
	4. Incidence of selected cancers	47
Progress measure — risk factor prevalence	5. Proportion of persons obese	49
	6. Proportion of adults who are daily smokers	52
	7. Proportion of adults at risk of long-term harm from alcohol	54
	8. Proportion of men reporting unprotected anal intercourse with casual male partners	56
Output measure — immunisation rates for vaccines in the national schedule	9. Immunisation rates for vaccines in the national schedule	57
Output measure — cancer screening rates (breast, cervical, bowel)	10. Breast cancer screening rates	60
	11. Cervical screening rates	62
	12. Bowel cancer screening rates	64
Output measure — proportion of children with 4th year developmental health check	13. Proportion of children with 4th year developmental health check	66
	PRIMARY AND COMMUNITY HEALTH	
Progress measure — access to general practitioners, dental and other primary healthcare professionals	14. Waiting times for GPs	68
	15. Waiting times for public dentistry	69
	16. People deferring recommended treatment due to financial barriers	70
Progress measure — proportion of diabetics with HbA1c below 7 per cent	17. Proportion of people with diabetes with HbA1c below 7 per cent	71

(Continued next page)

Table 4 **(continued)**

Progress measure or output	***Performance indicator***	***Page no.***
Progress measure — life expectancy (including the gap between Indigenous and non-Indigenous)	18. Life expectancy	72
Progress measure — infant/young child mortality rate (including the gap between Indigenous and non-Indigenous)	19. Infant/young child mortality rate	74
Progress measure — potentially avoidable deaths	20. Potentially avoidable deaths	76
Progress measure — treated prevalence rates for mental illness	21. Treatment rate for mental illness	78
Progress measure — selected potentially preventable hospitalisations	22. Selected potentially preventable hospitalisations	80
Progress measure — selected potentially avoidable general practitioner type presentations to emergency departments	23. Selected potentially avoidable GP-type presentations to emergency departments	82
Output measure — number of primary care services per 1000 population (by location)	24. GP-type services	84
	25. Specialist services claimed through Medicare	86
	26. Number of dental services	88
	27. Optometry services	90
Output measure — number of mental health services	28. Public sector community mental health services	92
	29. Private sector mental health services	94
Output measure — proportion of people with selected chronic disease who care is planned (asthma, diabetes, mental health)	30. Proportion of people with diabetes who have a GP annual cycle of care	96
	31. Proportion of people with asthma with a written asthma plan	98
	32. Proportion of people with a mental illness with GP care plans	100
Output measure — Number of women with at least one antenatal visit in the first trimester of pregnancy	33. Number of women with at least one antenatal visit in the first trimester of pregnancy	102
HOSPITAL AND RELATED CARE		
Progress measure — waiting times for services	34. Waiting times for elective surgery	104
	35. Waiting times for emergency department care	106
	36. Waiting times for admission following emergency department care	108
	37. Waiting times for radiotherapy and orthopaedic specialists	109

(Continued next page)

Table 4 **(continued)**

Progress measure or output	*Performance indicator*	*Page no.*
Progress measure — selected adverse events in acute and sub-acute care settings	38. Adverse drug events in hospitals	110
	39. Healthcare-associated Staphylococcus aureus (including MRSA) bacteraemia in acute care hospitals	111
	40. Pressure ulcers in hospitals	113
	41. Falls resulting in patient harm in hospitals	114
	42. Intentional self-harm in hospitals	116
Progress measure — unplanned/unexpected readmissions within 28 days of selected surgical admissions	43. Unplanned/unexpected readmissions within 28 days of selected surgical admissions	118
Progress measure — survival of people diagnosed with cancer (5 year relative rate)	44. Survival of people diagnosed with cancer	120
Output measure — rates of services provided by public and private hospitals per 1000 weighted population by patient type	45. Rates of services: Overnight separations	122
	46. Rates of services: Outpatient occasions of service	124
	47. Rates of services: Non-acute care separations	126
	48. Rates of services: Hospital procedures	128
	AGED CARE	
Progress measure — residential and community aged care services per 1000 population aged 70+ years	49. Residential and community aged care services per 1000 population aged 70+ years	130
Progress measure — selected adverse events in residential care	50. Staphylococcus aureus (including MRSA) bacteraemia in residential aged care	132
	51. Pressure ulcers in residential aged care	133
	52. Fall resulting in patient harm in residential aged care	134
Output measure — Number of older people receiving aged care services by type (in the community and residential settings)	53. Older people receiving aged care services	136
Output measure — Number of aged care assessments conducted	54. Aged care assessments completed	138
Output measure — Number of younger people with disabilities using residential, CACP and EACH aged care services	55. Younger people with disabilities using residential, CACP and EACH aged care services	140
Output measure — Number of people 65+ receiving sub-acute and rehabilitation services	56. People aged 65 years or over receiving sub-acute services	142

(Continued next page)

Table 4 **(continued)**

Progress measure or output	*Performance indicator*	*Page no.*
Output measure — Number hospital patient days by those eligible and waiting for residential aged care	57. Number hospital patient days used by those eligible and waiting for residential aged care	144
PATIENT EXPERIENCE		
Progress measure — nationally comparative information that indicates levels of patient satisfaction around key aspects of care they received	58. Patient satisfaction/experience	146
SOCIAL INCLUSION AND INDIGENOUS HEALTH		
Progress measure — age standardised mortality	59. Age-standardised mortality by major cause of death	147
Progress measure — access to services by type of service compared to need	60. Access to services by type of service compared to need	149
Progress measure — teenage birth rate	61. Teenage birth rate	151
Progress measure — hospitalisation for injury and poisoning	62. Hospitalisation for injury and poisoning	153
Progress measure — children's hearing loss	63. Children's hearing loss	155
Output measure — Indigenous Australians in the health workforce	64. Indigenous Australians in the health workforce	157
SUSTAINABILITY		
Progress measure — net growth in health workforce (doctors, nurses, midwives, dental practitioners, pharmacists)	65. Net growth in health workforce	159
Progress measure — allocation of health and aged care expenditure	66. Public health program expenditure as a proportion of total health expenditure	161
	67. Capital expenditure on health and aged care facilities as a proportion of capital consumption expenditure on health and aged care facilities	163
	68. Proportion of health expenditure spent on health research and development	165
Progress measure — cost per case mix-adjusted separation for both acute and non-acute care episodes	69. Cost per case mix-adjusted separation	167
Output measure — number of accredited/filled clinical training positions	70. Accredited and filled clinical training positions	169

a The progress measures/outputs are presented in this table using the direct wording from the table on pp. A-5 to A-7 of the NHA. This does not necessarily reflect the measures used to report against the indicators in this report.

Indicator 1: Proportion of babies born with low birthweight

Outcome area:	Prevention
Progress measure:	Proportion of babies born of low birth weight
Measure:	The incidence of low birthweight among live-born babies, of Aboriginal and Torres Strait Islander mothers and other mothers *Low birthweight is defined as less than 2500 grams* *Excludes multiple births, births with unknown birthweight, and births less than 20 weeks gestation and less than 400 grams* *Indigenous status of infants is based solely on the Indigenous status of the mother* The measure is defined as: • *numerator* — number of low birthweight singleton infants • *denominator* — total number of liveborn singleton infants and is expressed as a *percentage*
Data source:	*Numerator and denominator* — AIHW National Perinatal Data Collection (NPDC). Data are collected annually
Data provider:	AIHW
Data availability:	NPDC — 2007 (calendar year data)
Cross tabulations provided:	State and Territory by Indigenous status National by remoteness and SEIFA quintiles

Attachment tables

Table NHA.1.1	Proportion of live-born singleton babies of low birthweight, by maternal Indigenous status, 2007
Table NHA.1.2	Proportion of live-born singleton babies of low birthweight, by remoteness and SEIFA, 2007

Box 19 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of babies born with low birthweight.
- Data are available by Indigenous status by State and Territory, and by socioeconomic status (SES) nationally.
- Annual data are available. The most recent available data are for 2007.
- Data are of acceptable accuracy. The National Perinatal Data Collection provides information on the Indigenous status of the mother only.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator for SES by State and Territory is a priority. Further development work on the current data source is required.
- Data are relatively old and may not be representative of current outcomes. Further work is required to ensure availability of more timely data.

Indicator 2: Incidence of sexually transmissible infections and blood-borne viruses

Outcome area: Prevention

Progress measure: Incidence/prevalence of important preventable diseases

Measure: Incidence of sexually transmissible infections and blood-borne viruses

Syphilis is limited to cases of less than 2 years duration, and cases of congenital syphilis. HIV data includes reports of newly diagnosed HIV infection and cases of HIV infections known to have been newly acquired. Includes all Hepatitis B and C infections, whether or not the infection was sexually transmitted

The measure is defined as:
- *numerator* — number of notifications of new cases of syphilis, HIV, hepatitis B, hepatitis C, chlamydia and gonococcal infection
- *denominator* — total population

and expressed as *age standardised rates (per 100 000 people in the relevant population)*

Data source: *Numerator* — National Notifiable Diseases Surveillance System and the National HIV Registry

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: 2008

Cross tabulations provided: State and Territory, by:
- Indigenous status
- sex
- age
- remoteness
- SEIFA quintiles

Attachment tables

Table NHA.2.1	Notifications of new cases of sexually transmissible infections and blood borne viruses, 2008
Table NHA.2.2	Age specific rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, 2008
Table NHA.2.3	Rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, by Indigenous status, remoteness and SEIFA, 2008

Box 20 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled 'Data Quality Statements. Key points from the DQS are summarised below.

- The data provide relevant information on the reported prevalence of important preventable diseases. A major limitation of the notifications data is that, for most diseases, they represent only a proportion of the total cases occurring in the community (that is, only those cases for which health care was sought and a diagnosis made, followed by a notification to health authorities). The degree of under-representation of all cases is unknown.
- Data are available by State and Territory and by socioeconomic status (SES).
- Some data are available by Indigenous status, although results for some diseases in some jurisdictions are not reported because the level of non-reporting of Indigenous status makes the disaggregation unreliable.
- Annual data are available. The most recent available data are for 2008.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Improved reporting of this indicator by Indigenous status is a priority. Further development work on the current data source, or identification of an alternative data source, is required.
- Notifications data provide information on the number of new cases coming to the attention of health services. The progress measure would be improved by including information on the prevalence of sexually transmissible infections and blood-borne viruses. The Steering Committee is aware of the impact of survival rates on prevalence, but considers that the two sets of information would complement each other.

Indicator 3: Incidence of end-stage kidney disease

Outcome area: Prevention

Progress measure: Incidence/prevalence of important preventable diseases

Interim measure: Incidence of end-stage kidney disease

The measure is defined as:

- *numerator* — number of unique individuals who appeared as new cases on the Australian and New Zealand Dialysis and Transplant Registry (ANZDATA) in the reference year OR who died in the reference year and end-stage kidney disease was recorded as cause of death
- *denominator* — total population

and expressed as *age standardised rates (per 100 000 people in the relevant population)*

Count new cases on the ANZDATA registry who died of an end-stage kidney disease in the same year once only

Causes of death in scope: Chronic renal failure (ICD10 codes N180, N188, N189), hypertensive renal failure (ICD10 codes I120, I131, I132) or unspecified renal failure (ICD10 code N19) as an underlying cause of death, or chronic renal failure, end-stage (ICD10 code N180) as an associated cause of death

Data source: *Numerator* — Australian and New Zealand Dialysis and Transplant Registry (ANZDATA), National Death Index and National Mortality Database

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: 2006 and 2003–2006

Cross tabulations provided: State and Territory, by:

- sex (2003–2006 data)

Nationally, by:

- sex (2006 data)
- Indigenous status (2003–2006 data)

(data not available by remoteness areas or SEIFA quintiles)

Attachment tables

Table NHA.3.1	Incidence of end-stage kidney disease, 2003–2006

Box 21 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the number of people who were treated for or died from end-stage kidney disease in the reference year.
- Data are available by State and Territory.
- National data are available by Indigenous status. Data have not been disaggregated by socioeconomic status (SES).
- Annual data are available, but aggregated years are reported for some cross tabulations to ensure statistical validity, especially for small states and territories.
- Data are reported for 2006 nationally, and for 2003–2006 by State and Territory. Indigenous disaggregations are available for 2003–2006 nationally.
- Data are of acceptable accuracy.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by SES is a priority.
- Data for this indicator are relatively old because linked mortality data were available only up to 2006. These data may not be representative of current outcomes, although cancer incidence changes slowly.
- The measure for this indicator is based on a four year aggregate (2003–2006 inclusive). The trend data for this indicator will be based on annual single year changes. Further work is required to determine what level of disaggregation is reliable for single year data.
- Further work is required to include untreated cases by linking to mortality data, to identify people who did not die of end-stage kidney disease.

Indicator 4: Incidence of selected cancers

Outcome area: Prevention

Progress measure: Incidence/prevalence of important preventable diseases

Measure: Incidence of selected cancers of public health importance

For melanoma, lung and bowel cancer, the measure is defined as:

- *numerator* — number of new cases in the reported year
- *denominator* — total population

and expressed as *age standardised rates (per 100 000 people in the relevant population)*

For female breast and cervical cancer, the measure is defined as:

- *numerator* — number of new cases in women in the reported year
- *denominator* — female population

and expressed as *age standardised rates (per 100 000 people in the relevant population)*

Calculated separately for each type of cancer

Data source: *Numerator* — Australian Cancer Database

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: 2006

Cross tabulations provided: State and Territory (for each cancer type), by:

- Indigenous status
- remoteness
- SEIFA quintiles

Attachment tables

Table NHA.4.1	Incidence of selected cancers, 2006
Table NHA.4.2	Incidence of selected cancers by Indigenous status, 2006

Table NHA.4.3	Incidence of selected cancers by remoteness area, 2006
Table NHA.4.4	Incidence of selected cancers by SEIFA, 2006

Box 22 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the incidence of melanoma of the skin, lung cancer and bowel cancer and for females, cervical cancer and breast cancer.
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data for breast and bowel cancer (for 2006) were published in October 2009 (data on the incidence of other cancers in 2006 have not yet been published).
- Data are of acceptable accuracy. Incidence rates that are calculated using small numbers can be highly variable, resulting in wide confidence intervals (confidence intervals are presented in the attachment tables).
- The quality of Indigenous identification in cancer registry data varies between jurisdictions. Data by Indigenous status are reported for all jurisdictions except the NT (due to low incidence rates in the NT resulting in wide confidence intervals). Nonetheless, the 95 per cent confidence intervals for incidence rates by Indigenous status are broad. National disaggregation by Indigenous status is based on jurisdictions with adequate data quality — Queensland, WA, SA and the NT.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request (including on other types of cancer).

The Steering Committee also notes the following issues:

- The data are relatively old and may not be representative of current incidence. Further work is required to ensure availability of more timely data.
- Due to the broad confidence intervals for the Indigenous rates, differences between Indigenous and non-Indigenous rates should be interpreted with care. Further development work on the current data source, or identification of an alternative data source, is required to reduce the confidence intervals to enable more reliable results.

Indicator 5: Proportion of persons obese

Outcome area:	Prevention
Progress measure:	Risk factor prevalence
Measure:	Prevalence of obesity in adults and children For adults, the measure is defined as: • *numerator* — number of persons aged 18 years or over with a BMI equal to or greater than 30 • *denominator* — population aged 18 years or over and expressed as *age standardised rates (per cent)* For children, the measure is defined as: • *numerator* — number of children aged 5–17 years exceeding weight/height/age obesity norms • *denominator* — population aged 5–17 years and expressed as *age standardised rates (per cent)* *BMI calculated as weight (in kg) divided by the square of height (in metres)* *For children, obesity is defined as BMI (appropriate for age and sex) that is likely to be 30 or more at age 18 years, based on centile curves* *Excludes pregnant women and people with unknown BMI*
Data source:	*Numerator and denominator* — National Health Survey (NHS). Data are collected every three years. National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). Data are collected every six years
Data provider:	*Numerator and denominator* — ABS (NHS/NATSIHS)
Data availability:	2007-08 (NHS) — based on measured values 2004-05 (Indigenous status — NHS/NATSIHS) — based on self-report
Cross tabulations provided:	State and Territory, by: • sex by age • Indigenous status • remoteness • SEIFA quintiles • BMI category

Attachment tables

Table NHA.5.1	Rates of obesity for adults and children, by remoteness and SEIFA, 2007-08
Table NHA.5.2	RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by remoteness and SEIFA, 2007-08
Table NHA.5.3	Rates of obesity for adults and children, by sex and age, 2007- 08
Table NHA.5.4	RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by sex and age, 2007-08
Table NHA.5.5	Rates of obesity for adults and children, by Indigenous status, 2004-05
Table NHA.5.6	Proportion of adults and children in BMI categories, 2007-08
Table NHA.5.7	RSEs and 95 per cent confidence intervals for the proportion of adults and children in BMI categories, 2007-08

Box 23 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of people who are obese. State and Territory data are available by Indigenous status and by socioeconomic status (SES).
- Total population data are sourced from the National Health Survey (NHS), which is conducted every three years. The most recent available data (for 2007-08) were published in May 2009.
- The NHS does not include people living in very remote areas, which affects the comparability of the NT results.
- Indigenous data are from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which is conducted every six years. The most recent available Indigenous data (for 2004-05) were published in April 2006.
- Data are of acceptable accuracy. Data for the Indigenous/non-Indigenous comparisons in table NHA.5.7 are based on self-reported height and weight, from the 2004-05 NHS and 2004-05 NATSIHS. Relative standard errors for some SES and Indigenous status disaggregations are greater than 25 per cent and these data should be used with caution.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- NHS data are only available every three years and NATSIHS data are only available every six years. An assessment of the relative speed of change in results for this indicator is required to determine whether more regular data collection is necessary.
- The size of the standard errors means that the survey data may not be adequate for measuring change over time. Small year to year movements may be difficult to detect if the size of the standard errors is large compared to the size of the difference between estimates.

Indicator 6: Proportion of adults who are daily smokers

Outcome area:	Prevention
Progress measure:	Risk factor prevalence
Measure:	Proportion of adults who are daily smokers *Excludes smokers who have not consumed 100 cigarettes or the equivalent in their lifetime, and people who have not smoked in the past 12 months* *Daily smoking is defined as: currently smokes cigarettes (manufactured or roll-your-own) or equivalent tobacco product every day* The measure is defined as: • *numerator* — number of persons aged 18 years or over who smoke tobacco every day • *denominator* — population aged 18 years or over and is expressed as *age standardised rates (per cent)*
Data source:	*Numerator and denominator* — ABS National Health Survey (NHS). Data are collected every three years. National Aboriginal and Torres Strait Islander Social Survey (NATSISS). Data are collected every six years
Data provider:	*Numerator and denominator* — ABS
Data availability:	2007–08 (NHS) Indigenous status — 2008 NATSISS and 2007-08 NHS
Cross tabulations provided:	State and Territory, by: • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.6.1	Proportion of adults who are daily smokers, 2007-08
Table NHA.6.2	Proportion of adults who are daily smokers, by Indigenous status, 2007-08

Box 24 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of adults who are daily smokers. The specifications exclude current smokers who have not smoked 100 cigarettes, but the data presented in this report include this group. The impact on the proportion of adults who are daily smokers is not significant (a difference of 0.2 per cent) within the confidence interval of the data provided.
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Total population data are sourced from the National Health Survey (NHS), which is conducted every three years. The most recent available data (for 2007-08) were published in May 2009.
- The NHS does not include people living in very remote areas, which affects the comparability of the NT results.
- Indigenous data are from the National Aboriginal and Torres Strait Islander Social Survey (NATSISS), which is conducted every six years. The most recent available Indigenous data (for 2008) were published in October 2009.
- Data are of acceptable accuracy. Some relative standard errors for SES and Indigenous status disaggregations are greater than 25 per cent and should be used with caution.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- NHS data are only available every three years and the NATSISS are only available every six years. An assessment of the relative speed of change in results for this indicator is required to determine whether more regular data collection is necessary.
- The size of the standard errors mean that the survey data may not be adequate for measuring change over time. Small year to year movements may be difficult to detect if the size of the standard errors is large compared to the size of the difference between estimates.

Indicator 7: Proportion of adults at risk of long-term harm from alcohol

Outcome area:	Prevention
Progress measure:	Risk factor prevalence
Interim measure:	Proportion of adults at risk of long-term harm from alcohol The measure is defined as: • *numerator* — persons aged 18 years or over assessed as having an alcohol consumption pattern that puts them at risk of long-term alcohol related harm • *denominator* — population aged 18 years or over and is presented as *age standardised rates (per cent)* *‘At risk of long-term alcohol related harm’ defined according to the 2001 National Health and Medical Research Council guidelines: for males, 29 drinks or more per week; for females, 15 drinks or more per week* *Excludes people who have not consumed alcohol in the past 12 months*
Data source:	*Numerator and denominator* — National Health Survey (NHS). Data are collected every three years. National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). Data are collected every six years
Data provider:	*Numerator and denominator* — ABS
Data availability:	(Total population) 2007-08 (NHS) (Indigenous status) 2004-05 (NATSIHS/NHS)
Cross tabulations provided:	State and Territory, by: • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.7.1	Proportion of adults at risk of long-term harm from alcohol, 2007-08
Table NHA.7.2	Proportion of adults at risk of long-term harm from alcohol, by remoteness and SEIFA, 2007-08
Table NHA.7.3	Proportion of adults at risk of long-term harm from alcohol, by Indigenous status, 2004-05

Box 25 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of adults who are at risk of long-term harm from alcohol.
- State and Territory data are available by Indigenous status and by socioeconomic status (SES).
- Total population data are sourced from the National Health Survey (NHS), which is conducted every three years. The most recent available data (for 2007-08) were published in May 2009.
- The NHS does not include people living in very remote areas, which affects the comparability of the NT results.
- Indigenous data are from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which is conducted every six years. The most recent available Indigenous data (for 2004-05) were published in April 2006.
- Data are of acceptable accuracy. Relative standard errors for some SES and Indigenous status disaggregations are greater than 25 per cent and these data should be used with caution.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- NHS data are only available every three years and the NATSIHS are only available every six years. An assessment of the relative speed of change in results for this indicator is required to determine whether more regular data collection is necessary.
- The size of the standard errors means that the survey data may not be adequate for measuring change over time. Small year to year movements may be difficult to detect if the size of the standard errors is large compared to the size of the difference between estimates.
- The specifications are based on the 2001 NHMRC guidelines. New guidelines were released in March 2009. The specifications may require amendment for future reports to reflect these new guidelines.

Indicator 8: Proportion of men reporting unprotected anal intercourse with casual male partners

Outcome area:	Prevention
Progress measure:	Risk factor prevalence
Measure:	Proportion of men reporting unprotected anal intercourse with casual male partners
Data source:	
Data provider:	
Data availability:	Not available
Cross tabulations provided:	

Box 26 **Comment on data quality**

There are currently no available data to inform this indicator.

Indicator 9: Immunisation rates for vaccines in the national schedule

Outcome area: Prevention

Output measure: Immunisation rates for vaccines in the national schedule

Measure: Proportion of children fully vaccinated and proportion of older adults vaccinated against specific infections

Fully vaccinated for children includes: Hepatitis B, Diphtheria, tetanus and pertussis, *Haemophilius influenzae* type B, Polio, Pneumococcal Disease, rotavirus, measles, mumps, rubella, meningococcal C and varicella (also includes Hepatitis A for Indigenous children)

For children, the measure is defined as:

- *numerator* — number of 5 year olds (children 60 to 63 months) who have been fully vaccinated according to the National Immunisation Program Schedule
- *denominator* — number of children aged 5 years on the Australian Childhood Immunisation Register

and is expressed as a *crude rate (per cent)*

For older adults, the measure is defined as:

- *numerator* — number of Indigenous Australians aged 50 years or over, and non-Indigenous Australians aged 65 years or over, who have been vaccinated for influenza and pneumococcal disease
- *denominator* — population of Indigenous Australians aged 50 years or over, and non-Indigenous Australians aged 65 years or over

and is expressed as an *age standardised rate (per cent)*

Data source: *Numerator* — Australian Childhood Immunisation Register (ACIR) (childhood vaccinations); Adult vaccination survey (AVS) (adult vaccinations for influenza and pneumococcal disease); NATSIHS (Indigenous adult vaccinations)

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data provider: *Numerator* — AIHW (ACIR and AVS) and ABS (NATSIHS)
Denominator — ABS

ACIR data are collected quarterly. AVS conducted irregularly. NATSIHS collected every six years

Data availability: 2006 (adults) and 2004-05 (Indigenous adults)
June 2009 (for children)

Cross tabulations provided:	State and Territory, by: • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.9.1	Proportion of children aged five years who were fully vaccinated, by Indigenous status, remoteness and SEIFA, 30 June 2009
Table NHA.9.2	Proportion of Australians aged 65 years or over who were fully vaccinated, 2006
Table NHA.9.3	Proportion of Indigenous Australians aged 50 years or over who were fully vaccinated against specific infections, 2004-05

Box 27 **Comment on data quality**

The ACIR DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The AVS DQS was provided by AIHW. The NATSIHS DQS was provided by ABS. The DQSs are included in their original form in the section in this report titled 'Data Quality Statements. Key points from the DQSs are summarised below.

- The data provide relevant information on immunisation rates.
- Data are available by State and Territory by Indigenous status and socioeconomic status (SES).
- Data are available annually for all children and Indigenous children from the Australian Childhood Immunisation Register (ACIR). Data are available on an irregular basis for all older adults from the Adult Vaccination Survey (AVS). Data are available every six years for the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). The most recent available data are for 2009 for children's vaccinations, 2006 for older adults and 2004-05 for Indigenous older adults.
- The ACIR records details of vaccinations given to children under seven years, which is broader than the scope of the indicator (number of 5 year olds who have been vaccinated). Vaccines that have been recently added to the National Immunisation Program Schedule were not available to all of the cohort of children being reported on for this year.
- Data are of acceptable accuracy. However, the relative standard error for vaccination of Indigenous adults in the ACT is greater than 25 per cent and should be used with caution.
- Detailed explanatory notes are publicly available to assist in the interpretation of results for ACIR and the NATSIHS. A report on the AVS is not available for publication.
- Additional data from the ACIR and the NATSIHS are available on-line, and on request.

The Steering Committee also notes the following issues:

- AVS data are only available irregularly. An assessment of the relative speed of change in results for this indicator is required to determine the required regularity of data collection.
- AVS and NATSIHS data are relatively old and may not be representative of current rates. Further work is required to ensure availability of more timely data.

Indicator 10: Breast cancer screening rates

Outcome area:	Prevention
Output measure:	Cancer screening rates (breast, cervical, bowel)
Measure:	Screening rates for breast cancer for women within national target age group The measure is defined as: • *numerator* — number of women aged 50–69 years who have been screened in a 2 year period • *denominator* — total number of women aged 50–69 years and is expressed as an *age standardised rate (per cent)*
Data source:	*Numerator* — State and Territory BreastScreen programs *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2007–2008 (calculated for a two-year period)
Cross tabulations provided:	By State and Territory. Nationally, by: • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.10.1	Breast cancer screening rates for women aged 50 to 69 years participating in BreastScreen programs, January 2007 to December 2008

Box 28 **Comment on data quality**

The AIHW prepared the DQS for this indicator. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of women aged 50–69 years (the national target age group) screened for breast cancer in a two-year period (the recommended screening interval).
- Data are available by State and Territory.
- National data are available for Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for the two-year period 1 January 2007 to 31 December 2008.
- Data are of acceptable accuracy. SES status data are only available at the national level. Usual residence of those being screened is self-reported by postcode, and population data are based on estimates of population in a Statistical Local Area. Data on usual residence of those being screened are poorer quality and concordance issues also exist between postcodes and Statistical Local Areas, leading to some spurious results when State and Territory data are disaggregated by socioeconomic status. Indigenous status disaggregated by jurisdiction involves very small numbers with large confidence intervals and significant volatility over time.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issue:

- Disaggregation of State and Territory data by Indigenous status and SES is a priority. Further development work on the current data source is required.

Indicator 11: Cervical screening rates

Outcome area:	Prevention
Output measure:	Cancer screening rates (breast, cervical, bowel)
Measure:	Rates of cervical screening for women within national target age group The measure is defined as: • *numerator* — number of women aged 20–69 years who have been screened in a 2 year period • *denominator* — total number of women aged 20–69 years and is expressed as an *age standardised rate (per cent)* *Denominator is adjusted to exclude the estimated number of women who have had a hysterectomy, using national hysterectomy fractions*
Data source:	*Numerator* — State and Territory cervical screening programs (all women). Data are collected annually. National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) (Indigenous women). Data are collected every six years *Denominator* — ABS Estimated Resident Population (all women) and ABS 2001 National Health Survey (for hysterectomy adjustments) and ABS NATSIHS (Indigenous women)
Data provider:	*Numerator* — AIHW (register data) and ABS (NATSIHS) *Denominator* — ABS
Data availability:	2007–2008 (calculated for a two-year period for all women) and 2004-05 NATSIHS (Indigenous women)
Cross tabulations provided:	State and Territory, by: • Indigenous women Nationally, by: • remoteness • SEIFA quintiles

Attachment tables

Table NHA.11.1	Cervical screening rates among women aged 20 to 69 years, January 2007 to December 2008
Table NHA.11.2	Cervical screening rates among Indigenous women aged 20 to 69 years, who reported having a pap smear at least every 2 years, 2004-05

Box 29 **Comment on data quality**

The DQSs for this indicator have been prepared by the AIHW and the ABS and are included in their original forms in the section in this report titled ‘Data Quality Statements’. Key points from the DQSs are summarised below.

- The data provide relevant information on the proportion of women aged 20–69 years (the national target age group) screened for cervical cancer in a two-year period (the recommended screening interval).
- State and Territory data are available by Indigenous status.
- National data are available by socioeconomic status (SES).
- Total population data are sourced from State and Territory cervical cytology registers (for number of women screened) and the ABS (for population). Annual data are available. The most recent available data are for the two-year period 1 January 2007 to 31 December 2008.
- Indigenous data are from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which is conducted every six years. The most recent available Indigenous data (for 2004-05) were published in April 2006.
- Data are of acceptable accuracy. Socioeconomic status data are only available at the national level. Usual residence of those being screened is self-reported by postcode and population data are based on estimates of population in a Statistical Local Area. Data on usual residence of those being screened are poorer quality and concordance issues also exist between postcodes and Statistical Local Areas, leading to some spurious results when State and Territory data are disaggregated by socioeconomic status.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of State and Territory data by socioeconomic status is a priority. Further development work on the current data sources is required.
- NATSIHS data are only collected every six years. An assessment of the relative speed of change in outcomes for Indigenous women is required to determine whether more regular data collection is necessary.

Indicator 12: Bowel cancer screening rates

Outcome area:	Prevention
Output measure:	Cancer screening rates (breast, cervical, bowel)
Interim measure:	Screening rates for bowel cancer for people within national target age groups The measure is defined as: • *numerator* — number of persons aged 50, 55 and 65 years who have been screened by the National Bowel Cancer Screening Program in the reference calendar year • *denominator* — population aged 50, 55, and 65 years and is expressed as a *rate (per cent)* *Excludes people screened outside the National Bowel Cancer Screening Program*
Data source:	*Numerator* — National Bowel Cancer Screening Register *Denominator* — ABS Estimated Resident Population (total population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2008
Cross tabulations provided:	State and Territory, by: • sex and age (50, 55, 65, total in target ages) Nationally, by: • remoteness • SEIFA quintiles

Attachment tables

Table NHA.12.1	Bowel cancer screening rates for people aged 50, 55 and 65 years participating in the National Bowel Cancer Screening Program, by sex, 2008
Table NHA.12.2	Bowel cancer screening rates for people aged 50, 55 and 65 years participating in the National Bowel Cancer Screening Program, by Indigenous status, remoteness area and SEIFA, 2008

Box 30 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of people aged 50, 55 and 65 years (the national target ages) screened for bowel cancer.
- Data are available by State and Territory.
- National data are available by socioeconomic status (SES). Data are not available by Indigenous status.
- Data are sourced from the National Bowel Cancer Screening Program Register, maintained by Medicare Australia (for number of persons screened) and the ABS (for population). Data are collected annually. The most recent available data are for 2008.
- Data by Indigenous status are not available due to high non-response by participants (32 per cent), which results in unreliable participation rates.
- Data are of acceptable accuracy. SES data are only available at the national level. Usual residence of those being screened is self-reported by postcode, and population data are based on estimates of population in a Statistical Local Area. Data on usual residence of those being screened are poorer quality and concordance issues also exist between postcodes and Statistical Local Areas, leading to some spurious results when State and Territory data are disaggregated by socioeconomic status.
- Data do not include people screened for bowel cancer outside the National Bowel Cancer Screening Program, resulting in an underestimate of population screening rates.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request, but this indicator can not be compared with regular monitoring reports due to different calculation methods.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status is a priority.
- Disaggregation of State and Territory data by SES is also a priority. Further development work on the current data sources is required.

Indicator 13: Proportion of children with 4th year developmental health check

Outcome area:	Prevention
Output measure:	Proportion of children with 4th year developmental health check
Interim measure:	Proportion of children who have received a 4 year old developmental health check *Includes ATSI child checks (limited to those given to 3, 4 and 5 year olds). Children with both health checks counted only once. Count children who have received more than one check (of either type) once only* The measure is defined as: • *numerator* — number of children aged 3, 4 or 5 years who have received a developmental health check (Healthy Kids Check) or an Aboriginal and Torres Strait Islander Child Check • *denominator* — population aged 4 years and is expressed as a *percentage*
Data source:	*Numerator* — Medicare Benefits Schedule (MBS) data *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2008-09
Cross tabulations provided:	State and Territory, by: • by type of check (proxy for Indigenous status) • remoteness • SEIFA quintiles

Attachment tables

Table NHA.13.1	Proportion of children receiving a 4th year development health check, 2008-09

Box 31 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled ‘Data Quality Statements. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of children with fourth year developmental checks conducted through identified Medicare services. The data do not include all developmental health check activity, such as that conducted through State and Territory early childhood health assessments in preschools and community health centres.
- State and Territory data are available by Indigenous status and socioeconomic status (SES). Indigenous children are identified as those who receive Aboriginal and Torres Strait Islander population Child Health Checks.
- Annual data are available. The most recent available data are for 2008-09.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Indigenous identification in MBS data is voluntary and the data significantly underestimate Indigenous use. Further development work on the current data source (including identifying an appropriate adjustment factor) is required.

Indicator 14: Waiting times for GPs

Outcome area:	Primary and community health
Progress measure:	Access to general practitioners, dental and other primary healthcare professionals
Measure:	Length of time a patient needs to wait to see a GP for an urgent appointment The measure is defined as: • *numerator* — number of people who saw a GP for urgent medical care within specified waiting time categories • *denominator* — total number of people who saw a GP for urgent medical care in the last 12 months and is expressed as a *percentage*
Data source:	Nil
Data provider:	Nil
Data availability:	Data not currently available
Cross tabulations provided:	Nil

Box 32 **Comment on data quality**

There are currently no available data to inform this indicator.

The Steering Committee has been advised that data may be available in future years through the new *ABS Patient Experience Survey*.

Indicator 15: Waiting times for public dentistry

Outcome area:	Primary and community health
Progress measure:	Access to general practitioners, dental and other primary healthcare professionals
Measure:	Waiting time (in days) between being placed on a public dentistry waiting list and an offer of care for dental treatment being made Median waiting time for access to public dental services — from the date the patient was added to the waiting list to the date they were offered dental care — presented as median number of days *Limited to non-emergencies and adult clients. Care defined as 'non-emergency' if not involving relief of pain*
Data source:	State and Territory public dental services Data are available annually
Data provider:	AIHW
Data availability:	Comparable data not currently available for reporting
Cross tabulations provided:	Nil

Box 33 **Comment on data quality**

There are currently no available data to inform this indicator.

The Steering Committee has been advised that comparable data are expected to be available for the 2010-11 reporting year.

Indicator 16: People deferring recommended treatment due to financial barriers

Outcome area: Primary and community health

Progress measure: Access to general practitioners, dental and other primary healthcare professionals

Measure: Proportion of people who required treatment but deferred that treatment due to cost, by type of health service

The measure is defined as:
- *numerator* — number of people who needed treatment but did not get it because of cost
- *denominator* — yet to be determined (possibly total population)

and is expressed as a *percentage*

Data source: Nil

Data provider: Nil

Data availability: Data not currently available

Cross tabulations provided: Nil

Box 34 **Comment on data quality**

There are currently no available data to inform this indicator.

The Steering Committee has been advised that data may be available in future years through the new *ABS Patient Experience Survey*.

Indicator 17: Proportion of people with diabetes with HbA1c below 7 per cent

Outcome area: Primary and community health

Progress measure: Proportion of diabetics with HbA1c below 7 per cent

Measure: Proportion of people with diabetes mellitus who have a HbA1c (glycated haemoglobin) level less than or equal to 7 per cent

The measure is defined as:

- *numerator* — number of people with diabetes with HbA1c below or equal to 7 per cent
- *denominator* — number of people with diagnosed diabetes in the community

and is expressed as a *percentage*

Excludes children (aged under 18 years) with diabetes and women with gestational diabetes mellitus from both numerator and denominator

Data source: Nil

Data provider: Nil

Data availability: No data currently available

Cross tabulations provided: Nil

Box 35 **Comment on data quality**

There are currently no available data to inform this indicator.

The Steering Committee also notes that available data on people with diabetes have significant scope limitations (for example, the Australian National Diabetes Information Audit and Benchmarking collection, and the GP network) and are not representative of the total population of people with diabetes. However, if the intention of the indicator is to consider only those people with diabetes who have been diagnosed, then the GP network should be considered for further development to enable nationally comparable reporting.

Indicator 18: Life expectancy

Outcome area:	Primary and community health
Progress measure:	Life expectancy (including the gap between Indigenous and non-Indigenous Australians)
Measure:	The average number of years a person could expect to live from the day they are born if they experienced mortality rates at each age that are currently experienced by the total population Calculated by direct estimation of life expectancy at birth for all Australians, Indigenous and non-Indigenous Australians using the estimated population at a single point and the number of deaths registered in the three years centred on that population point. Presented as number of years
Data source:	ABS Population Census and Post Enumeration Survey and ABS mortality data provided by State and Territory Registrars of Births, Deaths and Marriages Census data are collected every five years. Mortality data are collected annually
Data provider:	ABS
Data availability:	2005–2007 (calculated for a three-year period)
Cross tabulations provided:	State and Territory, by: • Indigenous status by sex (only available for selected states) • sex

Attachment tables

Table NHA.18.1	Estimated life expectancies at birth by sex, 2007
Table NHA.18.2	Estimated life expectancies at birth, by Indigenous status and sex, 2005–2007

Box 36 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on life expectancy at birth.
- Data are available for all states and territories.
- Data on Indigenous status are not of sufficient quality for statistical reporting on Victoria, Tasmania and the ACT (although data are included in national totals). Data for SA are also not reported due to small numbers. Data are not available by socioeconomic status (SES).
- Data are available every five years. The most recent available data (for 2005–2007) were published in May 2009. The data are calculated as a three year average.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Further work is required to improve the quality of data by Indigenous status, to enable reporting by all states and territories.
- Disaggregation of this indicator by SES is a priority. Further work on the current data source, or identification of an alternative data source, is required.
- The measure for this indicator is based on a three year average. The multiple year average was required to disaggregate data by Indigenous status. However, multiple year averages may not be able to determine trends over time as each reporting year incorporates the two previous years. Further work is required to determine what level of disaggregation is reliable for single year data.

Indicator 19: Infant/young child mortality rate

Outcome area:	Primary and community health
Progress measure:	Infant/young child mortality rate (including the gap between Indigenous and non-Indigenous)
Measure:	Mortality rates for infants and children aged less than 5 years For infants, the measure is defined as: • *numerator* — number of deaths among infants • *denominator* — live births and is expressed as a *rate (per 1000 live births)* For children, the measure is defined as: • *numerator* — Number of deaths among children aged 1–4 years • *denominator* — population aged 1–4 years and is expressed as a *rate (per 1000 population)* For infants and children, the measure is defined as: • *numerator* — Number of deaths among children aged 0–4 years • *denominator* — population aged 0–4 years and is expressed as a *rate (per 1000 population)*
Data source:	*Numerator* — ABS Mortality data *Denominator* — ABS Post Enumeration Survey, Births data (births), Estimated Resident Population (total population), Experimental Indigenous estimates and projections (Indigenous population) Data are available annually
Data provider:	ABS
Data availability:	2005–2007 (3 year average for general population) 2003–2007 (5 year average for disaggregations by Indigenous status)
Cross tabulations provided:	State and Territory, by: • Indigenous status

Attachment tables

Table NHA.19.1	All causes infant and child mortality, by age group, by State and Territory 2005–2007
Table NHA.19.2	All causes infant (0–1 year) mortality, by Indigenous status, NSW, Queensland, WA, SA, NT and Australia, 2003–2007

Table NHA.19.3	All causes child (1–4 years) mortality, by Indigenous status, NSW, Queensland, WA, SA, NT and Australia, 2003–2007
Table NHA.19.4	All causes child (0–4 years) mortality, by Indigenous status, NSW, Queensland, WA, SA, NT and Australia, 2003–2007

Box 37 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on infant and young child mortality rates.
- Data are available for all states and territories.
- Data on Indigenous status are not of sufficient quality for statistical reporting on Victoria, Tasmania and the ACT (although data are included in national totals).
- Annual data (multiple year averages) are available. The most recent available data are for 2005–2007 for the general population and 2003–2007 by Indigenous status.
- Data are of acceptable accuracy. Although most deaths of Indigenous people are registered, it is likely that some are not identified as Indigenous. Therefore data are likely to underestimate the Indigenous mortality rate.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Further work is required to improve the quality of data by Indigenous status, to enable reporting for all states and territories.
- Disaggregation of this indicator by SES is a priority. Further development work on the current data source, or identification of an alternative data source, is required.
- The measure for this indicator is based on a three and five year average. The multiple year average was required to disaggregate data by State and Territory, and Indigenous status. However, multiple year averages may not be able to determine trends over time as each reporting year incorporates the previous years. Further work is required to determine what level of disaggregation is reliable for single year data.

Indicator 20: Potentially avoidable deaths

Outcome area: Primary and community health

Progress measure: Potentially avoidable deaths

Interim measure: Deaths that are potentially avoidable within the present health system:

- potentially preventable deaths (those amenable to screening and primary prevention such as immunisation)
- potentially treatable deaths (those amenable to therapeutic interventions)

The measure is defined as:

- *numerator* — number of deaths of persons aged less than 75 years categorised as potentially avoidable
- *denominator* — population aged less than 75 years

and is expressed as *crude* and *age standardised rates (per 100 000 people in the relevant population)*

Calculated separately for preventable and treatable categories and as a total

[Secretariat has list of in-scope ICD-10 codes for calculation purposes]

Data source: *Numerator* — ABS Causes of Death collection

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: ABS

Data availability: 2007

Cross tabulations provided: State and Territory, by:

- Indigenous status

Attachment tables

Table NHA.20.1	Age standardised mortality rates of potentially avoidable deaths, under 75 years, 2007
Table NHA.20.2	Age standardised mortality rates of potentially avoidable deaths, under 75 years, by Indigenous status, 2007

Box 38 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on potentially avoidable (potentially preventable and treatable) deaths.
- Data are available for all states and territories.
- Data on Indigenous status are not of sufficient quality for statistical reporting on Victoria, Tasmania and the ACT (although data are included in national totals). Data are not available by socioeconomic status (SES).
- Annual data are available. The most recent data are for 2007.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Improving the quality of data on Indigenous status to allow reporting across all states and territories is a priority.
- Disaggregation of this indicator by SES is a priority. Further development work on the current data source, or identification of an alternative data source, is required.

Indicator 21: Treatment rates for mental illness

Outcome area: Primary and community health

Progress measure: Treated prevalence rates for mental illness

Interim measure: Proportion of population receiving clinical mental health services

The measure is defined as:
- *numerator* — the number of people receiving clinical mental health services
- *denominator* — total population

and is expressed as an *age standardised rate (per cent)*

Calculated separately for public, private and MBS-funded services (cannot aggregate services)

Data source: *Numerator* —State and Territory community mental health care data; Private Mental Health Alliance (PMHA) Centralised Data Management Service (CDMS); Medicare Benefits Schedule (MBS) data

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: 2007-08

Cross tabulations provided: State and Territory, by service stream, by:
- 10-year age group (age specific rate)
- Indigenous status
- remoteness
- SEIFA quintiles

Attachment tables

NHA.21.1	Proportion of people receiving clinical mental health services by service type, 2007-08
NHA.21.2	Proportion of people receiving clinical mental health services by service type and Indigenous status, 2007-08
NHA.21.3	Proportion of people receiving clinical mental health services by service type and remoteness area, 2007-08

NHA.21.4	Proportion of people receiving clinical mental health services by service type and SEIFA, 2007-08
NHA.21.5	Proportion of people receiving clinical mental health services by service type and age, 2007-08

Box 39 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing and the AIHW, and finalised in consultation with State and Territory Health Authorities, and the Private Mental Health Alliance. The DQS is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of the population receiving clinical mental health services. Data are reported separately for public, private and MBS-funded services.
- State and Territory data are available by socioeconomic status (SES), and for public services, by Indigenous status. Data for private and MBS-funded services are not available by Indigenous status.
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy. Comparisons between states and territories need to be made with caution due to differences in counting clients under care and reporting processes. For example, people who are assessed for a mental health service but do not go on to be treated for a mental illness are included in the data by some jurisdictions but not others. The quality of Indigenous identification for public services also varies across states and territories.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator for private hospital patients and MBS services by Indigenous status is a priority. Further development work on the current data source, or identification of an alternative data source, is required.

Indicator 22: Selected potentially preventable hospitalisations

Outcome area: Primary and community health

Progress measure: Selected potentially preventable hospitalisations

Measure: Admissions to hospital that could have potentially been prevented through the provision of appropriate non-hospital health services

The measure is defined as:

- *numerator* — number of potentially preventable hospitalisations, divided into the following three categories and total:
  - vaccine-preventable conditions (for example, tetanus, measles, mumps, rubella);
  - potentially preventable acute conditions (for example, ear, nose and throat infections, dehydration/gastroenteritis)
  - potentially preventable chronic conditions (for example, diabetes, asthma, angina, hypertension, congestive heart failure and chronic obstructive pulmonary disease)
  - all potentially preventable hospitalisations
- *denominator* — total population

and expressed as *age standardised rates (per 100 000 people in the relevant population)*

Appendix 1 of Australian Hospital Statistics 2007-08 has ICD-10-AM codes in scope for each category above

Data source: *Numerator* — AIHW National Hospital Morbidity Database

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: 2007-08

Cross tabulations provided: State and Territory (by three groups and total), by:

- Indigenous status
- remoteness
- SEIFA quintiles

Attachment tables

Table NHA.22.1	Selected potentially preventable hospitalisations per 100 000 population, 2007-08
Table NHA.22.2	Selected potentially preventable hospitalisations per 100 000 population by Indigenous status, remoteness and SEIFA, 2007-08

Box 40 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on selected potentially preventable hospitalisations in public and private hospitals.
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2007-08.
- Data do not include potentially preventable conditions that are treated in outpatient clinics or emergency departments that do not require admission to hospital.
- The interpretation of rates for jurisdictions should take into consideration cross border flows, particularly in the ACT.
- Data are of acceptable accuracy.
- All public hospitals, except a mothercraft hospital in the ACT, provided data. Most private hospitals also provided data, except private day hospital facilities in the ACT, the single private free-standing hospital facility in the NT and a small private hospital in Victoria. Data are not published for private hospitals in Tasmania, the ACT and the NT to protect the confidentiality of individual hospitals, but are included in totals.
- Data on Indigenous status are not of sufficient quality for statistical reporting in Tasmania and the ACT.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available.

The Steering Committee also notes the following issue:

- Improving the quality of data on Indigenous status to allow reporting across all states and territories is also a priority.

Indicator 23: Selected potentially avoidable GP-type presentations to emergency departments

Outcome area: Primary and community health

Progress measure: Selected potentially avoidable GP-type presentations to emergency departments

Interim measure: Attendances at public hospital emergency departments that could have potentially been avoided through the provision of appropriate non-hospital services in the community

The measure is defined as the number of presentations to public hospital emergency departments with a type of visit of *Emergency presentation* (or *Not Reported*) where the patient:

- was allocated a triage category of 4 or 5, **and**
- did not arrive by ambulance or police or correctional vehicle, **and**
- was not admitted to the hospital or referred to another hospital, **and**
- did not die

and is presented as a *number*

Measure is limited to public hospitals in peer groups A and B

Data source: *Numerator* — AIHW National Non-admitted Emergency Department Care Database

Data are available annually

Data provider: AIHW

Data availability: 2007-08

Cross tabulations provided: State and Territory, by:

- Indigenous status
- remoteness
- SEIFA quintiles

Attachment tables

Table NHA.23.1	Selected potentially avoidable GP-type presentations to emergency departments, 2007-08

Box 41 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on selected potentially avoidable GP-type presentations to emergency departments.
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy. Data are almost complete for hospitals in peer group A (principal referral and specialist women's and children's hospitals) and B (large hospitals). Peer group A and B hospitals provide approximately 69 per cent of emergency department services.
- Caution is advised when interpreting these data as the quality of Indigenous identification has not been formally assessed. Further, as peer group A and B hospitals primarily occur in major cities, the data might not include regional and rural hospitals where the representation of Indigenous people is higher. Similarly, disaggregations by SES and remoteness should be used with caution.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Only 69 per cent of public hospital emergency department services are in scope. Further development work is required to expand the scope to all hospitals, or construct an appropriate method to ensure data are representative of all hospitals.
- Assessing and improving the quality of Indigenous status and SES reporting is a priority.
- The number of potentially avoidable GP-type presentations to emergency departments does not allow comparisons across states and territories, remoteness or SES status. The Steering Committee recommends examining the possibility of reporting this indicator as a rate per 100 000 people in the relevant population.

Indicator 24: GP-type services

Outcome area:	Primary and community health
Output measure:	Number of primary care services per 1000 population (by location)
Measure:	GP type service use per 1000 population The measure is defined as: • *numerator* — number of non-referred General Practice (GP) attendances claimed through the Medical Benefits Scheme (MBS) or the Department of Veterans' Affairs (DVA) • *denominator* — total population and is expressed as an *age standardised rate* *Includes GP/ Vocationally Registered GP non-referred attendances; Enhanced primary care; Practice nurse services; Other non-referred attendances* *Non-referred (GP) attendances is kept consistent with MBS classifications* *[Secretariat has list of MBS items for calculation of this measure]*
Data source:	*Numerator* — Medicare Benefits Schedule (MBS), Department of Veterans' Affairs (DVA) data *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2008-09 with caveats
Cross tabulations provided:	State and Territory, by: • remoteness • SEIFA quintiles

Attachment tables

Table NHA.24.1	GP-type service use, 2008-09

Box 42 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled ‘Data Quality Statements. Key points from the DQS are summarised below.

- The data provide relevant information on GP-type service use per 1000 population. Data are not available by Indigenous status.
- State and Territory data are available by socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2008-09.
- Data are of acceptable accuracy.
- State and Territory and SES data reflect location of residence of client, not location where services received.
- Data do not include medical claims reimbursed through the Department of Veterans’ Affairs (DVA).
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status is a priority. Indigenous identification in MBS data is voluntary and the data significantly underestimate Indigenous utilisation. The Steering Committee was advised that an adjustment factor may be available to apply to the data to enable reporting by Indigenous status for future reports.
- DVA data were not available for inclusion in this report. Data are anticipated to be available for future reports.

Indicator 25: Specialist services claimed through Medicare

Outcome area:	Primary and community health
Output measure:	Number of primary care services per 1000 population (by location)
Interim measure:	Differential rates for specialist service use (out-of-hospital private patient) per 1000 population The measure is defined as: • *numerator* — number of specialist services claimed through the Medicare Benefits Schedule (MBS) or Department of Veterans' Affairs (DVA) • *denominator* — total population and is expressed as an *age standardised rate*
Data source:	*Numerator* — Medicare Benefits Schedule (MBS), Department of Veterans' Affairs (DVA) data *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2008-09
Cross tabulations provided:	State and Territory, by: • remoteness • SEIFA quintiles

Attachment tables

Table NHA.25.1	Specialist services, 2008-09

Box 43 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on specialist service use for out-of-hospital private patients, per 1000 population. It only includes specialist services reimbursed through Medicare, and does not include specialist services delivered to patients in public hospitals (either inpatient or outpatient) and other settings that are not reimbursed by Medicare.
- State and Territory data are available by socioeconomic status (SES). Data are not available by Indigenous status.
- Annual data are available. The most recent available data are for 2008-09.
- Data are of acceptable accuracy.
- State and Territory and SES data reflect location of residence of client, not location where services received.
- Data do not include medical claims reimbursed through the Department of Veterans' Affairs (DVA).
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status is a priority. Indigenous identification in MBS data is voluntary and the data significantly underestimate Indigenous utilisation. The Steering Committee was advised that an adjustment factor may be available to apply to the data to enable reporting by Indigenous status for future reports.
- DVA data were not available for inclusion in this report. Data are anticipated to be available for future reports.

Indicator 26: Dental services

Outcome area: Primary and community health

Output measure: Number of primary care services per 1000 population (by location)

Interim measure: Differential rates for use of dental services per 1000 population

The measure is defined as:

- *numerator* — number of persons who visited a dentist in the last 12 months
- *denominator* — population aged 5 years or over (2 years and over for Indigenous people)

and is expressed as an *age standardised rate*

Rates are calculated separately for public and private providers and all providers, and for general and emergency and all visits

Visits classified as per Australian Dental Association Schedule of Dental Services

Service estimates to be restricted to dentate persons

Data source: *Numerator* — National Dental Telephone Interview Survey (NDTIS) (all). National Health Survey (NHS)/National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) (Indigenous status).

Denominator — ABS Estimated Resident Population (all) and NHS/NATSIHS (Indigenous status)

(Total population) Data are available every 2.5 years
(Indigenous status) Data are available every six years

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: (all) 2008
(Indigenous status) 2004-05

Cross tabulations provided: State and Territory, by public/private providers, by service type (general, emergency, total), by:

- remoteness
- SEIFA quintiles

State and Territory, by public/private providers, by:

- Indigenous status

Attachment tables

Table NHA.26.1	Use of dental services, by provider and service type, 2008
Table NHA.26.2	Use of dental services, by provider and service type, by remoteness and SEIFA, 2008
Table NHA.26.3	Use of dental services, by Indigenous status, 2004-05

Box 44 **Comment on data quality**

The DQSs for this indicator have been prepared by the AIHW and ABS and are included in their original form in the section in this report titled 'Data Quality Statements'. Key points from the DQSs are summarised below.

- The data provide relevant information on number of dental services per 1000 population. Data are available by State and Territory. National data are available by socioeconomic status (SES), and State and Territory data are available by Indigenous status.
- Data for all Australians are from the National Dental Telephone Interview Survey (NDTIS). Data exclude children aged 0–4 years and people with no remaining natural teeth. Data are available every 2.5 years. The most recent available data are for 2008.
- Data by Indigenous status are from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) (which is conducted every six years) and the National Health Survey (NHS) (which is conducted every three years). The most recent data are for 2004-05. The NHS does not include people living in very remote areas, which affects the comparability of the NT results.
- Data are of acceptable accuracy. Relative standard errors for some SES and Indigenous status disaggregations are greater than 25 per cent and these data should be used with caution.
- Detailed explanatory notes are publicly available to assist in interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Data are only available every 2.5 years (NDTIS) and every six years for the NATSIHS. An assessment of the relative speed of change in results for this indicator is required to determine whether more regular data collection is necessary.
- The size of the standard errors mean that the data may not be adequate for measuring change over time. Small year to year movements may be difficult to detect if the size of the standard errors is large compared to the size of the difference between estimates.
- Data from the NDTIS and the NHS/NATSIHS are not directly comparable.

Indicator 27: Optometry services

Outcome area:	Primary and community health
Output measure:	Number of primary care services per 1000 population (by location)
Measure:	Optometry service use per 1000 population The measure is defined as: • *numerator* — number of optometry services claimed through the Medicare Benefits Schedule (MBS) or Department of Veterans' Affairs (DVA) • *denominator* — total population and is expressed as an *age standardised rate* *[Secretariat has list of MBS items for calculation of this measure]*
Data source:	*Numerator* — Medicare Benefits Schedule (MBS), Department of Veterans' Affairs (DVA) data *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2008-09
Cross tabulations provided:	State and Territory, by: • remoteness • SEIFA quintiles

Attachment tables

Table NHA.27.1	Optometry services, 2008-09

Box 45 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on optometry services per 1000 population.
- Data are available by State and Territory.
- Data are not available by Indigenous status. State and Territory data are available by socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2008-09.
- Data do not include medical claims reimbursed through the Department of Veterans’ Affairs.
- Data are of acceptable accuracy. State and Territory and SES data reflect location of residence of client, not location where services received.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status is a priority. Indigenous identification in MBS data is voluntary and the data significantly underestimate Indigenous utilisation. The Steering Committee was advised that an adjustment factor may be available to apply to the data to enable reporting by Indigenous status for future reports.
- DVA data were not available for inclusion in this report. Data are anticipated to be available for future reports.

Indicator 28: Public sector community mental health services

Outcome area:	Primary and community health
Output measure:	Number of mental health services
Measure:	Number of public community mental health service contacts per 1000 population The measure is defined as: • *numerator* — total number of community mental health service contacts provided by public sector community mental health services • *denominator* — total population and is expressed as an *age standardised rate (per 1000 population)*
Data source:	*Numerator* — Community Mental Health Care National Minimum Dataset *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2007-08
Cross tabulations provided:	State and Territory, by: • sex • Indigenous status • remoteness • SEIFA quintiles • sex by age (10-year age groups) (age specific rates)

Attachment tables

Table NHA.28.1	Community mental health service contacts provided by public sector community mental health services, 2007-08
Table NHA.28.2	Community mental health service contacts provided by public sector community mental health services by sex and age, 2007-08

Box 46 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the use of community mental health services (as a rate per 1000 population).
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy.
- Indigenous status rates should be interpreted with care due to varying quality of Indigenous identification across states and territories.
- State and Territory and SES data reflect location of residence of the client, not location where services were received.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issue:

- The relevant output measure that this indicator informs is ‘number of mental health services’. The number of mental health services available can be affected by the size of the organisations offering the services. The Steering Committee recommends that this output measure be amended to ‘mental health service utilisation’ as it captures the extent to which mental health services are used by the community.

Indicator 29: Private sector mental health services

Outcome area: Primary and community health

Output measure: Number of mental health services

Interim measure: Ambulatory mental health services provided by private psychiatrists, GPs and allied health providers (psychologists, occupational therapists, social workers)

The measure is defined as:
- *numerator* — number of ambulatory mental health service contacts provided by private psychiatrists, general practitioners, clinical psychologists, registered psychologists and other allied health providers (including occupational therapists and social workers) claimed through the Medicare Benefits Schedule (MBS) or Department of Veterans' Affairs (DVA)
- *denominator* — total population

and is expressed as an *age standardised rate (per 1000 population)*

Includes Better Access MBS items claimed by allied health professionals (including occupational therapists and social workers) in addition to private psychiatrists, GPs and psychologists

Includes all mental-health related MBS items and includes some ambulatory-equivalent admitted patient mental health service contacts [Secretariat has list of MBS items for calculation of this measure]

Data source: *Numerator* — Medicare Benefits Schedule (MBS) and Department of Veterans' Affairs (DVA) data

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: 2008-09

Cross tabulations provided: State and Territory, by:
- service Streams (Psychiatrist, Clinical Psychologist, General Practitioner and Other Allied Health)
- sex
- sex by age (10 year groups) (age specific rates)
- remoteness
- SEIFA quintiles

Attachment tables

Table NHA.29.1	Rate of ambulatory mental health services provided, by MBS service stream, 2008-09
Table NHA.29.2	Rate of ambulatory mental health services provided, by MBS sex, Indigenous status, remoteness and SEIFA, 2008-09
Table NHA.29.3	Rate of ambulatory mental health services provided by MBS age, 2008-09

Box 47 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the use of private mental heath services (as a rate per 1000 population).
- Data are available by State and Territory.
- Data are not available by Indigenous status. Data are available by socioeconomic status (SES) by State and Territory.
- Annual data are available. The most recent available data are for 2008-09.
- The data do not include Medicare Benefits Schedule (MBS) claims reimbursed by the Department of Veterans' Affairs.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status is a priority. Indigenous identification in MBS data is voluntary and the data significantly underestimate Indigenous utilisation. The Steering Committee was advised that an adjustment factor may be available to apply to the data to enable reporting by Indigenous status for future reports.
- The relevant output measure that this indicator informs is 'number of mental health services'. A measure of the number of mental health services can be affected by the size of the services. The Steering Committee recommends that this output measure be amended to 'mental health service utilisation' as it captures the extent to which mental health services are used by the community.
- DVA data were not available for inclusion in this report. Data are anticipated to be available for future reports.

Indicator 30: Proportion of people with diabetes who have a GP annual cycle of care

Outcome area:	Primary and community health
Output measure:	Proportion of people with selected chronic disease whose care is planned (asthma, diabetes, mental health)
Measure:	Proportion of people with diabetes mellitus who have received a Medicare Benefits Schedule (MBS) annual cycle of care The measure is defined as: • *numerator* — number of people with a completed MBS diabetes annual cycle of care (includes MBS A18.2 or A19.2 codes) • *denominator* — number of people with diagnosed type 1 or type 2 diabetes in the community and is expressed as a *percentage* *The denominator excludes gestational diabetes mellitus (GDM) and 'other' diabetes cases and deceased registrants*
Data source:	*Numerator* — Medicare Benefits Schedule (MBS) data *Denominator* — National Diabetes Services Scheme (NDSS) database Data are available annually
Data provider:	*Numerator and denominator* — Department of Health and Ageing
Data availability:	2008-09
Cross tabulations provided:	State and Territory, by: • remoteness • SEIFA quintiles

Attachment tables

Table NHA.30.1	Proportion of people with diabetes who have a GP annual cycle of care, 2008-09

Box 48 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of people known to have diabetes who have an annual cycle of care.
- Data are available by State and Territory.
- Data are not available by Indigenous status. Data are available by socioeconomic status (SES) by State and Territory.
- Annual data are available. The most recent available data are for 2008-09.
- Not all people with diabetes are registered with the National Diabetes Services Scheme, and registration is lower in remote areas.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status is a priority. Indigenous identification in MBS data is voluntary and the data significantly underestimate Indigenous utilisation. The Steering Committee was advised that an adjustment factor may be available to apply to the data to enable reporting by Indigenous status for future reports.
- It would be useful to report this indicator in the future separately for type 1 and type 2 diabetes.

Indicator 31: Proportion of people with asthma with a written asthma plan

Outcome area:	Primary and community health
Output measure:	Proportion of people with selected chronic disease whose care is planned (asthma, diabetes, mental health)
Interim measure:	Proportion of people with asthma who have a written asthma plan The measure is defined as: • *numerator* — people with asthma who have a written asthma plan • *denominator* — estimated number of people with asthma and is expressed as a *percentage*
Data source:	*Numerator and denominator* — National Health Survey (NHS) (all). Data are collected every three years. National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) (Indigenous). Data are collected every six years
Data provider:	ABS
Data availability:	(Total population) 2007-08 (Indigenous status) 2004-05
Cross tabulations provided:	State and Territory, by: • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.31.1	Proportion of people with asthma with a written asthma plan, by remoteness and SEIFA, 2007-08
Table NHA.31.2	Proportion of people with asthma with a written asthma plan, by Indigenous status, 2004-05

Box 49 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of asthmatics who have an asthma management plan. However, there is no information about the severity of the condition and people with mild asthma are unlikely to require a written plan. Data are available by State and Territory by Indigenous status and socioeconomic status (SES).
- Data are available from the National Health Survey (NHS) every three years and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) every six years. The most recent available data are for 2007-08 for all people, and 2004-05 for Indigenous people.
- The NHS does not include people living in very remote areas which affects the comparability of the NT results.
- Data are of acceptable accuracy. Data are not comparable between Indigenous and non-Indigenous people because of different years of the data collections and different interpretations of what is a ‘written’ plan. Relative standard errors for some SES and Indigenous status disaggregations are greater than 25 per cent and these data should be used with caution.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- The data for the NATSIHS are relatively old and may not be representative of current outcomes. Further work is required to ensure availability of more timely data.
- The size of the standard errors mean that the NHS and NATSIHS data may not be adequate for measuring change over time. Small year to year movements may be difficult to detect if the size of the standard errors is large compared to the size of the differences between estimates.
- NATSIHS data are only collected every six years. An assessment of the relative speed of change in outcomes is required to determine whether more regular data collection is necessary.

Indicator 32: Proportion of people with mental illness with GP care plans

Outcome area:	Primary and community health
Output measure:	Proportion of people with selected chronic disease whose care is planned (asthma, diabetes, mental health)
Interim measure:	Proportion of people with mental illness with General Practice (GP) Mental Health Care Plans The measure is defined as: • *numerator* — number of persons with a GP Mental Health Care Plan • *denominator* — estimated number of people with mental illness and is expressed as an *age-standardised rate* (*per cent)* *Numerator and denominator limited to people aged 16-84 years* *Denominator is calculated by applying the estimated proportion (age and sex-specific) of the population with mental illness (from the most recent ABS National Survey of Mental Health and Wellbeing) to the Estimated Resident Population*
Data source:	*Numerator* — Medicare Benefits Schedule (MBS) data *Denominator* — Survey of Mental Health and Wellbeing and Estimated Resident Population data Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2008-09 (based on 2007 survey denominator for measure)
Cross tabulations provided:	State and Territory, by: • 10 year age group (age specific numbers of people) National, by: • remoteness • SEIFA quintiles • age specific rates

Attachment tables

Table NHA.32.1	People with mental illness with GP care plans, 2008-09
Table NHA.32.2	People with mental illness with GP care plans, by age, 2008-09
Table NHA.32.3	People with mental illness with GP care plans, by remoteness area and SEIFA, 2008-09

Box 50 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of people with a mental illness who have GP mental health care plans. The National Survey of Mental Health and Wellbeing does not capture all disorders (for example, low-prevalence disorders such as psychosis). This means that the numerator may potentially include some people who are not included in the denominator.
- Data are available by State and Territory.
- Data are not available by Indigenous status, and are available for socioeconomic status (SES) only at a national level.
- Data for age ranges are only for the number of people with GP mental health care plans by State and Territory.
- Annual data are available. The most recent available data are for 2008-09.
- The data do not cover all mental health care services, and do not include services that were reimbursed through the Department of Veterans' Affairs.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status, and SES by State and Territory is a priority. Further development work on the current data sources is required.
- The Steering Committee recommends consideration of reporting a rate for this indicator (per cent of people with mental illness) by State and Territory for age ranges.

Indicator 33: Women with at least one antenatal visit in the first trimester of pregnancy

Outcome area:	Primary and community health
Output measure:	Number of women with at least one antenatal visit in the first trimester of pregnancy
Interim measure:	Proportion of pregnancies with an antenatal visit in the first trimester The measure is defined as: • *numerator* — number of pregnancies resulting in a birth, where an antenatal visit was reported in the first trimester • *denominator* — total number of pregnancies resulting in a birth and is expressed as a *percentage* Births include live and still births where the birth weight was at least 400 grams or the gestational age was 20 weeks or more First trimester is defined as the first 12 weeks of pregnancy
Data source:	*Numerator and denominator* — National Perinatal Data Collection Data are available annually
Data provider:	*Numerator and denominator* — AIHW
Data availability:	2007 (data only available for NSW, SA and the NT for this baseline reporting cycle)
Cross tabulations provided:	State and Territory, by: • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.33.1	Proportion of pregnancies with an antenatal visit in the first trimester, 2007

Box 51 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of women with at least one antenatal visit in the first trimester of pregnancy that resulted in birth.
- Data are not available for Victoria, Queensland, WA and Tasmania, and are not of sufficient quality for reporting for the ACT. For other states and territories, data can be disaggregated by Indigenous status and socioeconomic status.
- Annual data are available. The most recent available data are for 2007.
- Data are not comparable across jurisdictions for which data were available because non-standard definitions were used and response rates were variable.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issue:

- These data are relatively old and may not be representative of current outcomes. Further work is required to ensure availability of more timely data, data for all states and territories, and improved comparability by State and Territory.
- The wording of this output measure in the NHA is 'Number of women with at least one antenatal visit in the first trimester of pregnancy'. Data on the per cent of live and still births has been provided, and this information allows comparisons across states and territories, and other disaggregations. The Steering Committee recommends changing the output measure to 'women with at least one antenatal visit in the first trimester of pregnancy'.

Indicator 34: Waiting times for elective surgery

Outcome area:	Hospital and related care
Progress measure:	Waiting times for services
Measure:	Median and 90th percentile waiting times for elective surgery in public hospitals, including by indicator procedure The measure is calculated by: • subtracting the listing date for care from the removal date, minus any days when the patient was 'not ready for care', and also minus any days the patient was waiting with a less urgent clinical urgency category than their clinical urgency category at removal and is expressed the number of days by *percentile* (ie. at the 50th and 90th percentile) Calculated overall and for each indicator procedure Waiting times are calculated for patients whose reason for removal was *Admitted as an elective patient*. Includes the proportion of removals for elective admission that waited more than 365 days
Data source:	National Elective Surgery Waiting Times Data Collection. For Indigenous disaggregation, the Collection is linked to the National Hospital Morbidity Database Data are available annually
Data provider:	AIHW
Data availability:	2007-08
Cross tabulations provided:	State and Territory, by: • peer group • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.34.1	Waiting times for elective surgery in public hospitals, by procedure, 2007-08
Table NHA.34.2	Waiting times for elective surgery in public hospitals, by Indigenous status and procedure, 2007-08

Table NHA.34.3	Waiting times for elective surgery in public hospitals, by remoteness area, 2007-08
Table NHA.34.4	Waiting times for elective surgery in public hospitals, by SEIFA, 2007-08

Box 52 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on waiting times for selected hospital services.
- Data are available by State and Territory.
- Data are available by Indigenous status and socioeconomic status, by State and Territory.
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee has no additional issues to note for this indicator.

Indicator 35: Waiting times for emergency department care

Outcome area: Hospital and related care

Progress measure: Waiting times for services

Interim measure: Percentage of patients who are treated within national benchmarks for waiting times for each triage category in public hospital emergency departments

Triage categories are:
- triage category 1: seen within seconds, calculated as less than or equal to 2 minutes
- triage category 2: seen within 10 minutes
- triage category 3: seen within 30 minutes
- triage category 4: seen within 60 minutes
- triage category 5: seen within 120 minutes

For each triage category, the measure is defined as:
- *numerator* — the number of presentations to public hospital emergency departments that were treated within benchmarks for each triage category
- *denominator* — total presentations to public hospital emergency departments

and is expressed as a *percentage*

Calculated overall and separately for each triage category

Includes records with a Type of visit of *Emergency presentation* or *Not reported*

Excludes where episode end status is either *Did not wait* or *Dead on arrival*, or if the Waiting time to service is invalid

Limited to public hospitals in peer groups A and B

Data source: *Numerator and denominator* — AIHW National Non-admitted Patient Emergency Department Care Database

Data are available annually

Data provider: *Numerator and denominator* — AIHW

Data availability: 2007-08

Cross tabulations provided: State and Territory, by Triage category, by:
- peer group
- Indigenous status
- remoteness area
- SEIFA quintiles

Attachment tables

Table NHA.35.1	Patients treated within national benchmarks for emergency department waiting time, 2007-08
Table NHA.35.2	Patients treated within national benchmarks for emergency department waiting time, by Indigenous status, 2007-08
Table NHA.35.3	Patients treated within national benchmarks for emergency department waiting time, by remoteness area, 2007-08
Table NHA.35.4	Patients treated within national benchmarks for emergency department waiting time, by SEIFA, 2007-08

Box 53 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of patients who are treated within specified waiting times for different triage categories in emergency departments in peer group A and B hospitals.
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy. Data are almost complete for hospitals in peer group A (principal referral and specialist women's and children's hospitals) and B (large hospitals). Peer group A and B hospitals provide approximately 69 per cent of emergency department services.
- Caution is advised when interpreting these data by Indigenous status as the quality of Indigenous identification has not been formally assessed. Further, as peer group A and B hospitals primarily occur in major cities, these data might not include hospitals in regional and rural areas where the representation of Indigenous patients is higher. Similarly, disaggregations by SES and remoteness should be used with caution.
- Detailed explanatory notes are publicly available to assist in interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Only 69 per cent of public hospital emergency department services are in scope. Further development work is required to expand the scope to all hospitals, or construct an appropriate method to ensure data are representative of all hospitals.
- Assessing and improving the quality of Indigenous data is a priority.

Indicator 36: Waiting times for admission following emergency department care

Outcome area: Hospital and related care

Progress measure: Waiting times for services

Measure: Percentage of patients who present to a public hospital emergency department and are admitted to the same hospital, whose time in the emergency department is less than 8 hours

The measure is defined as:

- *numerator* — presentations to public hospital emergency departments with an episode end status of 'admitted to this hospital' who were physically in the emergency department for less than 8 hours
- *denominator* — all presentations with an episode end status of 'admitted to this hospital'

and is expressed as a *percentage*

Data source: Not collected currently

Data provider: Nil

Data availability: Data currently not collected

Cross tabulations provided: Nil

Box 54 Comment on data quality

No data are currently available to inform this indicator. The Steering Committee has been advised that waiting time data could become a part of the AIHW's National Non-admitted Patient Emergency Department Database.

Indicator 37: Waiting times for radiotherapy and orthopaedic specialists

Outcome area:	Hospital and related care
Progress measure:	Waiting times for services
Measure:	Length of time patient needs to wait to see selected specialists for radiotherapy and orthopaedic services The measure is calculated as: • the waiting time from the date the patient first sought an appointment, following a GP or other appropriate referral, to: – *for* radiotherapy *patients,* the date of the first appointment at which treatment is provided – *for* orthopaedic *patients*, the date of their first appointment with a medical specialist and is expressed as the number of days, by percentile (i.e. at the 50th and 90th percentile), for each specialist type
Data source:	There is no current national data source
Data provider:	Nil
Data availability:	Data currently not collected
Cross tabulations provided:	Nil

Box 55 **Comment on data quality**

No data are currently available to inform this indicator.

Indicator 38: Adverse drug events in hospitals

Outcome area: Hospital and related care

Progress measure: Selected adverse events in acute and sub-acute care settings

Measure: Adverse drug events occurring in hospital and requiring treatment

The measure is defined as:

- *numerator* — number of separations with an adverse drug event which occurred in hospital
- *denominator* — total number of separations from hospital

and is expressed as a *rate*

Data source: There is no current national data source

Data provider: Nil

Data source: Nil

Data provider: Nil

Data availability: Data are not currently available

Cross tabulations provided: Nil

Box 56 **Comment on data quality**

No data are currently available to inform this indicator.

Indicator 39: Healthcare-associated *Staphylococcus aureus* (including MRSA) bacteraemia in acute care hospitals

Outcome area: Hospital and related care

Progress measure: Selected adverse events in acute and sub-acute care settings

Interim measure: Healthcare-associated Staphylococcus aureus (including Methicillin-resistant *Staphylococcus aureus*) bacteraemia (SAB) in acute care hospitals

For public acute-care hospitals in Peer Group A and B:

the number of patient episodes of SAB (both methicillin resistant and methicillin sensitive) where the time when the first positive blood culture was collected was 48 hours or more after admission to hospital

plus

the number of patient episodes of SAB (both methicillin resistant and methicillin sensitive) where the time when the first positive blood culture was collected was within 48 hours of the time of a discharge from hospital

plus

the number of any additional patient episodes of SAB (both methicillin resistant and methicillin sensitive) where the time when the first positive blood culture was collected was within 48 hours of the time of admission and one of the following clinical criteria were met:

- SAB is a complication of the presence of an indwelling medical device
- SAB occurs within 30 days of a surgical procedure and is related to the surgical site
- SAB occurs within 48 hours of, and is related to, an invasive instrumentation or incision
- SAB is associated with neutropenia ($<1x10^9$/L) contributed to by cytotoxic therapy

presented as a *number*

A patient-episode of SAB is defined as a positive blood culture for Staphylococcus aureus. Only the first isolate per patient is counted, unless at least 14 days has passed without a positive blood culture, in which case an additional episode is recorded.

Data source: State and Territory infection surveillance data

Data are available annually

Data provider: AIHW

Data availability: 2008-09

Cross tabulations provided: State and Territory

Attachment tables

Table NHA.39.1	Episodes of *Staphylococcus aureus* (including MRSA) bacteraemia (SAB) in acute care hospitals, 2008-09

Box 57 Comment on data quality

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the number of patient episodes of healthcare-associated *Staphylococcus aureus* bacteraemia (SAB) for five jurisdictions (Queensland, WA, SA, Tasmania and the ACT). Queensland data were only available for people aged 15 years and over. Data were not available by Indigenous status or socioeconomic status (SES).
- Data provided include other healthcare-associated SAB which is diagnosed and treated in hospital but may have been acquired in non-hospital settings.
- Annual data are available. The most recent available data are for 2008-09.
- Data are of acceptable accuracy. However, there are some variations in the definitions and the data collection arrangements used across jurisdictions, so comparisons should be made with caution.
- Some additional data are available on websites for selected jurisdictions.

The Steering Committee also notes the following issues:

- Improving scope (to include all jurisdictions) and coverage (to include all hospitals) is a priority. A suitable denominator is yet to be determined to enable reporting of rates.
- Improving comparability across jurisdictions is a priority.
- Disaggregation of this indicator by Indigenous status and SES would improve reporting but may not be feasible due to the small number of episodes.
- The Australian Commission on Safety and Quality in Health Care has consulted with infectious disease and surveillance specialists to develop a standard definition of health-care associated SAB in acute care hospitals to apply nationally. This definition was endorsed by the Commission's Inter-Jurisdictional Committee on 22 October 2009. Since then, jurisdictions have been making changes to their surveillance programs in hospitals nationwide in order to standardise data collection for future reporting.

Indicator 40: Pressure ulcers in hospitals

Outcome area: Hospital and related care

Progress measure: Selected adverse events in acute and sub-acute care settings

Measure: Pressure ulcers arising in acute and sub-acute hospital care

The measure is calculated as:

- the number of separations with a grade II to IV pressure ulcer recorded as arising during the episode of care

Data source: There is no current national data source

Data provider: Nil

Data source: Nil

Data provider: Nil

Data availability: Data not currently available

Cross tabulations provided: Nil

Box 58 **Comment on data quality**

No data are currently available to inform this indicator.

Indicator 41: Falls resulting in patient harm in hospitals

Outcome area: Hospital and related care

Progress measure: Selected adverse events in acute and sub-acute care settings

Interim measure: Falls occurring in health care settings and resulting in patient harm treated in hospital

The measure is defined as:
- *numerator* — number of separations with an external cause code for fall and a place of occurrence of *Health service area*
- *denominator* — total number of hospital separations

and is expressed as *number* and *rate (per 1000 separations)*

Data source: *Numerator and denominator* — National Hospital Morbidity Database

Data are available annually

Data provider: *Numerator and denominator* — AIHW

Data availability: 2007-08

Cross tabulations provided: State and Territory, by:
- hospital sector
- Indigenous status
- remoteness
- SEIFA quintiles

Attachment tables

Table NHA.41.1	Separations for falls that occurred in a health care setting, 2007-08

Box 59 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on falls by admitted patients in public and private hospitals in health care settings that result in patient harm.
- Data are available by State and Territory for Indigenous status and socioeconomic status.
- All public hospitals, except a mothercraft hospital in the ACT, provided data. Most private hospitals also provided data, except private day hospital facilities in the ACT, the single private free-standing hospital facility in the NT and a small private hospital in Victoria. Data are not published for private hospitals in Tasmania, the ACT and the NT to protect the confidentiality of individual hospitals, but are included in totals.
- Annual data are available. The most recent available data are for 2007-08.
- The interpretation of rates for jurisdictions should take into consideration cross border flows, particularly in the ACT.
- Data are of acceptable accuracy. However, the rates may underestimate falls requiring treatment because around 25 per cent of the records of separations involving falls requiring treatment did not specify the place of occurrence.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee has no additional issues for noting with this indicator.

Indicator 42: Intentional self-harm in hospitals

Outcome area: Hospital and related care

Progress measure: Selected adverse events in acute and sub-acute care settings

Interim measure: Separations in which a patient self-harmed during an admission

The measure is defined as:

- *numerator* — number of hospital separations with an external cause code for intentional self-harm and a place of occurrence of *Health service area*
- *denominator* — total number of hospital separations

and is expressed as a *number* and *rate (per 1000 separations)*

Excludes separations with a principal diagnosis of an injury or poisoning
Health service area code: Y92.22

Data source: *Numerator and denominator* — National Hospital Morbidity Database

Data are available annually

Data provider: *Numerator and denominator* — AIHW

Data availability: 2007-08

Cross tabulations provided: State and Territory, by:

- hospital sector
- Indigenous status
- remoteness
- SEIFA quintiles

Attachment tables

Table NHA.42.1	Separations for intentional self-harm that occurred in a health care setting, 2007-08

Box 60 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on intentional self-harm by admitted public and private hospital patients in health care settings.
- Data are available by State and Territory for Indigenous status and socioeconomic status (SES).
- All public hospitals, except a mothercraft hospital in the ACT, provided data. Most private hospitals also provided data, except private day hospital facilities in the ACT, the single private free-standing hospital facility in the NT and a small private hospital in Victoria. Data are not published for private hospitals in Tasmania, the ACT and the NT to protect the confidentiality of individual hospitals, but are included in totals.
- Annual data are available. The most recent available data are for 2007-08.
- The interpretation of rates for jurisdictions should take into consideration cross border flows, particularly in the ACT.
- Data are of acceptable accuracy. However, the rates may underestimate intentional self-harm that occurred in health care settings because around 30 per cent of the records of self-harm incidents did not specify place of occurrence.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee has no additional issues to note for this indicator.

Indicator 43: Unplanned/unexpected readmissions within 28 days of selected surgical admissions

Outcome area:	Hospital and related care
Progress measure:	Unplanned/unexpected readmissions within 28 days of selected surgical admissions
Interim measure:	Unplanned and unexpected hospital readmissions within 28 days for selected surgical procedures

The measure is defined as:

- *numerator* — number of separations for public hospitals which meet all of the following criteria:
  - the separation is a readmission to the same hospital following a separation in which one of the following procedures was performed (knee replacement; hip replacement; tonsillectomy and adenoidectomy; hysterectomy; prostatectomy; cataract surgery; appendectomy)
  - the readmission occurs within 28 days of the previous date of separation
  - a principal diagnosis for the readmission has one of the following ICD10-AM codes: T80-88, T98.3, E89, G97, H59, H95, I97, J95, K91, M96 or N99
- *denominator* — number of public hospital separations in which one of the following surgical procedures was undertaken: knee replacement; hip replacement; tonsillectomy and adenoidectomy; hysterectomy; prostatectomy; cataract surgery; appendectomy

and is expressed as a *rate (per 1000 separations)*

'Unexpected/unplanned' is identified by specifying an adverse event code as the principal diagnosis on readmission
Calculated separately for each of the specified procedures

The denominator limited to separations with a separation date between 1 July and 19 May in the reference year. The denominator excludes separations where the patient died in hospital

Data source:	*Numerator and denominator* — National Hospital Morbidity Database, based on the Admitted Patient Care National Minimum Data Set Data are available annually
Data provider:	*Numerator and denominator* — AIHW
Data availability:	2007-08
Cross tabulations provided:	State and Territory, by: • specified procedures • peer group • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.43.1	Rate of unplanned/unexpected readmission within 28 days of selected surgical admissions, 2007-08
Table NHA.43.2	Rate of unplanned/unexpected readmission within 28 days of selected surgical admissions, by Indigenous status, remoteness and SEIFA, 2007-08

Box 61 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on unexpected/unplanned readmissions to hospitals, but only to the extent that readmission was to the same public hospital and within 28 days. This limitation means that the calculated value of the indicator will be an underestimate.
- Data are available by State and Territory. Calculation of the indicator for WA was not possible using data from the National Hospital Morbidity Database (NHMD). Data for WA were supplied by WA Health and total rates and numbers do not include WA.
- For Indigenous status, data are only available for selected jurisdictions, and socioeconomic status (SES) data are generally only available for larger states. This is because readmissions are generally rare events, and disaggregation by jurisdiction results in small numbers that may need to be suppressed for confidentiality reasons.
- Annual data are available. The most recent available data are for 2007-08.
- The interpretation of rates for jurisdictions should take into consideration cross border flows, particularly in the ACT.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Improving reporting on this indicator by Indigenous status and SES is a priority. Further development work on the current data source is required.
- Further linkage is required to capture readmissions to different public hospitals and private hospitals.

Indicator 44: Survival of people diagnosed with cancer

Outcome area:	Hospital and related care
Progress measure:	Survival of people diagnosed with cancer (five-year relative rate)
Measure:	Five-year relative rate of survival for people diagnosed with cancer The measure is defined as: • *numerator* — proportion of people diagnosed with cancer who survived for five years after diagnosis • *denominator* — proportion of similar people in the general population who survived for the same period and is expressed as a *percentage* People in the denominators are matched for sex and age Relative survival proportions are age-adjusted to the 2004 all-cancer incidence population
Data source:	*Numerator* — AIHW National Death Index and Australian Cancer Database *Denominator* — AIHW Mortality database and ABS Estimated Resident Population (generated life tables)
Data provider:	*Numerator* — AIHW *Denominator* — AIHW and ABS Data are collected annually for cancer incidence. However, calculation of survival is not recommended to be conducted more frequently than every three years as annual changes are very small
Data availability:	31 December 2006 (for cancers diagnosed 1998–2004)
Cross tabulations provided:	National (not currently available by State and Territory or Indigenous status), by: • sex • remoteness • SEIFA quintiles NB: Geographical disaggregations based on residence at time of diagnosis

Attachment tables

Table NHA.44.1	Five-year relative survival proportions for people diagnosed with cancer (relative rate)

Box 62 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on five-year *relative* survival rates for people diagnosed with cancer — the ratio of five-year survival rates for people diagnosed with cancer to five-year survival rates for similar people in the general population.
- Data are not available by State and Territory.
- National data are available by socioeconomic status (SES). Data are not available by Indigenous status.
- Data are sourced from the Australian Cancer Database (for cancer incidence) and the National Death Index (for deaths), the National Mortality Database, and the ABS (for life tables on expected survival rates).
- The AIHW only produce the data irregularly (by funded adhoc requests). The data reported were published in 2008. The indicator is based on cancers diagnosed between 1982 and 2004. But disaggregations use different time periods, reflecting available information for constructing life tables — by sex is for cancers diagnosed 1998–2004, by remoteness is 1997–2004, and by SES is 2000–2004.
- Data are of acceptable accuracy. Data are not available by State and Territory or by Indigenous status. For geographic analyses (remoteness and SES), results should be interpreted with care. Mortality data might reflect where people were living at the time of their treatment, rather than their usual residence. It is common for people from remote or outer regional areas to move to major centres for treatment for significant illnesses, resulting in them potentially being included in ‘major centres’ for deaths, but as ‘remote’ for census (population) counts.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line and on request.

The Steering Committee also notes the following issues:

- Data are relatively old and are reported irregularly. It is not clear when data will be updated. The Steering Committee has been advised that reporting every three years would be appropriate given small changes in survival rates over time.
- Disaggregation of data by State and Territory and by Indigenous status is also a priority. Further development work on the current data source, or identification of an alternative data source, is required.
- Disaggregation of the data for cancer survival rate (numerator) and general survival rate (denominator) would assist in improving interpretation of this indicator.

Indicator 45: Rates of services: Overnight separations

Outcome area:	Hospital and related care
Output measure:	Rates of services provided by public and private hospitals per 1000 weighted population by patient type
Measure:	Number of overnight hospital separations per 1000 population The measure is defined as: • *numerator* — number of overnight separations • *denominator* — total population and is expressed as an *age standardised rate* *Excludes newborns without qualified days* *An overnight separation is where length of stay in hospital was at least one night (admission date and separation date are different)*
Data source:	*Numerator* — AIHW National Hospital Morbidity Database *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2007-08
Cross tabulations provided:	State and Territory, by: • hospital sector • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.45.1	Overnight separations, 2007-08

Box 63 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the number of overnight hospital separations in public and private hospitals (as a rate per 1000 population).
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy.
- All public hospitals, except a mothercraft hospital in the ACT, provided data. Most private hospitals also provided data, except private day hospital facilities in the ACT, the single private free-standing hospital facility in the NT and a small private hospital in Victoria. Data are not published for private hospitals in Tasmania, the ACT and the NT to protect the confidentiality of individual hospitals, but are included in totals.
- Data on Indigenous status are not of sufficient quality for statistical reporting in Tasmania and the ACT.
- Separations are reported for the State or Territory where the hospital was located, not the State or Territory of the patient’s usual residence (particularly an issue in interpreting data for the ACT). For geographic analyses, remoteness and SES are based on the patient’s usual residential address, but separations will be counted in the state/territory where the hospital was located rather than the state/territory of usual residential address.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee has no additional issues to note for this indicator.

Indicator 46: Rates of services: Outpatient occasions of service

Outcome area: Hospital and related care

Output measure: Rates of services provided by public and private hospitals per 1000 weighted population by patient type

Interim measure: Number of hospital outpatient occasions of service per 1000 population

The measure is defined as:

- *numerator* — number of outpatient occasions of service in hospitals
- *denominator* — total population

and is expressed as a *crude rate* (age not available)

Excludes: private hospitals

Excludes: occasions of service for diagnostic imaging, pathology and pharmacy, as different counting method apply to these categories, and methods vary by State and Territory

Outpatient: a patient who does not undergo a hospital's formal admission process, excluding patients receiving services through emergency departments, community health settings and other outreach

Outpatient occasion of service: an interaction between one or more health care professionals with one or more non-admitted patients, for assessment, consultation and/or treatment intended to be unbroken in time. A service event means that a dated entry is made in the patient/client's medical record

Outpatient care categories: allied health, dental, dialysis, drug and alcohol, endoscopy, mental health, other medical/surgical/obstetric

Data source: *Numerator* — AIHW National Public Hospital Establishments Database

Denominator — ABS Estimated Resident Population

Data are available annually

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: 2007-08

Cross tabulations provided: State and Territory, by type of outpatient care (major categories and total) (no demographic information available)

Attachment tables

Table NHA.46.1	Public hospital outpatient occasions of service, 2007-08

Box 64 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the number of public hospital outpatient occasions of service (as a rate per 1000 population). Data are available by State and Territory. Data are not available for private hospitals. Data are not available by Indigenous status or socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy. However, comparability of the data might be affected by differences in counting and admission practices, and the use of outpatient clinics by interstate (non-resident) patients.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status and SES are priorities. Further development work on the current data source, or identification of an alternative data source, is required.
- Further development work is also required to expand the scope from public hospitals to all hospitals, or ensure data is representative of all hospitals.

Indicator 47: Rates of services: Non-acute care separations

Outcome area:	Hospital and related care
Output measure:	Rates of services provided by public and private hospitals per 1000 weighted population by patient type
Measure:	Number of non-acute care overnight separations per 1000 population, by care type The measure is defined as: • *numerator* — number of non-acute care separations (overnight admissions only) • *denominator* — total population and are expressed as an *age standardised rate* Non-acute care includes separations with care type of rehabilitation, palliative care, geriatric evaluation and maintenance, psychogeriatric care, and maintenance care Rates presented for each care type and total
Data source:	*Numerator* — AIHW National Hospital Morbidity Database *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2007-08
Cross tabulations provided:	State and Territory, by care type (and total), by: • hospital sector • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.47.1	Non-acute care separations, 2007-08
Table NHA.47.2	Non-acute care separations, by care type, 2007-08

Box 65 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the number of non-acute care overnight separations in public and private hospitals (as a rate per 1000 population).
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy.
- All public hospitals, except a mothercraft hospital in the ACT, provided data. Most private hospitals also provided data, except private day hospital facilities in the ACT, the single private free-standing hospital facility in the NT and a small private hospital in Victoria. Data are not published for private hospitals in Tasmania, the ACT and the NT to protect the confidentiality of individual hospitals, but are included in totals.
- Data on Indigenous status are not of sufficient quality for statistical reporting in Tasmania and the ACT.
- Separations are reported for the State or Territory where the hospital was located, not the State or Territory of the patient’s usual residence (particularly an issue in interpreting data for the ACT). SES is based on the patient’s usual residential address, but the event is counted in the State or Territory where the hospital was located rather than the State or Territory of usual residential address. This is only an issue where the usual residential address and hospital are in different states or territories.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available.

The Steering Committee also notes the following issue:

- Improving the quality of data on Indigenous status to allow reporting across all states and territories is a priority.

Indicator 48: Rates of services: Hospital procedures

Outcome area: Hospital and related care

Output measure: Rates of services provided by public and private hospitals per 1000 weighted population by patient type

Measure: Rates at which selected hospital procedures are performed for different population groups and in public and private hospital sectors

The measure for this indicator is:

- *numerator* — number of hospital separations involving selected hospital procedures**## (hysterectomy limited to females aged 15–69 years)
- *denominator* — total population (male population for prostatectomy; female population aged 15–69 years for hysterectomy)

presented as *age standardised rates*^^

** Cataract extraction; cholecystectomy; coronary artery bypass graft; coronary angioplasty; cytoscopy; haemorrhoidectomy; hip replacement; inguinal herniorrhaphy; knee replacement; lens insertion; myriongotomy; tonsillectomy; varicose veins stripping and ligation; septoplasty; prostatectomy; hysterectomy

##Excludes: multiple procedures for the same separation within the same procedure group; separations with care type *newborn with no qualified days*, *hospital boarders* and *posthumous organ procurement*

^^Calculated separately for each procedure and total
Hysterectomy limited to patients aged 15–69 years

Data source: *Numerator* — AIHW National Hospital Morbidity Database

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: 2007-08

Cross tabulations provided: State and Territory, by:

- procedure type
- hospital sector
- Indigenous status
- remoteness
- SEIFA quintiles

Attachment tables

Table NHA.48.1	Selected hospital procedures, 2007-08
Table NHA.48.2	Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08

Box 66 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on selected procedures in public and private hospitals (separations as a rate per 1000 population).
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2007-08.
- All public hospitals, except a mothercraft hospital in the ACT, provided data. Most private hospitals also provided data, except private day hospital facilities in the ACT, the single private free-standing hospital facility in the NT and a small private hospital in Victoria. Data are not published for private hospitals in Tasmania, the ACT and the NT to protect the confidentiality of individual hospitals, but are included in totals.
- Data on Indigenous status are not of sufficient quality for statistical reporting in Tasmania and the ACT.
- Separations are reported for the State or Territory where the hospital was located, not the State or Territory of the patient’s usual residence (particularly an issue in interpreting data for the ACT). SES is based on the patient’s usual residential address, but the event is counted in the State or Territory where the hospital was located rather than the State or Territory of usual residential address. This is only an issue where the usual residential address and hospital are in different states or territories.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available.

The Steering Committee also notes the following issue:

- Improving the quality of data on Indigenous status to allow reporting across all states and territories is a priority.

Indicator 49: Residential and community aged care services per 1000 population aged 70+ years

Outcome area: Aged care

Progress measure: Residential and community aged care services per 1000 population aged 70+ years

Interim measure: Operational residential and community aged care places per 1000 people aged 70 years or over (or Aboriginal and Torres Strait Islander people aged 50 and over), excluding services funded through Home and Community Care

The measure for this indicator is defined as:

- *numerator* — number of operational aged care places at 30 June^^
- *denominator* — population aged 70 years or over (or 50 years or over, for Indigenous Australians)

and is expressed as a *rate***

^^Residential and community aged care places currently include Community Aged Care Packages (CACP), Extended Aged Care at Home (EACH), EACH Dementia, Transition Care Program, aged care places and packages delivered by Multi-Purpose Services and places delivered under the Aboriginal and Torres Strait Islander Aged Care Strategy

**Calculated separately for residential and community aged care services

Data source: *Numerator* — Australian Government Department of Health and Ageing aged care data warehouse

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: 2008-09

Cross tabulations provided: State and Territory
National, by:

- planning region
- remoteness

Attachment tables

Table NHA.49.1	Residential and community aged care services, 2008-09
Table NHA.49.2	Residential and community aged care services per 1000 population, by planning region, 2008-09
Table NHA.49.3	Residential and community aged care services per 1000 population, by remoteness, 2008-09

Box 67 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on residential and community aged care services. Data for services funded under the Home and Community Care (HACC) program are not available.
- Data are available by State and Territory.
- Data are not available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2008-09.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issue:

- Disaggregation of this indicator by Indigenous status and SES is a priority.
- Data development is required in order to develop a measure of capacity available under the HACC program.

Indicator 50: *Staphylococcus aureus* (including MRSA) bacteraemia in residential aged care

Outcome area:	Aged care
Progress measure:	Selected adverse events in residential care
Measure:	People in residential aged care with *Staphylococcus aureus* (including Methicillin-resistant *Staphylococcus aureus*) bacteraemia leading to hospitalisation A measure has yet to be developed for this indicator
Data source:	No suitable data source currently available
Data provider:	Nil
Data availability:	Nil
Cross tabulations provided:	Nil

Box 68 **Comment on data quality**

There is currently no agreed measure, nor data available, to inform this indicator.

Indicator 51: Pressure ulcers in residential aged care

Outcome area:	Aged care
Progress measure:	Selected adverse events in residential care
Measure:	Pressure ulcers in hospitalised patients arising in residential aged care A measure has yet to be developed for this indicator
Data source:	No suitable data source has been identified for this measure
Data provider:	Nil
Data availability:	Nil
Cross tabulations provided:	Nil

Box 69 **Comment on data quality**

There is currently no agreed measure, nor data available, to inform this indicator.

Indicator 52: Falls resulting in patient harm in residential aged care

Outcome area:	Aged care
Progress measure:	Selected adverse events in residential care
Interim measure:	Falls occurring in residential aged care and resulting in patient harm treated in hospital The measure is defined as: • the number of hospital separations with a diagnosis of injury resulting from a fall, where the event occurred in residential aged care and is presented as a *number* *Injury resulting from fall defined by ICD-10-AM external cause codes of W00-W19* *Place of occurrence code of Y92.14 (Aged care facility)*
Data source:	*Numerator* — National Hospital Morbidity Database Data are available annually
Data provider:	*Numerator* — AIHW
Data availability:	2007-08
Cross tabulations provided:	State and Territory, by: • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

NHA.52.1	Falls resulting in patient harm in residential aged care, 2007-08

Box 70 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the number of falls in an aged care facility (which is broader than residential aged care and includes retirement villages) resulting in patient harm where they are treated in hospital. The data do not provide information on falls which did not require hospitalisation.
- Data are available by State and Territory.
- Data are available for four jurisdictions for Indigenous status. Data are available by State and Territory for socioeconomic status.
- Annual data are available. The most recent available data are for 2007-08.
- The interpretation of rates for jurisdictions should take into consideration cross border flows, particularly in the ACT.
- Data are of acceptable accuracy. However, the rates may underestimate falls requiring treatment because around 25 per cent of the records of separations involving falls requiring treatment did not specify the place of occurrence.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status for all jurisdictions is a priority.
- The Steering Committee recommends consideration of reporting a rate for this indicator (rate of people in residential aged care).

Indicator 53: Older people receiving aged care services

Outcome area:	Aged care
Output measure:	Number of older people receiving aged care services by type (in the community and residential settings)
Interim measure:	Number of non-Indigenous people aged 70 years and over, and Indigenous people aged 50 years and over, receiving aged care services in community settings or residential settings The measure is defined as: • *numerator* — the number of individuals using residential aged care or community-based aged programs during the 12 months to 30 June** • *denominator* — the total population aged 70 years or over, and the Indigenous population aged 50–69 years and is expressed as *number* and *rate* (*per 1000 people in the relevant population)* ^^ *^^Calculated separately for each program and total* ***Services included are Home and Community Care (HACC), Veterans' Home Care (VHC), Community Aged Care Packages (CACP), Extended Aged Care at Home (EACH), EACH Dementia, residential aged care, residential respite, Transition Care Program, multipurpose services and Aboriginal and Torres Strait Islander Aged Care strategy*
Data source:	*Numerator* — Australian Government Department of Health and Ageing aged care data warehouse, HACC Minimum Data Set (MDS), Department of Veterans' Affairs (DVA) *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2008-09
Cross tabulations provided:	State and Territory, by each program (and total), by: • age • Indigenous status • remoteness

Attachment tables

Table NHA.53.1	Older people receiving aged care services, 2008-09
Table NHA.53.2	Older people receiving aged care services, by age, Indigenous status and remoteness, 2008-09

Box 71 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on older people receiving aged care services.
- Data are available by State and Territory for Indigenous status. Data are not available for socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2008-09.
- The data do not provide complete coverage for services funded by the Home and Community Care (HACC) program, multi-purpose services, Veteran's Home Care or the Aboriginal and Torres Strait Islander Aged Care Strategy. Around 10 per cent of HACC data does not have Indigenous status recorded.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by SES is a priority. Further development work on the current data source is required.
- The wording of this output measure in the NHA is 'number of older people receiving aged care services'. Data on the rate per 1000 people in the relevant population has been provided by State and Territory by service. However, for Indigenous status, remoteness and age range disaggregations, only the number of people using services has been provided. The Steering Committee recommends changing the output measure to 'older people receiving aged care services by type' and reporting the number and rate per 1000 people in the relevant population by age group, Indigenous status, SES and remoteness in future reports.

Indicator 54: Aged care assessments completed

Outcome area: Aged care

Output measure: Number of aged care assessments conducted

Measure: Number of aged care assessments completed under the Aged Care Assessment Program (ACAP)

The measure is defined as:

- *numerator* — the number of ACAP assessments completed
- *denominator* — the total population

and is expressed as a *number* and *rate (per 1000 people in the relevant population)*

Data source: *Numerator* — Australian Government Department of Health and Ageing aged care data warehouse

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: *Numerator* — Department of Health and Ageing
Denominator — ABS

Data availability: 2007-08

Cross tabulations provided: State and Territory, by:

- age
- Indigenous status
- remoteness
- SEIFA quintiles

Attachment tables

Table NHA.54.1	Aged care assessments completed under the ACAP, 2007-08

Box 72 **Comment on data quality**

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on aged care assessments completed under the Aged Care Assessment Program (ACAP).
- Data are available by State and Territory for Indigenous status and socioeconomic status.
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issue:

- The wording of this output measure in the NHA is ‘number of aged care assessments conducted’. Data on the rate per 1000 people in the relevant population has been provided which improves comparisons across states and territories. The Steering Committee recommends changing the output measure to ‘aged care assessments completed under the Aged Care Assessment Program’.

Indicator 55: Younger people with disabilities using residential, CACP and EACH aged care services

Outcome area:	Aged care
Output measure:	Number of younger people with disabilities using residential, Community Aged Care Package and Extended Aged Care at Home services
Measure:	Number of people under 65 years of age with disabilities using residential and community aged care services funded under the *Aged Care Act 1997* The measure is defined as: • the number of people aged less than 65 years living in permanent residential care or receiving packaged community aged care services in the 12 months to 30 June and is expressed as a *number*
Data source:	Department of Health and Aging aged care data warehouse Data are available annually
Data provider:	Department of Health and Ageing
Data availability:	2008-09
Cross tabulations provided:	State and Territory, by service type (residential, community), by age group (under 50 years, 50–64 years, total)

Attachment tables

Table NHA.55.1	Number of younger people with a disability using residential, CACP, EACH and EACHD aged care services, 2008-09

Box 73 Comment on data quality

The DQS for this indicator was initially drafted by the Department of Health and Ageing, and finalised in consultation with and provided by the AIHW. The DQS is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on younger people with a disability using residential aged care services.
- Data are available by State and Territory.
- Data are not available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2008-09.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status and SES is a priority. However, reporting may be limited because cells would need to be suppressed for confidentiality reasons.

Indicator 56: People aged 65 years or over receiving sub-acute services

Outcome area: Aged care

Output measure: Number of people 65+ receiving sub-acute and rehabilitation services

Interim measure: Number of admitted sub-acute services to people 65 years or over

The measure is defined as:
- *numerator* — the number of sub-acute care separations for people aged 65 years or over**
- *denominator* — the total population aged 65 years or over

and is expressed as a *number* and as a *rate (per 1000 people in the relevant population)*

***Sub-acute care includes separations with a care type of rehabilitation, palliative care, geriatric evaluation and maintenance, and psychogeriatric care*

Data source: *Numerator* — AIHW National Hospital Morbidity Database

Denominator — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population)

Data are available annually

Data provider: *Numerator* — AIHW
Denominator — ABS

Data availability: 2007-08

Cross tabulations provided: State and Territory, by:
- age
- Indigenous status
- remoteness
- SEIFA quintiles

Attachment tables

Table NHA.56.1	Separations for persons aged 65 years or over, receiving sub-acute services, 2007-08

Box 74 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on people aged 65 years or over receiving sub-acute and rehabilitation services in public and private hospitals.
- Data are available by State and Territory for Indigenous status and socioeconomic status.
- Annual data are available. The most recent available data are for 2007-08.
- All public hospitals, except a mothercraft hospital in the ACT, provided data. Most private hospitals also provided data, except private day hospital facilities in the ACT, the single private free-standing hospital facility in the NT and a small private hospital in Victoria. Data are not published for private hospitals in Tasmania, the ACT and the NT to protect the confidentiality of individual hospitals, but are included in totals.
- The interpretation of rates for jurisdictions should take into consideration cross border flows, particularly in the ACT. There may be differences between jurisdictions in the delivery of sub-acute care which should be considered in interpreting the data. The numerator is a count of separations, and a person may have more than one occasion in hospital during the year.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- The wording of this output measure in the NHA is ‘number of people 65+ receiving sub-acute and rehabilitation services’. Data on the rate per 1000 people in the relevant population has been provided, which improve comparisons across states and territories. The Steering Committee recommends changing the output measure to ‘people 65 years and over receiving sub-acute and rehabilitation services’.
- Data are based in the number of separations and not the number of people using services. Further development is required to report the number of people receiving services.

Indicator 57: Number of hospital patient days by those eligible and waiting for residential aged care

Outcome area: Aged care

Output measure: Number of hospital patient days by those eligible and waiting for residential aged care

Proxy measure: Number of hospital bed days used by patients whose acute or sub-acute episode of admitted patient care have finished and who have been assessed by an Aged Care Assessment Team (ACAT) and approved for residential aged care or packaged community care (Community Aged Care Package or Extended Aged Care at Home)

As there is no accurate measure for this indicator, a proxy measure will be reported against for this cycle. The proxy measure is long-term aged care in public hospitals

The proxy measure is defined as:

- *numerator* — the number of completed hospital separations for people aged 70 years or over plus Indigenous people aged 50-69 years where:
  - the care type was maintenance, and
  - the diagnosis (either principal or additional) was either ‘person awaiting admission to residential aged care service’ or ‘need for assistance at home and no other household member able to render care’, and
  - where the length of stay was 35 days or longer
- *denominator* — the number of completed hospital separations for people aged 70 years or over plus Indigenous people aged 50-69 years

and is expressed as a *percentage*

Although the diagnosis codes reflect a care type, they do not determine a persons appropriate requirement for residential aged care (this is determined by an ACAT assessment)

Excludes separations with records for Hospital boarders and Posthumous organ procurement

Data source: *Numerator and denominator* — AIHW National Hospital Morbidity Database
Data are available annually

Data provider: AIHW

Data availability: 2007-08

Cross tabulations provided: State and Territory, by length of stay (35 days or more, less than 35 days)

Attachment tables

Table NHA.57.1	Public hospital separations for care type 'maintenance' for people aged 70 years and over plus Indigenous people aged 50–69 years, 2007-08

Box 75 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data do not provide information on the number of hospital patient days by those eligible and waiting for residential aged care in public and private hospitals. The data provide information on the proportion of hospital separations that are for people in older age groups who are waiting for admission to residential aged care.
- Data are available by State and Territory.
- Data are not available for Indigenous status and socioeconomic status (SES).
- All public hospitals, except a mothercraft hospital in the ACT, provided data. Most private hospitals also provided data, except private day hospital facilities in the ACT, the single private free-standing hospital facility in the NT and a small private hospital in Victoria. Data are not published for private hospitals in Tasmania, the ACT and the NT to protect the confidentiality of individual hospitals, but are included in totals.
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy. There is some variation across states and territories in assigning care type categories.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by Indigenous status and SES is a priority.
- Further development is required to collect data on the number of days people in hospitals who have received Aged Care Assessment Team assessments and are deemed eligible for residential aged care have been waiting for placement in a residential aged care facility.

Indicator 58: Patient satisfaction/experience

Outcome area:	Patient experience
Progress measure:	Nationally comparative information that indicates levels of patient satisfaction around key aspects of care they received
Measure:	A measure for this indicator has yet to be developed
Data source:	Data source not currently available Likely to be able to source from new ABS *Patient Experience Survey*
Data provider:	Nil
Data availability:	Data not yet available
Cross tabulations provided:	Nil

Box 76 **Comment on data quality**

There is currently no agreed measure, nor data available, to inform this indicator.

The Steering Committee has been advised that data may be available for future reports through the new *ABS Patient Experience Survey*.

Indicator 59: Age-standardised mortality by major cause of death

Outcome area:	Social inclusion and Indigenous health
Progress measure:	Age-standardised mortality
Measure:	Age-standardised mortality rate by major cause of death, and rate ratios for Indigenous people The measure is defined as: • *numerator* — number of deaths • *denominator* — total population and is expressed as *age standardised rates (per 100 000 people in the relevant population)* and *rate ratios* (Indigenous:non-Indigenous; first:fifth SEIFA quintiles; major cities:remote areas) Calculated overall and for major causes of death** **Major causes of death categories are: circulatory diseases; external causes; neoplasms (incl. cancers); endocrine, metabolic and nutritional disorders; respiratory diseases; digestive diseases; conditions originating in the perinatal period; nervous system diseases; kidney diseases; infectious and parasitic diseases
Data source:	*Numerator* — ABS Causes of Death, Australia *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator and denominator* — ABS
Data availability:	2007
Cross tabulations provided:	State and Territory, by major cause of death (and total), by: • Indigenous status

Attachment tables

Table NHA.59.1	Age standardised mortality rates by major cause of death, 2007
Table NHA.59.2	Age standardised mortality rates and rate ratios by major cause of death, by Indigenous status, 2007

Box 77 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on age-standardised mortality by major cause of death.
- Data are available by Indigenous status for NSW, Queensland, WA, SA, NT and Australia. Data for Indigenous deaths are not of sufficient quality for reporting in Victoria, Tasmania and the ACT, and further work is required to improve the quality of Indigenous deaths data to enable reporting by all states and territories.
- Data are not available by socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2007.
- Data are of acceptable accuracy. Although most deaths of Indigenous people are registered, it is likely that some are not identified as Indigenous. Therefore data are likely to underestimate the Indigenous mortality rate.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Disaggregation of this indicator by SES is a priority. Further development work on the current data source is required.
- Data are relatively old and may not be representative of current performance. Further work is required to ensure availability of more timely data.

Indicator 60: Access to services by type of service compared to need

Outcome area: Social inclusion and Indigenous health

Progress measure: Access to services by type of service compared to need

Interim measure: Proportion of people who accessed health services by health status

The measure is defined as:

- *numerator* — number of people aged 15 years or over who accessed a particular health service in the past 12 months (for hospital admissions) or 2 weeks (for other health services)
- *denominator* — population aged 15 years or over

and is expressed as an *age standardised rate (per cent)*

Service types are: Admitted hospitalisations; Casualty/outpatients; GP and/or specialist doctor consultations; Consultations with other health professional; Dental consultation

Self assessed health status is: categorised as (excellent/very good/good) and (fair/poor)

Calculated separately for each type of service and by categories of self-assessed health status

Data source: *Numerator and denominator* — National Health Survey (NHS). Data are collected every three years. National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). Data are collected every six years.

Data provider: *Numerator and denominator* — ABS

Data availability: 2004-05

Cross tabulations provided: State and Territory, by:

- service type by self assessed health status
- service type by self assessed health status by Indigenous status
- service type by self assessed health status by remoteness
- service type by self assessed health status by SEIFA quintiles

Attachment tables

Table NHA.60.1	Proportion of people who accessed health services by health status, 2004-05
Table NHA.60.2	RSEs and confidence intervals for the proportion of people who accessed health services by health status, 2004-05
Table NHA.60.3	Proportion of people who accessed health services by health status, by Indigenous status, 2004-05
Table NHA.60.4	RSEs and confidence intervals for the proportion of people who accessed health services by health status, by Indigenous status, 2004-05
Table NHA.60.5	Proportion of people who accessed health services by health status, by remoteness of residence, 2004-05

Table NHA.60.6	RSEs and confidence intervals for the proportion of people who accessed health services by health status, by remoteness of residence, 2004-05
Table NHA.60.7	Proportion of people who accessed health services by health status, by SEIFA, 2004-05
Table NHA.60.8	RSEs and confidence intervals for the proportion of people who accessed health services by health status, by SEIFA, 2004-05

Box 78 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the number of persons (15 years and over) who used services in a given period (use of services is reported as a proxy measure for access to services). Further, the National Health Survey (NHS) does not have a direct measure of need for services (self-assessed health status is used as a proxy measure).
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Data are from the NHS (conducted every three years) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) (conducted every six years). The most recent data are for 2004-05.
- The NHS does not include people living in very remote areas which affects the comparability of the NT results.
- Data are of acceptable accuracy. Relative standard errors (RSEs) for some SES and Indigenous status disaggregations are greater than 25 per cent and these data should be used with caution. Some RSEs are greater than 50 per cent and data are considered too unreliable for general use.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- The data for the NHS and the NATSIHS are relatively old and may not be representative of current outcomes. Further work is required to ensure availability of more timely data.
- The size of the standard errors mean that the NHS and NATSIHS data may not be adequate for measuring change over time. Small year to year movements may be difficult to detect if the size of the standard errors is large compared to the size of the difference between estimates.
- NATSIHS data are only collected every six years. An assessment of the relative speed of change in outcomes is required to determine whether more regular data collection is necessary.

Indicator 61: Teenage birth rate

Outcome area:	Social inclusion and Indigenous health
Progress measure:	Teenage birth rate
Measure:	Teenage birth rate The measure is defined as: • *numerator* — the number of babies born (both live births and stillbirths) to mothers aged less than 20 years at the time of the birth (includes births to mothers aged less than 15 years) • *denominator* — total population of females aged 15–19 years and is expressed as a *rate (per 1000 females aged 15–19)*
Data source:	*Numerator* — AIHW National Perinatal Data Collection *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2007
Cross tabulations provided:	State and Territory, by: • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.61.1	Births to mothers aged less than 20 years, by Indigenous status, remoteness and SEIFA, 2007

Box 79 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the teenage birth rate (number of births to females aged less than 20 years as a proportion of females aged 15–19 years).
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Annual data are available. The most recent available data are for 2007.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Data are relatively old and may not be representative of current outcomes. Further work is required to ensure availability of more timely data.

Indicator 62: Hospitalisation for injury and poisoning

Outcome area:	Social inclusion and Indigenous health
Progress measure:	Hospitalisation for injury and poisoning
Measure:	The number of hospital separations with a principal diagnosis of injury and poisoning The measure is defined as: • *numerator* — the number of separations with a principal diagnosis of injury and poisoning** • *denominator* — total population and is expressed as an *age standardised rate (per 1000 people in the relevant population)* ***Injury and poisoning diagnoses defined by ICD-10-AM codes S00-T98*
Data source:	*Numerator* — AIHW National Hospital Morbidity Database *Denominator* — ABS Estimated Resident Population (total population) and ABS Indigenous experimental estimates and projections (Indigenous population) Data are available annually
Data provider:	*Numerator* — AIHW *Denominator* — ABS
Data availability:	2007-08
Cross tabulations provided:	State and Territory, by: • sex • Indigenous status • remoteness • SEIFA quintiles • age

Attachment tables

Table NHA.62.1	Hospital separations for injury or poisoning, by sex, Indigenous status, remoteness and SEIFA, 2007-08
Table NHA.62.2	Age-specific hospital separation rates for injury or poisoning, 2007-08

Box 80 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the number of separations in public and private hospitals with a principal diagnosis of injury and poisoning (as a rate per 1000 population). The data do not include injuries that are treated in an emergency department that do not require admission to hospital.
- State and Territory data are available by Indigenous status and socioeconomic status (SES). Data on Indigenous status are not of sufficient quality for statistical reporting in Tasmania and the ACT.
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy. All public hospitals, except a mothercraft hospital in the ACT, provided data. Most private hospitals also provided data, except private day hospital facilities in the ACT, the single private free-standing hospital facility in the NT and a small private hospital in Victoria. Data are not published for private hospitals in Tasmania, the ACT and the NT to protect the confidentiality of individual hospitals, but are included in totals.
- Separations are reported for the State or Territory where the hospital was located, not the State or Territory of the patient’s usual residence (particularly an issue in interpreting data for the ACT). SES is based on the patient’s usual residential address, but the event is counted in the State or Territory where the hospital was located rather than the State or Territory of usual residential address. This is only an issue where the usual residential address and hospital are in different states or territories.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available.

The Steering Committee also notes the following issue:

- Improving the quality of data on Indigenous status to allow reporting across all states and territories is a priority.

Indicator 63: Children's hearing loss

Outcome area:	Social inclusion and Indigenous health
Progress measure:	Children's hearing loss
Measure:	Prevalence of hearing loss and otitis media in children The measure is defined as: • *numerator* — the number of children aged 0–14 years with hearing loss or otitis media** • *denominator* — the number of children aged 0–14 years and is expressed as a *rate (per 1000 children in the relevant population)* ***Hearing loss conditions included are: complete/partial deafness or hearing loss, otitis media and other diseases of the ear and mastoid*
Data source:	*Numerator and denominator* — National Health Survey (NHS). Data are collected every three years. National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). Data are collected every six years
Data provider:	*Numerator and denominator* — ABS
Data availability:	(total population) 2007-08 (NHS) (Indigenous status) 2004-05 (NHS/NATSIHS)
Cross tabulations provided:	State and Territory, by: • age group • Indigenous status • remoteness • SEIFA quintiles

Attachment tables

Table NHA.63.1	Rate of children with hearing loss, by age, remoteness and SEIFA, 2007-08
Table NHA.63.2	RSEs and 95 per cent confidence intervals for rate of children with hearing loss, 2007-08
Table NHA.63.3	Rate of children with hearing loss, by Indigenous status, 2004-05
Table NHA.63.4	RSEs and 95 per cent confidence intervals for rate of children with hearing loss, by Indigenous status, 2004-05

Box 81 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of children aged 0–14 years with hearing loss.
- State and Territory data are available by Indigenous status and socioeconomic status (SES).
- Data are from the National Health Survey (NHS) (which is conducted every three years) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) (which is conducted every six years). The most recent available Indigenous data (for 2004-05) were published in April 2006. The most recent available data for the total population (for 2007-08) were published in May 2009.
- The NHS does not include people living in very remote areas, which affects the comparability of the NT results.
- Data are of acceptable accuracy. Relative standard errors for some SES and Indigenous status disaggregations are greater than 25 per cent and these data should be used with caution.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- The data for the NATSIHS are relatively old and may not be representative of current outcomes. Further work is required to ensure availability of more timely data.
- The size of the standard errors mean that the NHS and NATSIHS data may not be adequate for measuring change over time. Small year to year movements may be difficult to detect if the size of the standard errors is large compared to the size of the difference between estimates.
- NATSIHS data are only collected every six years. An assessment of the relative speed of change in outcomes is required to determine whether more regular data collection is necessary.

Indicator 64: Indigenous Australians in the health workforce

Outcome area:	Social inclusion and Indigenous health
Output measure:	Indigenous Australians in the health workforce
Interim measure:	Indigenous Australians in the health workforce There are two measures for this indicator Measure (1) is defined as: • *numerator* — number of Indigenous Australians in the health workforce (employed in the specified health occupations) • *denominator* — total health workforce and is expressed as a *percentage* Occupation groupings are: medical practitioners; medical imaging workers, dental workers; nursing workers; pharmacists; allied health workers; complementary therapists and other health workers (see AIHW's *Health and community services labour force 2006* publication for definitions of health occupations) Measure (2) is defined as: • *numerator* — number of Indigenous Australians in the health workforce for selected professions (employed in the selected professions) • *denominator* — total health workforce for selected professions and is expressed as a *percentage* Selected professions are: medical practitioners and nurses/midwives. No other data currently available
Data source:	*Measure (1) Numerator and denominator* — Census of Population and Housing. Data are collected every five years *Measure (2) Numerator and denominator* — Health Labour Force Surveys. Data are collected annually for medicine, nursing and midwifery data and State and Territory registration board data
Data provider:	*Measure (1) Numerator and denominator* — ABS *Measure (2) Numerator and denominator* — AIHW
Data availability:	Measure (1) 2006 Measure (2) 2007
Cross tabulations provided:	State and Territory, by (1) occupation grouping / (2) selected profession

Attachment tables

Table NHA.64.1	Proportion of the health workforce that is Indigenous, by occupation groupings, 2006
Table NHA.64.2	Proportion of the health workforce that are Indigenous, by selected professions, 2007

Box 82 **Comment on data quality**

The DQSs for this indicator has been prepared by the AIHW and the ABS and are included in their original form in the section in this report titled 'Data Quality Statements'. Key points from the DQSs are summarised below.

- The data provide relevant information on the proportion of the total health workforce who are Indigenous Australians, for selected health occupations and professions.
- State and Territory data are available.
- Data for selected health occupations are from the Census (which is conducted every five years). The most recent data are for 2006. Data for selected professions (medical practitioners, nurses and midwives) are from the National Health Labour Force Survey (NHLFS) (collected annually). The most recent data are for 2007 (NSW data are for 2006). Data exclude Aboriginal Health Workers, a large segment of the Indigenous health workforce.
- Census data are of acceptable accuracy for the selected health occupations. However, the quality of information on occupation is affected by the level of detail provided by respondents and the ease with which responses could be coded.
- NHLF data are of acceptable accuracy. However, data are limited because of the small numbers of Indigenous people identified in the surveys. The national response rate was 70 per cent for medical practitioners and 50 per cent for nurses and midwives. State and Territory comparisons should be undertaken with caution.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Data are relatively old and may not be representative of current outcomes. Further work is required to ensure availability of more timely data.
- Better quality data may be available for future reports from the National Registration and Accreditation Scheme. The scheme is due to be implemented in mid-2010, with data anticipated to be available in 2012.

Indicator 65: Net growth in health workforce

Outcome area:	Sustainability
Progress measure:	Net growth in health workforce
Interim measure:	Net growth in health workforce (currently only available for the professions of medical practitioners, nurses/midwives and dentists) The measure is defined as: • *numerator* — full time equivalent (FTE) number in the workforce in the reference year • *denominator* — FTE in the workforce in the year prior to the reference year and is expressed as a *percentage* FTE = Total hours worked by workforce ÷ standard working week for selected professions (medical practitioners 40 hours, nurses/midwives and dentists 38 hours) Net growth reference years: (Medical practitioners) between 2005 and 2006 and between 2006 and 2007 (2 figures); (Nurses/midwives) between 2005 and 2007 (2006 data not available); (Dentists) between 2005 and 2006 (2007 data not available)
Data source:	*Numerator and denominator* — Health Labour Force Surveys Data are collected annually for selected health professions and State and Territory registration board data
Data provider:	AIHW
Data availability:	(Medical practitioners) 2007, 2006, 2005 (Nurses) 2007, 2005 (Dentists) 2006, 2005
Cross tabulations provided:	State and Territory, by profession, by clinician/non-clinician status

Attachment tables

Table NHA.65.1	Net growth in health workforce, selected professions
Table NHA.65.2	Net growth in health workforce, by clinical/non-clinical status

Box 83 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the growth in the health workforce (measured as the percentage increase in the full time equivalent number of health workers for selected professions).
- State and Territory data are available.
- Data for selected professions (medical practitioners, nurses and midwives, and dentists) are from the National Health Labour Force Survey (NHLFS) (collected annually). The most recent data are for 2007 for medical practitioners, and nurses and midwives, and 2006 for dentists.
- Data are of acceptable accuracy. The national response rate was 70 per cent for medication practitioners and 50 per cent for the nursing and midwifery survey (with low response rates in some states and territories). State and Territory comparisons should be undertaken with caution.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- NHLFS data are relatively old and may not be representative of current outcomes. Further work is required to ensure availability of more timely data.
- Better quality data may be available for future reports from the National Registration and Accreditation Scheme. The scheme is due to be implemented in mid-2010, with data available in 2012.

Indicator 66: Public health program expenditure as a proportion of total health expenditure

Outcome area:	Sustainability
Progress measure:	Allocation of health and aged care expenditure
Measure:	Public health program expenditure as a proportion of total health expenditure The measure is defined as: • *numerator* — total public health program expenditure by governments • *denominator* — total recurrent health expenditure and is expressed as a *percentage* Public health expenditure is defined by the National Public Health Expenditure Project and covers nine public health activities (AIHW National Public Health Expenditure Report 2005-06, Appendix B)
Data source:	*Numerator and denominator* — AIHW Health expenditure database Data are available annually
Data provider:	AIHW
Data availability:	2007-08
Cross tabulations provided:	State and Territory (numerator/denominator/percentage)

Attachment tables

Table NHA.66.1	Public health expenditure as a proportion of total health expenditure, 2007-08
Table NHA.66.2	Public health and health expenditure, by funding source, 2007-08

Box 84 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on public health program expenditure as a proportion of total health expenditure.
- Data are available by State and Territory.
- Annual data are available. The most recent available data are for 2007-08.
- Public health expenditure funded by the states and territories excludes $30 million funding by non-government sources that cannot be allocated to individual activities.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee has no additional issues to note for this indicator.

Indicator 67: Capital expenditure on health and aged care facilities as a proportion of capital consumption expenditure on health and aged care facilities

Outcome area:	Sustainability
Progress measure:	Allocation of health and aged care expenditure
Interim measure:	Government funded capital expenditure on publicly-owned health and aged care facilities as a proportion of government funded capital consumption expenditure on publicly-owned health and aged care facilities The measure is defined as: • *numerator* — government gross fixed capital formation on publicly-owned health and aged care facilities • *denominator* — government funded capital consumption expenditure on publicly-owned health and aged care facilities and is expressed as a *ratio* *Limited to government expenditure on publicly-funded facilities*
Data source:	*Numerator and denominator* — ABS Government Finance Statistics data (capital expenditure and capital consumption) Data are available annually
Data provider:	ABS
Data availability:	2007-08
Cross tabulations provided:	State and Territory (numerator/denominator/ratio)

Attachment tables

NHA.67.1	Capital expenditure on health and aged care facilities to capital consumption expenditure on health and aged care facilities, 2007-08

Box 85 **Comment on data quality**

The DQS for this indicator has been prepared by the ABS and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on capital expenditure on health and aged care facilities as a proportion of capital consumption expenditure on health and aged care facilities.
- State and Territory data are available.
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issue:

- Data are limited to government expenditure on publicly funded facilities, as this allows comparisons to be made. Further work is required to expand the scope to include private facilities.

Indicator 68: Proportion of health expenditure spent on health research and development

Outcome area:	Sustainability
Progress measure:	Allocation of health and aged care expenditure
Measure:	Proportion of health expenditure spent on health research and development The measure is defined as: • *numerator* — health research and experimental development expenditure • *denominator* — total recurrent health expenditure and is expressed as a *percentage* Health research and development expenditure comprises health research undertaken at tertiary institutions, in private non-profit organisations and in government facilities that have a health socioeconomic objective Excludes commercially oriented research carried out or funded by private business, the costs of which are assumed to be included in the prices charged for the goods and services
Data source:	*Numerator* — ABS Survey of Research and Experimental Development *Denominator* — AIHW health expenditure database Data are collected every two years
Data provider:	*Numerator* — ABS *Denominator* — AIHW
Data availability:	2007-08
Cross tabulations provided:	State and Territory (numerator/denominator/percentage)

Attachment tables

NHA.68.1	Health expenditure on health research and development, 2007-08

Box 86 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.

- The data provide relevant information on the proportion of total health expenditure spent on health research and development.
- State and Territory data are available.
- Annual data are available. The most recent available data are for 2007-08.
- The estimates of research and development are based on the ABS Research and Experimental Development Survey, which is conducted biennially. As 2007-08 was a non-survey year, the AIHW estimated expenditure on health research by extrapolation from 2004-05 and 2006-07.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issue:

- Extrapolation is a single projection which may or may not equate to actual expenditure. Results should be treated with caution pending availability of new ABS figures.

Indicator 69: Cost per casemix adjusted separation

Outcome area: Sustainability

Progress measure: Cost per casemix adjusted separation for both acute and non-acute care episodes

Interim measure: Average cost per casemix adjusted separation for acute and non-acute care in public and private hospitals

The measure is defined as:

- *numerator* — total reported recurrent expenditure (excluding depreciation) multiplied by the admitted patient cost proportion** reported for each hospital
- *denominator* — total casemix adjusted separations reported for acute and non-acute care in public hospitals

and is expressed in *dollars*

Total separations excludes newborns without qualified days, and records that do not relate to admitted patients (hospital boarders and posthumous organ procurement)

Average cost weight is calculated from the National Hospital Morbidity Database, using the 2007-08 Australian Refined Diagnosis Related Group (AR-DRG) version 5.1 cost weights published by the Department of Health and Ageing.

Casemix adjustment is based on Diagnosis Related Group (DRG) assigned to each separation

** the estimated proportion of total hospital expenditure that relates to admitted patient care

Data source: *Numerator* — National Public Hospital Establishments Database (NPHED)

Denominator — Admitted Patient Care National Minimum Data Set (APC NMDS) and National Hospital Cost Data Collection (NHCDC)

Data are available annually for public hospitals (NPHED). Data are available every two years for private hospitals (PHS)

Data provider: *Numerator* — AIHW and ABS (though ABS PHS won't be available until 2008-09 — therefore private hospitals not reported for 2007-08)

Denominator — AIHW

Data availability: 2007-08 (public hospitals only for this year — will include private hospitals in 2008-09)

Cross tabulations provided: State and Territory, by public hospital peer group

Attachment tables

Table NHA.69.1	Average cost per casemix adjusted separation, 2007-08

Box 87 **Comment on data quality**

The DQS for this indicator has been prepared by the AIHW and is included in its original form in the section in this report titled 'Data Quality Statements'. Key points from the DQS are summarised below.

- The data provide relevant information on the average cost per casemix adjusted separation in public hospitals.
- State and Territory data are available for public hospitals for selected peer groups (principal referral and specialist womens' and children's hospitals, large and medium hospital and small acute hospitals). Data are not available for private hospitals.
- Public hospitals data exclude small non-acute hospitals, multi-purpose services, hospices, rehabilitation hospitals, mothercraft hospitals, other non-acute hospitals, psychiatric hospitals.
- Annual data are available. The most recent available data are for 2007-08.
- Data are of acceptable accuracy.
- Detailed explanatory notes are publicly available to assist in the interpretation of results.
- Additional data from the data source are available on-line, and on request.

The Steering Committee also notes the following issues:

- Data do not include all public hospitals or any private hospitals. The scope has been limited to public hospitals that have predominately acute care admitted patient activity in order to ensure comparable reporting. Consideration should be given to expanding reporting to all hospitals, reported by hospital type (public or private).

Indicator 70: Accredited and filled clinical training positions

Outcome area:	Sustainability
Output measure:	Number of accredited and filled clinical training positions
Measure:	Number of accredited and filled clinical training positions, by undergraduate/graduate status Will apply to medical practitioners only A measure for this indicator has yet to be developed
Data source:	No data source currently available
Data provider:	Nil
Data availability:	Data not currently available
Cross tabulations provided:	Nil

Box 88 **Comment on data quality**

There is currently no agreed measure, nor data available, to inform this indicator.

National Agreement performance reporting: National Healthcare Agreement

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NHA Indicator 1:

Proportion of babies born with low birth weight

Table NHA.1.1 Proportion of live-born singleton babies of low birthweight, by maternal Indigenous status, 2007 (a), (b), (c)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Unit	%	%	%	%	%	%	%	%	%	no.
Indigenous status										
Indigenous	10.3	10.6	10.0	14.4	13.8	5.3	np	12.3	11.2	1 186
Non-Indigenous	4.3	4.7	4.3	4.4	4.7	5.3	4.4	4.1	4.5	12 100
Total	**4.5**	**4.7**	**4.7**	**5.0**	**4.9**	**5.3**	**4.5**	**7.3**	**4.7**	
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (d)	4 212	3 215	2 702	1 463	942	326	201	258	13 319	

(a) Low birthweight is defined as less than 2500 grams.

(b) Data are by place of usual residence of the mother. Table excludes Australian non-residents, residents of external territories and not stated State/Territory of residence.

(c) Excludes multiple births, births with unknown birthweight, and births both less than 20 weeks gestation and less than 400 grams

(d) Number of live born babies in each category with low birthweight

np Not published.

Source: AIHW (unpublished) *National Perinatal Data Collection*.

Table NHA.1.2 **Proportion of live-born singleton babies of low birthweight, by remoteness and SEIFA, 2007 (a), (b)**

	Aust	
	%	no. (c), (d)
Remoteness of residence		
Major cities	4.5	8 786
Inner regional	5.1	2 595
Outer regional	5.2	1 381
Remote	5.3	260
Very remote	9.5	293
SEIFA of residence (e)		
Quintile 1	5.7	3 528
Quintile 2	5.2	2 908
Quintile 3	4.6	2 623
Quintile 4	4.2	2 297
Quintile 5	3.5	1 813

(a) Low birthweight is defined as less than 2500 grams.

(b) Excludes multiple births, births with unknown birthweight, and births both less than 20 weeks gestation and less than 400 grams.

(c) Number of live born babies in each category with low birthweight.

(d) Data are by place of usual residence of the mother. Table excludes Australian non-residents, residents of external territories and not stated State/Territory of residence.

(e) The Socio-Economic Indexes for Areas (SEIFA) Index for Relative Socio-economic Disadvantage (IRSD) quintiles assign those resident in the most disadvantaged areas to Quintile 1 and those in the least disadvantaged areas to Quintile 5.

Source : AIHW (unpublished) *National Perinatal Data Collection* .

NHA Indicator 2:

Incidence of sexually transmissible infections and blood-borne viruses

Table NHA.2.1 **Notifications of new cases of sexually transmissible infections and blood borne viruses, 2008 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Unit	Age standardised rate per 100 000 population									no.
Syphillis (b)	6.2	7.0	4.6	8.1	3.2	1.5	n.p.	35.4	6.2	1 304
HIV (c)	5.4	5.4	4.7	3.5	3.1	np	1.8	4.8	4.7	995
Hepatitis B (d)	37.7	36.3	20.9	30.6	27.7	15.7	16.5	94.7	32.2	6 834
Hepatitis C (d)	52.1	45.5	62.3	62.2	38.0	78.0	55.7	100.0	53.6	11 317
Chlamydia	202.7	226.5	350.0	390.0	237.3	321.7	251.3	924.6	272.3	58 514
Gonococcal infection	19.4	17.0	38.1	77.4	32.6	5.6	5.6	637.0	36.2	7 675

(a) Rates are age standardised.

(b) Syphilis limited to cases of less than 2 years duration, and cases of congenital syphilis.

(c) HIV data includes reports of newly diagnosed HIV infection and cases of HIV infections known to have been newly acquired

(d) Includes all Hepatitis B and C infections, whether or not the infection was sexually transmitted.

np Not published.

Source: Department of Health and Ageing (unpublished) Analysis of the National Notifiable Diseases Surveillance System and the National HIV registry; ABS (unpublished) Estimated Residential Population, 30 June 2008.

Table NHA.2.2 **Age specific rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Syphilis (a)				
0–4 years	np	–	np	–	–	–	–	np	0.4
5–9 years	–	–	–	–	–	–	–	–	–
10–14 years	–	–	np	np	–	–	–	np	0.6
15–19 years	1.5	2.2	3.3	21.6	–	–	–	97.3	5.0
20–24 years	5.1	8.8	6.2	18.3	np	–	np	56.1	8.0
25–34 years	11.1	17.0	8.2	12.2	7.9	np	–	50.5	12.1
35–44 years	17.2	15.3	9.1	11.4	6.6	np	np	60.8	13.7
45–54 years	7.8	8.3	6.3	7.2	3.1	np	np	36.8	7.2
55–64 years	2.8	2.6	2.9	5.4	4.1	–	–	np	3.1
65 years and over	np	np	np	np	–	np	–	np	0.7
Total	**6.0**	**6.9**	**4.5**	**8.2**	**3.1**	**1.4**	**np**	**38.2**	**6.1**
					HIV (b)				
0–4 years	–	np	np	–	np	–	–	–	np
5–9 years	–	–	np	np	–	–	–	–	np
10–14 years	np	–	np	–	–	–	–	–	np
15–19 years	np	1.9	np	–	–	–	np	–	0.8
20–24 years	9.0	8.0	5.5	6.9	np	–	np	5.6	6.9
25–34 years	12.0	13.4	9.1	8.6	6.4	np	np	2.7	10.6
35–44 years	12.5	10.7	9.9	5.9	8.0	np	–	14.5	10.1
45–54 years	5.6	5.2	7.1	4.9	3.5	np	–	np	5.5
55–64 years	2.0	2.6	3.5	np	np	–	np	–	2.4
65 years and over	np	1.0	np	–	np	–	–	–	0.6
Total	**5.2**	**5.4**	**4.7**	**3.5**	**2.9**	**np**	**2.0**	**5.0**	**4.6**

Table NHA.2.2 **Age specific rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Hepatitis B (c)				
0–4 years	1.6	1.5	np	np	np	np	np	–	1.7
5–9 years	1.1	5.6	3.2	5.0	np	–	–	np	3.4
10–14 years	4.4	8.0	3.7	13.7	6.9	14.8	–	29.9	6.8
15–19 years	22.5	22.8	12.6	19.6	16.8	np	np	73.0	19.9
20–24 years	55.7	52.6	34.5	48.6	39.6	29.2	33.3	145.7	48.8
25–34 years	80.5	83.2	47.9	64.1	55.3	44.1	26.7	140.8	70.4
35–44 years	62.4	55.0	31.5	49.0	46.9	16.3	29.2	118.8	50.9
45–54 years	45.4	41.0	20.6	29.1	31.7	8.2	16.8	97.1	35.8
55–64 years	28.5	22.2	15.5	22.8	24.3	7.9	13.4	104.9	23.3
65 years and over	12.0	13.1	7.6	11.6	8.1	np	np	116.3	11.3
Total	**37.2**	**36.1**	**20.6**	**30.6**	**26.8**	**14.1**	**17.4**	**92.8**	**31.9**
					Hepatitis C (c)				
0–4 years	3.6	np	np	np	np	–	np	–	1.7
5–9 years	np	–	np	–	np	–	np	–	0.7
10–14 years	np	np	–	3.4	11.9	–	–	–	0.9
15–19 years	14.5	18.9	27.5	22.3	24.2	26.1	37.0	30.4	19.8
20–24 years	69.0	51.3	102.1	70.1	48.6	119.9	66.7	22.4	70.1
25–34 years	101.1	87.9	134.8	137.1	73.0	187.2	96.2	143.5	107.9
35–44 years	91.2	83.4	110.9	108.3	72.2	166.1	103.1	173.8	96.4
45–54 years	90.9	77.1	96.9	106.2	51.9	83.8	88.1	264.4	89.7
55–64 years	32.1	29.2	25.8	31.9	13.4	31.4	32.1	124.8	29.6
65 years and over	12.7	12.7	7.2	8.9	11.4	np	20.3	np	11.1
Total	**51.2**	**45.3**	**61.2**	**61.9**	**36.2**	**69.9**	**57.9**	**103.7**	**52.8**

Table NHA.2.2 **Age specific rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Chlamydia				
0–4 years	10.9	4.7	np	–	np	15.6	–	np	5.5
5–9 years	–	–	np	np	–	–	–	85.7	1.5
10–14 years	18.1	7.1	66.5	65.7	20.8	59.3	51.7	365.1	36.4
15–19 years	664.5	578.4	1 488.4	1 589.0	818.5	1 701.8	994.7	4 043.0	987.1
20–24 years	988.7	1 197.8	1 838.0	1 982.8	1 314.7	1 781.8	1 350.1	3 794.6	1 394.5
25–34 years	403.9	505.9	607.9	700.0	463.2	422.0	417.1	1 647.3	520.6
35–44 years	129.9	138.2	136.8	181.7	110.7	71.2	128.3	550.5	140.7
45–54 years	52.3	55.0	46.7	62.8	33.9	28.9	37.7	160.6	51.8
55–64 years	17.3	19.6	18.7	27.0	12.4	12.6	24.1	59.9	19.1
65 years and over	3.2	2.9	4.6	5.0	np	np	np	53.7	3.6
Total	**200.8**	**230.1**	**354.0**	**398.0**	**227.9**	**297.3**	**285.6**	**1 045.4**	**273.0**
					Gonococcal infection				
0–4 years	np	–	np	np	–	–	–	–	np
5–9 years	–	–	np	–	–	–	–	np	np
10–14 years	np	np	12.6	45.2	5.0	–	–	401.0	12.8
15–19 years	19.0	18.1	138.5	311.6	69.0	17.4	np	2 772.4	107.9
20–24 years	54.4	51.8	140.5	251.4	86.3	19.4	16.7	2 180.4	117.1
25–34 years	48.8	42.4	68.5	141.7	72.0	10.6	10.7	1 107.9	74.0
35–44 years	28.5	23.5	33.7	58.3	48.3	5.9	np	np	36.7
45–54 years	15.2	13.0	15.8	32.0	19.8	4.1	np	np	18.1
55–64 years	6.4	4.8	5.8	11.2	7.2	–	np	np	7.0
65 years and over	1.6	0.8	1.5	3.5	np	–	–	np	1.6
Total	**19.1**	**17.0**	**38.1**	**78.0**	**30.7**	**5.0**	**6.1**	**712.9**	**35.8**

Table NHA.2.2 **Age specific rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(a) Syphilis limited to cases of less than 2 years duration, and cases of congenital syphilis.

(b) HIV data includes reports of newly diagnosed HIV infection and cases of HIV infections known to have been newly acquired.

(c) Includes all Hepatitis B and C infections, whether or not the infection was sexually transmitted.

– Nil or rounded to zero. **np** Not published.

Source : Department of Health and Ageing (unpublished) Analysis of the National Notifiable Diseases Surveillance System and the National HIV registry; ABS (unpublished) Estimated Residential Population, 30 June 2008.

Table NHA.2.3 **Rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, by Indigenous status, remoteness and SEIFA, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Syphillis (a)				
Sex									
Males	11.9	13.4	8.1	11.9	5.6	2.2	np	41.5	11.0
Females	0.6	0.6	1.0	4.3	0.8	np	–	28.9	1.4
Indigenous status									
Indigenous	5.0	np	14.7	83.2	19.6	–	np	103.5	31.8
Non-Indigenous	6.2	7.0	4.1	4.8	2.9	1.6	1.1	10.6	5.4
Remoteness of residence (b)									
Major cities	7.7	7.2	4.8	6.2	3.7	..	np	..	6.5
Inner regional	1.5	2.6	1.2	np	np	2.2	np	..	1.7
Outer regional	np	np	7.2	np	np	–	..	14.5	3.9
Remote	–	np	np	27.7	np	np	..	35.6	15.3
Very remote	np	..	np	110.1	np	np	..	86.2	59.6
SEIFA of residence (c)									
Quintile 1	2.9	5.6	3.4	41.3	2.9	np	np	55.1	5.8
Quintile 2	2.7	3.0	4.0	9.0	1.8	np	np	np	3.5
Quintile 3	8.7	6.7	3.0	4.3	5.5	np	np	np	6.0
Quintile 4	14.8	4.2	6.7	7.4	np	np	np	24.8	7.9
Quintile 5	5.0	9.9	4.8	5.4	4.7	..	np	24.9	6.3
					HIV (d)				
Sex									
Males	9.6	9.6	8.1	5.2	5.6	np	7.7	np	8.2
Females	1.2	1.3	1.4	1.8	0.7	np	np	np	1.3
Indigenous status									

Table NHA.2.3 **Rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, by Indigenous status, remoteness and SEIFA, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Indigenous	5.3	–	np	np	np	–	np	np	3.8
Non-Indigenous	5.3	5.5	4.8	3.4	2.9	np	1.8	5.8	4.7
Remoteness of residence (b)									
Major cities	6.0	5.9	5.0	3.8	4.2	..	1.8	..	5.3
Inner regional	1.8	3.2	1.8	2.0	–	0.9	np	..	2.0
Outer regional	3.0	2.1	7.9	3.7	–	1.0	..	6.2	4.4
Remote	np	np	np	np	–	np	..	np	2.7
Very remote	np	..	np	np	–	np	..	np	np
SEIFA of residence (c)									
Quintile 1	2.4	4.5	3.8	4.3	–	np	np	np	2.8
Quintile 2	3.0	2.3	3.6	3.5	–	np	np	np	2.8
Quintile 3	7.3	5.6	3.5	2.7	21.4	np	np	np	5.8
Quintile 4	10.9	4.5	6.5	4.0	–	np	np	np	6.2
Quintile 5	3.9	8.3	5.5	4.2	–	..	np	np	5.1
					Hepatitis B (e)				
Sex									
Males	42.1	38.1	21.4	34.3	27.9	21.0	21.0	116.2	35.0
Females	32.7	32.8	20.4	26.9	27.6	10.6	12.1	70.6	28.8
Indigenous status									
Indigenous (f)	np	np	np	118.2	151.2	–	np	253.4	158.3
Non-Indigenous (f)	np	np	np	28.8	26.5	16.3	np	53.9	27.6
Remoteness of residence (b)									
Major cities	45.8	43.0	23.1	33.4	29.2	..	14.8	..	22.6
Inner regional	9.1	10.3	10.1	8.4	4.9	–	np	..	8.5

Table NHA.2.3 **Rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, by Indigenous status, remoteness and SEIFA, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Outer regional	12.7	10.8	21.1	16.8	7.9	7.5	..	68.7	16.8
Remote	42.3	np	15.7	26.2	np	np	..	107.2	30.5
Very remote	np	..	83.9	117.7	117.4	np	..	162.1	110.7
SEIFA of residence (c)									
Quintile 1	64.1	70.6	25.1	54.4	38.0	15.6	np	103.8	51.2
Quintile 2	24.2	26.6	20.6	41.7	17.7	–	np	153.6	25.6
Quintile 3	39.5	29.5	14.2	27.8	21.7	15.3	np	69.6	28.5
Quintile 4	33.5	28.3	21.4	27.3	14.7	18.7	12.5	80.2	27.0
Quintile 5	26.0	30.1	21.6	19.9	15.8	..	15.1	66.1	24.8
					Hepatitis C (e)				
Sex									
Males	66.0	57.6	79.8	79.0	45.6	105.9	70.0	120.9	67.0
Females	38.0	33.0	45.2	44.9	30.4	51.3	41.9	78.0	39.0
Indigenous status									
Indigenous (f)	np	np	np	157.0	153.5	106.4	np	44.7	110.6
Non-Indigenous (f)	np	np	np	58.0	34.9	76.1	np	115.2	53.8
Remoteness of residence (b)									
Major cities	44.0	42.5	60.7	56.6	30.1	..	55.2	..	47.0
Inner regional	72.4	47.2	68.2	79.6	32.4	86.6	np	..	64.9
Outer regional	82.1	51.5	63.9	65.2	38.6	56.6	..	108.8	65.8
Remote	132.2	np	43.9	74.6	42.2	np	..	99.2	71.4
Very remote	np	..	53.9	59.9	np	np	..	44.3	55.8
SEIFA of residence (c)									
Quintile 1	73.4	64.1	104.7	71.1	47.7	59.6	np	46.1	73.2

Table NHA.2.3 **Rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, by Indigenous status, remoteness and SEIFA, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Quintile 2	51.7	52.1	66.4	77.8	34.0	50.7	np	147.3	55.9
Quintile 3	49.7	43.8	51.8	53.0	29.3	143.8	81.4	81.1	50.0
Quintile 4	51.7	34.7	54.3	80.4	18.1	83.8	56.6	130.7	50.2
Quintile 5	22.8	31.6	35.6	33.4	10.5	..	50.5	112.9	30.2
					Chlamydia				
Sex									
Males	173.1	186.3	264.6	326.3	190.9	241.0	206.8	698.3	220.4
Females	231.5	264.6	434.9	456.0	283.6	402.7	295.7	1 154.8	323.3
Indigenous status									
Indigenous (g)	np	164.3	1 169.7	137.9	608.6	82.5	np	1 708.4	1 102.4
Non-Indigenous (g)	np	226.9	310.3	345.6	228.5	336.0	np	536.8	278.1
Remoteness of residence (b)									
Major cities	189.2	212.2	314.8	344.0	241.5	..	310.1	..	193.2
Inner regional	224.8	233.1	250.1	364.7	181.8	330.4	np	..	194.5
Outer regional	231.8	226.9	504.2	435.6	178.1	299.7	..	591.4	337.8
Remote	332.4	112.6	586.3	719.7	186.2	295.0	..	1 024.9	587.8
Very remote	413.2	..	1 498.8	1 337.3	995.2	398.4	..	1 503.4	1 364.6
SEIFA of residence (c)									
Quintile 1	165.7	204.1	404.6	880.0	257.8	320.8	np	1 047.0	288.3
Quintile 2	228.1	224.6	363.2	430.7	227.6	285.9	204.7	1 082.3	272.7
Quintile 3	212.2	230.0	337.7	341.9	192.8	314.3	233.2	610.4	268.7
Quintile 4	210.8	198.7	356.8	347.0	227.1	339.2	247.9	875.9	270.8
Quintile 5	166.3	220.6	275.0	325.5	226.9	..	246.9	551.4	230.8
					Gonococcal infection				

Table NHA.2.3 **Rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, by Indigenous status, remoteness and SEIFA, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Sex									
Males	32.1	28.0	48.9	87.1	44.3	9.2	8.6	617.5	47.1
Females	6.9	6.0	27.4	67.4	20.9	2.1	2.6	652.4	25.2
Indigenous status									
Indigenous (g)	np	21.2	348.6	1 401.3	423.4	–	np	1 723.7	764.9
Non-Indigenous (g)	np	17.0	23.8	22.2	23.3	5.9	np	103.6	21.2
Remoteness of residence (b)									
Major cities	22.6	17.2	27.9	27.9	28.5	..	5.6	..	22.7
Inner regional	7.2	5.4	10.1	16.3	9.6	7.1	np	..	8.1
Outer regional	6.4	10.3	79.9	71.5	16.4	np	..	181.3	53.8
Remote	np	np	129.5	391.6	27.0	np	..	758.9	289.1
Very remote	np	..	387.3	1 480.2	893.6	np	..	1 483.7	1 075.0
SEIFA of residence (c)									
Quintile 1	9.7	13.2	58.1	752.4	47.1	4.0	np	956.3	71.1
Quintile 2	13.5	7.5	39.4	51.6	23.5	np	np	692.6	23.4
Quintile 3	24.2	16.1	25.9	31.2	20.1	np	–	301.6	25.5
Quintile 4	33.7	13.9	37.3	44.4	20.4	14.1	4.9	327.5	32.4
Quintile 5	19.0	21.2	27.0	19.7	18.5	..	5.4	277.8	22.0

(a) Syphilis limited to cases of less than 2 years duration, and cases of congenital syphilis.

(b) Indirect age standardised rate. Not all remoteness areas are represented in each State or Territory.

(c) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged.

(d) HIV data includes reports of newly diagnosed HIV infection and cases of HIV infections known to have been newly acquired.

(e) Includes all Hepatitis B and C infections, whether or not the infection was sexually transmitted.

Table NHA.2.3 **Rates per 100 000 population for notifications of new cases of sexually transmissible infections and blood borne viruses, by Indigenous status, remoteness and SEIFA, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(f) ACT, NSW, Queensland and Victoria cases and populations have not been included in the calculation of this national figure due to Indigenous status completeness being <50 per cent.

(g) ACT and NSW cases and populations have not been included in the calculation of this national figure due to Indigenous status completeness being <50 per cent.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : Department of Health and Ageing (unpublished) Analysis of the National Notifiable Diseases Surveillance System and the National HIV registry; ABS (unpublished) Estimated Residential Population, 30 June 2008; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2008, Series B, Cat. no. 3238.0.

NHA Indicator 3:

Incidence of end-stage kidney disease

Table NHA.3.1 **Incidence of end-stage kidney disease, 2003–2006 (a)**

	Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Unit		Age standardised rate per 100 000 population									no.
Sex											
Males	2006	np	np	np	np	np	np	np	np	26.7	2 584
Females	2006	np	np	np	np	np	np	np	np	17.0	2 103
Sex											
Males	2003–2006	22.3	25.0	23.0	24.2	26.3	21.9	np	np	24.1	8 949
Females	2003–2006	14.8	15.6	16.9	16.0	15.3	16.0	np	np	16.1	7 681
Indigenous status (b)											
Indigenous	2003–2006	np	np	np	np	np	np	np	np	114.4	929
Non-Indigenous	2003–2006	np	np	np	np	np	np	np	np	18.0	10 706
Total (c)	2003–2006	**18.1**	**19.7**	**19.7**	**19.7**	**20.0**	**18.7**	**25.7**	**74.3**	**19.6**	16 630
Unit		no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number		5 262	4 242	3 057	1 511	1 483	415	278	382	16 630	
		95 per cent confidence interval									
Sex											
Males	2003–2006	21.5–23.2	24.0–26.0	21.8–24.1	22.5–25.9	24.5–28.1	18.9–24.9	np	np	23.6–24.6	
Females	2003–2006	14.2–15.4	15.3–15.8	16.0–17.8	14.8–17.2	14.1–16.5	13.8–18.3	np	np	15.7–16.4	
Indigenous status (b)											
Indigenous	2003–2006	np	np	np	np	np	np	np	np	105.8–123.0	
Non-Indigenous	2003–2006	np	np	np	np	np	np	np	np	17.7–18.4	
Total (c)	2003–2006	**17.7–18.6**	**19.1–20.3**	**19.0–20.4**	**18.7–20.7**	**19.0–21.0**	**16.9–20.5**	**22.7–28.8**	**65.2–83.4**	**19.3–19.9**	

(a) Rates are directly age standardised to the Australian population as at 30 June 2001.

(b) Indigenous disaggregation is based on data from NT, Queensland, SA, WA and NSW only.

(c) Total includes people whose Indigenous status was not known or not stated.

Table NHA.3.1 **Incidence of end-stage kidney disease, 2003–2006 (a)**

	Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

np Not published.

Source : AIHW (unpublished), sourced from the Australian and New Zealand Dialysis and Transplant Register, the National Death Index and the National Mortality Database; ABS (unpublished) Estimated Residential Population, 2003–2006; ABS (2009) Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021, 2003–2006, Cat. no. 3238.0.

NHA Indicator 4:

Incidence of selected cancers of public health importance

Table NHA.4.1 **Incidence of selected cancers, 2006**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
				Age standardised rate per 100 000 population					
Bowel cancer (a)	62.4	62.2	65.7	53.1	61.7	70.1	62.3	60.8	62.2
Lung cancer (a)	42.4	43.0	46.7	44.9	42.1	54.0	33.9	60.5	43.8
Melonoma (a)	49.2	40.3	60.0	52.9	35.7	46.5	42.4	24.2	47.9
Female breast cancer (b)	110.1	112.7	115.5	115.4	111.3	105.5	128.3	79.5	112.4
Cervical cancer (b)	6.1	5.8	8.9	6.6	5.6	5.5	4.6	15.2	6.6
				Number of new cases					
Bowel cancer (a)	4 616	3 426	2 679	1 078	1 152	401	179	60	13 591
Lung cancer (a)	3 124	2 367	1 919	898	790	307	93	65	9 563
Melonoma (a)	3 549	2 178	2 467	1 089	622	247	129	45	10 326
Female breast cancer (b)	4 118	3 169	2 470	1 239	1 041	303	213	61	12 614
Cervical cancer (b)	220	159	185	68	47	14	8	14	715
				95 per cent confidence interval					
Bowel cancer (a)	60.6–64.3	60.2–64.4	63.2–68.2	50.0–56.4	58.2–65.4	63.4–77.3	53.4–72.3	43.6–81.7	61.2–63.3
Lung cancer (a)	40.9–43.9	41.3–44.8	44.6–48.8	42.0–47.9	39.2–45.2	48.1–60.5	27.3–41.7	44.1–80.2	43.0–44.7
Melonoma (a)	47.6–50.9	38.6–42.0	57.6–62.4	49.8–56.2	32.9–38.6	40.8–52.7	35.2–50.5	17.0–33.2	47.0–48.9
Female breast cancer (b)	106.8–113.6	108.8–116.8	110.9–120.1	109.1–122.1	104.6–118.4	93.8–118.2	111.5–146.9	58.2–105.2	110.4–114.4
Cervical cancer (b)	5.3–7.0	5.0–6.8	7.7–10.3	5.1–8.4	4.1–7.4	3.0–9.3	2.0–9.0	7.2–27.3	6.1–7.1

(a) Age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years, and expressed per 100 000 persons.

(b) Age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years, and expressed per 100 000 females.

Source : AIHW (unpublished) *Australian Cancer Database* ; ABS (unpublished) Estimated Residential Population, 30 June 2006.

Table NHA.4.2 **Incidence of selected cancers by Indigenous status, 2006**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	Age standardised rate per 100 000 population									no.
Bowel cancer (a)										
Indigenous	45.3	82.4	47.8	20.5	29.9	76.7	–	np	42.5	75
Other (b)	62.6	62.2	65.8	53.4	61.9	70.5	62.5	np	62.4	13 516
Lung cancer (a)										
Indigenous	56.1	31.9	82.2	63.8	120.3	148.6	53.6	np	70.5	128
Other (b)	42.2	43.0	46.3	44.7	41.7	53.8	33.8	np	43.6	9 435
Melanoma of the skin (a)										
Indigenous	5.4	7.2	4.9	4.5	–	–	–	np	4.3	13
Other (b)	49.6	40.4	60.9	53.7	36.0	47.4	42.6	np	48.5	10 313
Female breast cancer (c)										
Indigenous	89.2	57.6	87.4	16.6	113.8	–	146.0	np	69.8	86
Other (b)	110.7	113.0	116.0	117.2	111.6	106.8	128.8	np	113.1	12 528
Cervical cancer (c)										
Indigenous	6.1	–	26.8	9.1	–	–	–	np	16.4	26
Other (b)	6.1	5.9	8.7	6.4	5.7	5.6	4.7	np	6.5	689
	95 per cent confidence interval									
Bowel cancer (a)										
Indigenous	26.3–71.3	37.7–152.7	27.9–75.1	5.6–46.9	4.3–91.7	6.8–284.3	–	np	32.2–54.8	..
Other (b)	60.8–64.4	60.1–64.3	63.4–68.4	50.2–56.7	58.3–65.6	63.8–77.9	53.5–72.5	np	61.3–63.5	..
Lung cancer (a)										
Indigenous	37.1–80.6	11.5–69.9	54.5–117.5	30.8–113.9	54.8–223.5	41.7–359.7	1.4–298.5	np	57.3–85.5	..
Other (b)	40.7–43.7	41.2–44.7	44.2–48.4	41.8–47.8	38.8–44.8	47.9–60.2	27.1–41.5	np	42.7–44.5	..
Melanoma of the skin (a)										
Indigenous	1.9–11.9	0.2–40.2	0.3–16.2	0.5–16.6	–	–	–	np	2.1–7.7	..

Table NHA.4.2 **Incidence of selected cancers by Indigenous status, 2006**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Other (b)	48.0–51.3	38.7–42.1	58.5–63.4	50.5–57.0	33.2–39.0	41.6–53.8	35.4–50.7	np	47.5–49.4	..
Female breast cancer (c)										
Indigenous	57.7–130.3	18.3–135.2	54.6–130.8	4.4–42.8	41.0–242.8	–	3.7–813.5	np	54.3–87.9	..
Other (b)	107.3–114.1	109.1–117.0	111.5–120.8	110.7–123.9	104.8–118.7	95.0–119.7	111.9–147.5	np	111.1–115.1	..
Cervical cancer (c)										
Indigenous	1.2–17.9	–	10.4–53.3	1.9–26.6	–	–	–	np	9.8–25.3	..
Other (b)	5.3–7.0	5.0–6.9	7.4–10.0	4.9–8.1	4.1–7.6	3.0–9.5	2.0–9.2	np	6.0–7.0	..

(a) Age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years, and expressed per 100 000 persons.

(b) 'Other' comprises non-Indigenous and unknown Indigenous status.

(c) Age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 74 years, as estimated Indigenous female population in Tasmania and the ACT were not available for older 5-year age groups.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : AIHW (unpublished) *Australian Cancer Database* ; ABS (unpublished) Estimated Residential Population, 30 June 2006; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2006, Series B, Cat. no. 3238.0.

Table NHA.4.3 **Incidence of selected cancers by remoteness area, 2006 (a)**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust	
	Age standardised rate per 100 000 population									no.
Bowel cancer (a)										
Major cities	61.0	60.8	66.3	53.3	61.0	..	62.3	..	61.1	8 841
Inner regional	66.1	66.7	69.0	54.4	59.6	71.7	–	..	66.3	3 191
Outer regional	65.5	64.7	60.7	58.5	63.0	68.4	..	np	63.2	1 367
Remote	50.6	70.1	53.2	33.3	86.2	54.1	..	np	55.1	148
Very remote	26.9	..	44.1	45.3	67.7	–	..	np	44.1	44
Lung cancer (a)										
Major cities	41.8	43.5	44.9	43.3	42.5	..	33.9	..	42.9	6 185
Inner regional	42.5	42.7	48.6	51.1	37.9	55.4	–	..	45.0	2 177
Outer regional	43.1	38.6	47.9	45.4	44.2	50.7	..	np	45.1	976
Remote	89.2	84.6	61.8	44.9	39.4	67.3	..	np	56.3	152
Very remote	148.9	..	76.7	61.9	62.2	37.7	..	np	74.8	74
Melanoma (a)										
Major cities	44.7	35.9	59.8	51.1	36.6	..	42.4	..	42.5	6 468
Inner regional	63.3	51.6	62.2	58.4	34.1	47.7	–	..	52.0	2 584
Outer regional	51.3	55.3	60.0	55.4	30.7	45.3	..	np	48.1	1 080
Remote	44.2	63.0	48.7	58.4	36.1	41.7	..	np	48.2	143
Very remote	94.7	..	43.5	44.4	48.6	22.8	..	np	49.0	50
Female breast cancer (b)										
Major cities	111.8	112.6	119.1	114.8	113.2	..	128.3	..	114.1	8 624
Inner regional	104.6	115.7	108.6	123.5	134.7	113.5	–	..	111.5	2 663
Outer regional	107.1	105.9	112.7	138.6	74.1	95.1	..	np	106.7	1 144
Remote	130.0	4.7	120.9	70.9	121.6	64.1	..	np	99.8	140
Very remote	262.8	..	78.8	56.6	85.2	–	..	np	72.6	43

Table NHA.4.3 **Incidence of selected cancers by remoteness area, 2006 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Cervical cancer (b)										
Major cities	6.3	6.2	9.3	7.0	5.8	..	4.6	..	6.8	505
Inner regional	5.3	4.9	7.4	6.2	7.7	5.2	–	..	5.9	126
Outer regional	5.7	4.2	9.5	4.6	1.1	6.0	..	np	6.1	59
Remote	19.1	–	5.9	2.6	5.3	4.3	..	np	7.8	12
Very remote	0.9	..	16.6	13.8	–	–	..	np	20.1	13
					95 per cent confidence interval					
Bowel cancer (a)										
Major cities	58.8–63.2	58.4–63.3	63.1–69.7	49.6–57.2	56.8–65.3	..	53.4–72.3	..	59.8–62.4	..
Inner regional	62.3–70.1	62.1–71.5	63.9–74.4	46.0–63.7	49.9–70.5	63.2–80.9	–	..	64.1–68.7	..
Outer regional	59.0–72.5	56.2–73.9	54.3–67.4	48.0–70.1	53.1–74.2	57.1–81.2	..	np	59.9–66.6	..
Remote	28.8–78.8	16.6–170.5	36.6–72.7	19.7–50.3	62.2–115.2	13.7–123.9	..	np	46.4–64.9	..
Very remote	0.3–133.8	..	24.2–72.2	21.2–81.1	23.9–133.6	–	..	np	31.0–59.8	..
Lung cancer (a)										
Major cities	40.0–43.6	41.4–45.6	42.3–47.7	39.9–46.8	39.1–46.2	..	27.3–41.7	..	41.8–43.9	..
Inner regional	39.5–45.7	39.1–46.5	44.3–53.1	43.0–59.9	30.2–46.7	47.9–63.6	–	..	43.2–47.0	..
Outer regional	37.9–48.8	32.1–45.8	42.3–54.0	36.2–56.1	35.8–53.7	41.0–61.7	..	np	42.3–48.0	..
Remote	60.6–125.3	29.2–173.2	44.3–82.8	28.9–64.3	24.2–60.1	20.5–142.2	..	np	47.4–66.1	..
Very remote	48.9–320.4	..	48.5–111.4	30.8–104.4	22.8–119.8	1.0–209.9	..	np	57.2–94.7	..
Melanoma (a)										
Major cities	42.9–46.6	34.0–37.8	56.8–63.0	47.5–54.9	33.3–40.2	..	35.2–50.5	..	40.5–44.5	..
Inner regional	59.3–67.4	47.5–56.0	57.3–67.5	49.6–68.0	26.4–42.9	40.5–55.6	–	..	49.9–54.2	..
Outer regional	45.2–57.8	46.9–64.4	53.8–66.5	45.2–67.0	23.3–39.0	35.7–56.3	..	np	46.0–50.2	..
Remote	24.6–72.0	15.5–149.4	33.7–66.7	42.3–77.0	20.6–56.7	7.9–101.0	..	np	46.1–50.3	..
Very remote	25.2–235.9	..	24.0–69.8	23.4–73.3	16.2–108.9	0.6–127.2	..	np	46.9–51.1	..

Table NHA.4.3 **Incidence of selected cancers by remoteness area, 2006 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Female breast cancer (b)										
Major cities	107.8–116.0	108.0–117.3	113.1–125.3	107.4–122.7	105.3–121.6	..	111.5–146.9	..	111.7–116.6	..
Inner regional	97.6–111.8	107.2–124.7	99.7–118.2	105.7–143.3	113.6–157.9	98.3–130.0	–	..	107.3–115.9	..
Outer regional	94.8–120.1	89.8–123.6	100.9–125.3	115.7–163.7	58.2–92.1	76.2–116.5	..	np	100.5–113.1	..
Remote	78.9–195.6	–	87.7–161.1	45.3–104.9	81.3–170.9	8.0–182.2	..	np	83.5–117.6	..
Very remote	85.4–592.0	..	43.5–125.5	22.0–109.8	25.5–197.9	–	..	np	51.2–98.6	..
Cervical cancer (b)										
Major cities	5.3–7.3	5.2–7.4	7.7–11.1	5.2–9.2	4.0–8.1	..	2.0–9.0	..	6.2–7.4	..
Inner regional	3.7–7.1	3.2–7.1	5.0–10.3	2.3–12.3	3.3–14.9	2.3–10.2	–	..	4.8–7.0	..
Outer regional	2.9–9.9	1.3–9.7	6.2–13.6	1.3–11.8	0.0–4.9	1.8–13.5	..	np	4.6–7.9	..
Remote	2.6–51.4	–	0.6–17.5	0.0–13.8	0.1–29.6	–	..	np	3.9–13.9	..
Very remote	–	..	3.0–45.5	2.7–40.8	–	–	..	np	9.9–34.9	..

(a) Classified according to the Australian Standard Geographical classification (ASGC) Remoteness Area. Disaggregation by remoteness area is based on postcode of usual residence. Not all remoteness areas are represented in each State or Territory.

(b) Age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years, and expressed per 100 000 persons.

(c) Age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years, and expressed per 100 000 females.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : AIHW (unpublished) Australian Cancer Database; ABS (unpublished) concordances from Postal Area to Remoteness Area; ABS (unpublished) Estimated Residential Population, 30 June 2006.

Table NHA.4.4 **Incidence of selected cancers by SEIFA, 2006 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	Age standardised rate per 100 000 population									no.
Bowel cancer (b)										
Quintile 1	72.1	77.2	49.0	87.1	78.4	60.2	–	np	67.8	3 029
Quintile 2	55.5	61.0	84.0	68.3	43.7	197.4	–	np	61.8	2 911
Quintile 3	77.9	47.6	79.2	30.0	76.4	19.8	–	np	61.4	2 629
Quintile 4	41.7	69.6	69.7	80.8	51.4	60.9	105.6	np	62.2	2 532
Quintile 5	64.3	59.0	48.8	45.4	61.2	..	48.4	np	57.9	2 490
Lung cancer (b)										
Quintile 1	54.3	60.9	42.3	117.3	59.9	49.8	–	np	54.9	2 459
Quintile 2	38.9	40.0	65.9	65.1	34.5	132.6	–	np	45.7	2 160
Quintile 3	54.7	37.0	55.9	24.9	41.4	23.9	–	np	44.1	1 889
Quintile 4	24.4	47.7	45.0	60.0	36.0	40.1	59.5	np	41.1	1 667
Quintile 5	37.0	33.3	23.1	30.1	29.1	..	26.9	np	32.5	1 388
Melanoma (b)										
Quintile 1	45.4	38.1	46.0	75.3	33.2	36.8	–	np	42.5	1 830
Quintile 2	47.3	46.9	73.1	67.2	33.2	126.8	–	np	52.0	2 322
Quintile 3	61.0	31.9	71.3	28.8	42.4	15.8	–	np	48.1	2 046
Quintile 4	33.8	41.8	68.3	64.8	36.1	44.7	67.3	np	48.2	2 014
Quintile 5	57.2	42.9	40.1	60.2	39.4	..	36.7	np	49.0	2 114
Female breast cancer (c)										
Quintile 1	111.9	122.1	83.5	180.6	101.7	73.8	..	np	104.7	2 343
Quintile 2	93.5	100.9	150.4	159.3	94.4	328.5	–	np	111.5	2 575
Quintile 3	131.0	93.6	137.5	66.0	157.4	34.1	23.1	np	111.3	2 456
Quintile 4	77.1	127.6	118.9	131.3	98.9	116.4	200.1	np	111.3	2 423
Quintile 5	137.3	117.7	94.8	121.7	132.3	..	106.2	np	122.2	2 818

Table NHA.4.4 **Incidence of selected cancers by SEIFA, 2006 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Cervical cancer (c)										
Quintile 1	6.6	5.8	6.2	22.0	10.1	6.2	..	np	7.4	154
Quintile 2	4.9	7.3	13.5	5.7	3.7	7.7	–	np	6.5	141
Quintile 3	8.7	6.5	10.4	3.8	5.7	2.7	–	np	7.4	160
Quintile 4	4.6	5.3	9.7	9.2	3.2	2.3	9.7	np	6.4	138
Quintile 5	6.2	4.9	5.8	5.8	3.7	..	2.7	np	5.4	121
				95 per cent confidence interval						
Bowel cancer (b)										
Quintile 1	67.9–76.5	71.5–83.1	44.8–53.6	70.4–105.9	71.0–86.4	51.9–69.2	–	np	65.4–70.3	..
Quintile 2	52.4–58.8	56.2–66.2	76.9–91.5	60.5–76.8	37.9–50.0	162.3–237.7	–	np	59.6–64.1	..
Quintile 3	73.0–83.0	43.6–51.8	73.4–85.3	25.9–34.4	65.7–88.0	12.1–30.0	–	np	59.0–63.8	..
Quintile 4	37.8–45.9	64.9–74.5	64.5–75.2	71.2–91.0	44.0–59.6	45.4–79.7	83.8–131.3	np	59.7–64.6	..
Quintile 5	60.2–68.6	54.8–63.3	43.3–54.9	39.7–51.7	51.8–71.6	..	38.9–59.4	np	55.6–60.2	..
Lung cancer (b)										
Quintile 1	50.7–58.1	56.0–66.2	38.4–46.5	97.6–139.3	53.4–67.0	42.2–58.2	–	np	52.7–57.1	..
Quintile 2	36.3–41.7	36.1–44.1	59.7–72.6	57.4–73.3	29.4–40.1	104.2–164.4	–	np	43.8–47.6	..
Quintile 3	50.6–59.1	33.6–40.8	51.0–61.0	21.2–29.0	33.8–50.1	15.2–34.8	–	np	42.2–46.2	..
Quintile 4	21.5–27.6	43.8–51.8	40.9–49.5	51.7–69.2	29.9–42.9	27.3–56.0	43.1–79.9	np	39.1–43.1	..
Quintile 5	33.9–40.3	30.2–36.6	19.3–27.4	25.3–35.4	22.8–36.6	. .	19.8–35.6	np	30.8–34.3	..
Melanoma (b)										
Quintile 1	42.0–48.9	34.1–42.4	41.7–50.5	59.9–93.0	28.3–38.8	30.1–44.4	–	np	40.5–44.5	..
Quintile 2	44.3–50.4	42.6–51.5	66.5–80.3	59.4–75.6	27.9–39.3	97.8–160.5	–	np	49.9–54.2	..
Quintile 3	56.6–65.6	28.7–35.4	65.8–77.1	24.9–33.1	34.2–51.8	8.8–25.2	–	np	46.0–50.2	..
Quintile 4	30.4–37.5	38.2–45.7	63.3–73.6	56.6–73.7	29.9–43.2	30.9–61.8	50.9–87.2	np	46.1–50.3	..
Quintile 5	53.3–61.2	39.3–46.7	35.2–45.4	53.6–67.5	31.9–48.2	..	28.6–46.3	np	46.9–51.1	..

Table NHA.4.4 **Incidence of selected cancers by SEIFA, 2006 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Female breast cancer (c)										
Quintile 1	104.5–119.6	112.0–132.8	75.6–92.0	146.6–219.5	89.6–114.6	60.7–88.4	..	np	100.5–109.0	..
Quintile 2	87.6–99.7	92.1–110.2	136.9–164.8	142.4–177.1	82.0–107.8	265.0–400.9	–	np	107.2–115.9	..
Quintile 3	122.1–140.5	85.9–101.8	126.9–148.7	57.7–75.1	135.2–181.6	20.0–53.5	0.6–128.6	np	106.9–115.8	..
Quintile 4	69.9–84.9	118.8–136.9	109.7–128.6	115.0–148.7	84.6–114.5	85.4–152.2	161.2–245.3	np	106.9–115.9	..
Quintile 5	129.0–145.9	109.6–126.4	84.6–105.7	108.6–135.6	113.4–153.3	..	87.4–127.0	np	117.7–126.8	..
Cervical cancer (c)										
Quintile 1	4.8–8.7	3.7–8.6	4.0–8.9	11.3–38.4	6.4–15.1	2.8–11.9	..	np	6.3–8.7	..
Quintile 2	3.6–6.5	5.0–10.2	9.5–18.2	2.8–10.1	1.5–7.4	0.7–28.5	–	np	5.5–7.7	..
Quintile 3	6.5–11.3	4.5–8.9	7.5–13.8	2.0–6.6	2.1–12.4	0.1–14.9	–	np	6.3–8.7	..
Quintile 4	2.9–6.7	3.6–7.5	7.2–12.7	5.3–14.7	1.0–7.4	0.1–13.1	3.1–22.6	np	5.3–7.5	..
Quintile 5	4.6–8.3	3.3–6.9	3.6–9.0	3.2–9.7	1.0–9.5	..	0.5–7.8	np	4.5–6.5	..

(a) SEIFA quintiles are based on the Index of Relative Socioeconomic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Disaggregation by SEIFA is based on postcode of usual residence. Not all quintiles are represented in every jurisdiction.

(b) Age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years, and expressed per 100 000 persons.

(c) Age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years, and expressed per 100 000 females.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source: AIHW (unpublished) Australian Cancer Database; ABS (unpublished) concordances from Postal Area to SLA; ABS (unpublished) Estimated Residential Population, 30 June 2006.

NHA Indicator 5:

Proportion of persons obese

Table NHA.5.1 Rates of obesity for adults and children, by remoteness and SEIFA, 2007-08 (a), (b), (c), (d)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
						Adults				
Remoteness of residence										
Major cities	%	21.5	23.0	22.4	23.5	23.4	..	25.0	..	22.5
Inner regional	%	28.2	27.8	27.3	29.0	24.3	25.4	–	..	27.6
Outer regional	%	32.7	40.2	29.0	32.3	26.7	28.9	..	26.8	31.3
Remote	%	35.7	–	27.1	38.0	31.5	19.8	..	45.6	35.0
Very remote (e)	%	..	..	..	..	..	..	..	..	..
Index of disadvantage of residence										
Quintile 1	%	32.6	34.7	31.8	30.6	28.0	36.4	20.5	33.9	32.5
Quintile 2	%	25.8	26.4	27.5	33.3	24.6	30.0	33.5	36.5	27.2
Quintile 3	%	24.0	25.6	25.9	27.1	21.7	17.1	29.3	30.8	25.0
Quintile 4	%	21.5	23.1	19.4	25.2	21.2	20.9	np	np	21.9
Quintile 5	%	16.5	18.6	21.4	18.9	23.0	7.6	np	np	18.6
Total (f)	**%**	**23.8**	**24.8**	**25.2**	**25.7**	**23.8**	**26.5**	**24.9**	**32.8**	**24.7**
Total number of obese adults	('000)	919.7	690.4	558.0	304.8	181.2	66.4	44.9	25.2	2 790.6
						Children				
Remoteness of residence										
Major cities	%	8.6	6.7	8.3	5.8	np	..	6.0	..	np
Inner regional	%	8.0	6.4	8.8	np	np	7.8	–	..	7.8
Outer regional	%	14.9	–	np	np	–	5.5	..	np	10.1
Remote	%	–	–	np	–	–	–	..	–	np
Very remote (e)	%	..	..	..	..	..	..	..	..	..
Index of disadvantage of residence										
Quintile 1	%	10.6	12.3	19.8	np	16.5	8.2	–	np	12.6
Quintile 2	%	4.8	9.2	14.6	11.8	np	3.6	np	–	8.7

Table NHA.5.1 **Rates of obesity for adults and children, by remoteness and SEIFA, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Quintile 3	%	9.4	6.4	6.6	7.9	np	np	np	–	7.5
Quintile 4	%	13.9	np	np	2.3	3.8	np	5.6	–	7.3
Quintile 5	%	6.3	np	np	3.6	12.8	–	5.6	–	4.5
Total (f)	**%**	**8.9**	**6.5**	**9.3**	**np**	**7.4**	**6.8**	**6.0**	**np**	**7.9**
Total number of obese children	('000)	74.1	34.3	48.1	13.8	10.4	3.8	2.5	np	187.9

(a) Adults are defined as persons aged 18 years and over. Children are defined as persons aged 5–17 years.

(b) Obesity for adults is defined as BMI equal to or greater than 30. Obesity for children is defined as BMI (appropriate for age and sex) that is likely to be 30 or more at age 18 years.

(c) Measured persons only.

(d) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 yr ranges from 18 for adults, selected ranges from 0–17 for children).

(e) Very remote data was not collected in the 2007-08 NHS.

(f) Includes persons for whom index of disadvantage was not able to be determined.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2007-08.

Table NHA.5.2 **RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by remoteness and SEIFA, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					RSE for Adults					
Remoteness of residence										
Major cities	%	7.1	6.3	7.8	8.4	5.8	..	5.2	..	3.1
Inner regional	%	9.1	9.8	7.4	12.8	16.4	8.5	–	..	4.5
Outer regional	%	10.7	15.8	10.4	15.1	18.9	10.2	..	24.2	5.1
Remote	%	40.2	–	45.3	35.8	33.4	114.9	..	35.1	17.7
Very remote (e)	%	..	..	..	..	..	..	..	..	..
Index of disadvantage of residence										
Quintile 1	%	7.4	11.3	7.2	18.9	9.9	9.6	107.1	56.6	3.8
Quintile 2	%	10.0	10.4	13.5	11.2	13.3	8.4	20.7	35.8	5.3
Quintile 3	%	10.6	13.2	10.0	12.0	12.7	17.4	15.8	51.7	5.4
Quintile 4	%	14.1	11.6	11.2	16.0	10.0	20.8	np	np	6.3
Quintile 5	%	11.3	11.5	13.4	14.5	16.5	40.7	np	np	6.1
Total (f)	%	4.7	4.9	5.0	6.3	5.0	6.1	5.2	20.8	2.3
Total obese adults	%	5.2	5.5	5.5	6.4	5.7	6.8	5.4	23.4	2.6
					RSE for Children					
Remoteness of residence										
Major cities	%	19.0	26.1	31.2	27.3	np	..	21.4	..	np
Inner regional	%	47.6	39.1	38.1	np	np	34.2	–	..	19.9
Outer regional	%	91.3	–	np	np	–	50.8	..	np	43.6
Remote	%	–	–	np	–	–	–	..	–	np
Very remote (e)	%	..	..	..	..	..	..	..	..	..
Index of disadvantage of residence										
Quintile 1	%	38.4	35.7	34.3	np	44.6	45.8	–	np	19.8

Table NHA.5.2 RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by remoteness and SEIFA, 2007-08 (a), (b), (c), (d)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Quintile 2	%	45.2	33.7	43.5	62.9	np	52.7	np	–	23.1
Quintile 3	%	62.3	47.7	58.2	42.6	np	np	np	–	29.0
Quintile 4	%	33.1	np	np	59.7	57.0	np	34.0	–	21.3
Quintile 5	%	58.0	np	np	40.3	63.2	–	30.5	–	30.6
Total (f)	%	19.2	20.9	21.9	np	30.1	29.1	21.4	np	11.1
Total obese children	%	19.0	22.5	21.8	25.2	31.2	30.0	21.7	np	11.3
					95 per cent confidence interval for Adults					
Remoteness of residence										
Major cities	%	3.0	2.8	3.4	3.9	2.7	..	2.6	..	1.4
Inner regional	%	5.0	5.4	4.0	7.2	7.8	4.2	–	..	2.4
Outer regional	%	6.9	12.4	5.9	9.6	9.9	5.8	..	12.7	3.1
Remote	%	28.2	–	24.0	26.7	20.6	44.5	..	31.4	12.2
Very remote (e)	%	..	..	..	..	..	..	..	..	..
Index of disadvantage of residence										
Quintile 1	%	4.7	7.7	4.5	11.3	5.5	6.8	43	37.6	2.4
Quintile 2	%	5.1	5.4	7.3	7.3	6.4	4.9	13.6	25.7	2.9
Quintile 3	%	5	6.6	5.1	6.4	5.4	5.8	9.1	31.2	2.7
Quintile 4	%	5.9	5.2	4.3	7.9	4.2	8.5	np	np	2.7
Quintile 5	%	3.7	4.2	5.6	5.4	7.4	6.1	np	np	2.2
Total (f)	%	2.2	2.4	2.5	3.2	2.3	3.2	2.5	13.4	1.1
Total obese adults	('000)	93.4	73.9	60.1	38.2	20.3	8.8	4.7	11.6	139.7

Table NHA.5.2 **RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by remoteness and SEIFA, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					95 per cent confidence interval for Children					
Remoteness of residence										
Major cities	%	3.2	3.4	5.1	3.1	np	..	2.5	..	np
Inner regional	%	7.4	4.9	6.6	np	np	5.2	–	–	3.0
Outer regional	%	26.7	–	np	np	–	5.5	–	np	8.6
Remote	%	–	–	np	–	–	–	–	–	np
Very remote (e)	%	–	–	–	–	–	–	–	–	–
Index of disadvantage of residence										
Quintile 1	%	8.0	8.6	13.4	np	14.5	7.4	–	np	4.9
Quintile 2	%	4.3	6.1	12.4	14.6	np	3.7	np	–	3.9
Quintile 3	%	11.5	6.0	7.5	6.6	np	np	np	–	4.3
Quintile 4	%	9.0	np	np	2.7	4.2	np	3.7	–	3.0
Quintile 5	%	7.1	np	np	2.8	15.9	–	3.4	–	2.7
Total (f)	%	3.4	2.6	4.0	np	4.4	3.9	2.5	np	1.7
Total number of obese children	('000)	27.67	15.14	20.61	6.81	6.36	2.2	1.05	np	41.47

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Adults are defined as persons aged 18 years and over. Children are defined as persons aged 5–17 years.

(b) Obesity for adults is defined as BMI equal to or greater than 30. Obesity for children is defined as BMI (appropriate for age and sex) that is likely to be 30 or more at age 18 years.

(c) Measured persons only.

(d) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 year ranges from 18 for adults, selected ranges from 0–17 for children).

(e) Very remote data was not collected in the 2007-08 NHS.

(f) Includes persons for whom index of disadvantage was not able to be determined.

Table NHA.5.2 **RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by remoteness and SEIFA, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2007-08.

Table NHA.5.3 **Rates of obesity for adults and children, by sex and age, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
						Adults				
Male adults										
18–24	%	17.1	11.6	9.0	13.5	3.0	10.9	np	np	12.8
25–34	%	20.3	18.9	19.2	20.5	19.1	17.7	np	np	19.6
35–44	%	24.4	24.3	32.1	28.8	23.9	28.4	np	np	26.5
45–54	%	32.2	28	27.3	31.6	32.8	25.2	np	np	29.9
55–64	%	35.4	39.5	31.4	28.9	33.9	32.2	33.6	51.1	35
65–69	%	37.2	35.4	29.0	30.0	30.4	23.6	np	np	33.6
70–74	%	31.6	35.4	46.9	22.4	31.4	25.9	np	np	34.2
75 and over	%	26.1	10.1	22.5	27.9	16.7	22.2	np	np	21.5
Total male adults	%	26.9	24.4	25.2	25.3	23.8	23.6	24.9	39.0	25.6
Total male adults number	'000	522.4	344.1	269.3	152.4	90.6	28.6	23.8	18.2	1449.5
Female adults										
18–24	%	14.2	15.7	16.8	12.1	13.1	17.1	13.6	–	14.9
25–34	%	16.2	17.2	23.7	17.1	19.0	21.1	np	np	18.4
35–44	%	18.6	27.6	22.7	23.1	24.2	39.5	np	np	22.9
45–54	%	25.3	27.0	24.4	33.0	23.1	39.2	np	np	26.5
55–64	%	30.0	40.1	32.6	35.6	33.5	24.6	22.3	–	33.4
65–69	%	17.6	33.3	39.8	34.4	43.2	30.6	29.8	–	29.6
70–74	%	28.9	23.3	29.1	35.1	35.9	43.3	38.6	–	29.2
75 and over	%	24.1	22.2	26.2	33.4	24.0	25.2	40.2	–	25.1
Total female adults	%	21.4	25.4	25.0	25.9	25.1	29.7	23.2	15.4	24.0
Total female adults number	'000	397.3	346.3	288.7	152.4	90.5	37.8	21.2	7.0	1341.2
All adults										
18–24	%	15.7	13.7	13.1	12.8	7.7	13.9	np	np	13.9

Table NHA.5.3 **Rates of obesity for adults and children, by sex and age, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
25–34	%	18.4	18.1	21.4	18.9	19.0	19.4	16.7	19.1	19.0
35–44	%	21.4	25.9	27.2	25.9	24.1	34.4	np	np	24.7
45–54	%	28.8	27.5	25.8	32.3	28.2	32.3	29.2	16.3	28.2
55–64	%	32.8	39.8	32.0	32.1	33.7	28.3	28.3	42.7	34.2
65–69	%	27.4	34.4	34.4	32.3	37.7	26.9	np	np	31.6
70–74	%	30.3	29.1	37.3	29.4	33.6	33.8	np	np	31.7
75 and over	%	25.0	16.5	24.7	30.9	20.6	23.9	np	np	23.5
Total adults	**%**	**24.2**	**24.9**	**25.1**	**25.6**	**24.4**	**26.7**	**24.1**	**27.4**	**24.8**
Total adults number	'000	919.7	690.4	558.0	304.8	181.2	66.4	44.9	25.2	2790.6
						Children				
Male children										
5–14	%	9.9	3.8	11.3	3.1	np	np	4.9	–	8.1
15–17	%	23.4	9.7	12.2	4.0	np	np	15.7	–	15.2
Total male children	%	13.1	5.0	11.5	3.3	13.4	9.5	7.4	–	9.7
Total male children number	'000	56.2	13.5	31.5	4.3	9.2	2.6	1.5	–	118.9
Female children										
5–14	%	4.2	5.4	6.4	8.3	np	np	3.6	np	5.2
15–17	%	5.5	14.9	8.6	5.9	np	np	8.7	np	8.0
Total female children	%	4.5	7.2	6.8	7.7	np	4.1	4.9	np	5.8
Total female children number	'000	17.9	20.8	16.6	9.4	np	1.1	1.0	np	69.0
All children										
5–14	%	7.1	4.6	8.9	5.6	np	7.1	4.2	np	6.7
15–17	%	14.8	12.3	10.8	5.0	np	5.7	12.0	np	11.8
Total children	**%**	**9.0**	**6.2**	**9.3**	**5.4**	**np**	**6.8**	**6.1**	**np**	**7.8**
Total children number	'000	74.1	34.3	48.1	13.8	np	3.8	2.5	np	187.9

Table NHA.5.3 **Rates of obesity for adults and children, by sex and age, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(a) Adults are defined as persons aged 18 years and over. Children are defined as persons aged 5–17 years.

(b) Obesity for adults is defined as BMI equal to or greater than 30. Obesity for children is defined as BMI (appropriate for age and sex) that is likely to be 30 or more at age 18 years.

(c) Includes measured persons only.

(d) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 year ranges from 18 for adults, and 5 year ranges from 0 for children)

– Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2007-08.

Table NHA.5.4 RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by sex and age, 2007-08 (a), (b), (c), (d)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
						RSE for Adults				
Male adults										
18–24	%	30.3	36.6	32.8	29.5	59.4	51.2	np	np	18.2
25–34	%	14.7	20.7	20.8	17.3	20.0	28.1	np	np	9.3
35–44	%	14.3	12.5	10.7	14.7	17.6	20.4	np	np	5.9
45–54	%	13.1	12.6	15.5	18.2	13.3	18.1	np	np	6.3
55–64	%	11.7	13.3	13.2	17.3	15.1	17.9	14.8	53.4	5.7
65–69	%	17.2	20.5	29.3	25.4	27.0	38.5	np	np	9.9
70–74	%	22.2	26.3	21.0	41.2	27.6	35.3	np	np	11.5
75 and over	%	22.9	41.6	33.9	25.1	32.3	26.8	np	np	13.4
Total male adults	%	6.2	6.9	6.6	7.9	5.7	10.7	6.1	29.1	3.1
Total male adults number	%	6.5	6.6	7.3	8.2	6.5	10.9	7.0	30.2	3.2
Female adults										
18–24	%	32.3	34.8	23.3	35.1	44.7	37.6	33.9	np	12.2
25–34	%	14.7	19.5	15.8	21.0	18.9	25.5	np	np	8.0
35–44	%	12.4	12.4	16.3	15.2	18.6	17.2	np	np	6.4
45–54	%	11.9	16.6	15.9	15.8	21.0	15.2	np	np	6.8
55–64	%	13.0	13.1	11.9	15.5	15.7	18.8	19.8	np	6.6
65–69	%	26.5	21.6	17.5	21.8	17.4	31.3	25.9	np	8.3
70–74	%	24.7	30.0	26.4	23.2	19.5	20.6	34.4	np	12.5
75 and over	%	21.4	18.3	20.8	24.2	24.2	24.3	28.6	np	10.0
Total female adults	%	6.6	7.1	6.1	7.9	7.5	7.5	8.9	39.4	3.4
Total female adults number	%	7.1	8.1	6.8	8.1	8.2	9.3	9.7	39.8	3.8
All adults										
18–24	%	20.5	25.2	18.7	20.1	39.2	31.3	np	np	9.8

Table NHA.5.4 **RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by sex and age, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
25–34	%	10.2	14.0	14.0	13.4	13.9	18.3	12.8	54.8	5.8
35–44	%	9.4	9.2	9.7	11.6	10.8	13.8	np	np	4.3
45–54	%	8.5	11.1	11.8	13.9	10.5	10.6	10.6	46.8	4.8
55–64	%	9.0	8.4	10.1	11.2	10.3	13.0	12.1	56.5	4.2
65–69	%	15.3	13.4	17.6	15.8	14.8	27.9	np	np	6.6
70–74	%	16.9	21.2	16.7	21.7	16.2	22.2	np	np	8.5
75 and over	%	16.6	17.7	17.4	18.9	18.7	13.4	np	np	8.1
Total adults	%	4.7	4.9	5.0	6.3	4.9	5.7	5.0	20.9	2.3
Total adults number	%	5.2	5.5	5.5	6.4	5.7	6.8	5.4	23.4	2.6
						RSE for Children				
Male children										
5–14	%	30.7	50.3	29.5	44.4	np	np	41.1	–	16.9
15–17	%	38.0	49.4	40.0	63.3	np	np	41.6	–	24.7
Total male children	%	23.9	35.3	24.1	40.6	32.7	38.7	27.5	–	14.1
Total male children number	*%*	*24.2*	*36.8*	*23.8*	*39.6*	*34.6*	*37.5*	*28.0*	–	*14.4*
Female children										
5–14	%	37.7	38.0	45.6	36.2	np	np	53.0	np	21.0
15–17	%	64.7	39.5	51.9	60.3	np	np	54.1	np	22.8
Total female children	%	31.5	25.8	36.7	30.8	np	40.1	44.0	np	15.6
Total female children number	%	31.7	26.6	37.0	32.5	np	40.9	45.1	np	15.8
All children										
5–14	%	23.0	29.4	26.7	29.5	np	35.8	29.1	np	13.7
15–17	%	31.9	28.7	35.0	44.6	np	49.2	31.9	np	17.6
Total children	%	19.1	20.9	22.1	25.3	np	29.7	21.5	np	11.1
Total children number	%	19.0	22.5	21.8	25.2	np	30.0	21.7	np	11.3

Table NHA.5.4 **RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by sex and age, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					95 per cent confidence interval for Adults					
Male adults										
18–24	%	10.2	8.3	5.8	7.8	3.5	10.9	np	np	4.6
25–34	%	5.9	7.7	7.9	7.0	7.5	9.7	np	np	3.6
35–44	%	6.9	6.0	6.7	8.3	8.3	11.4	np	np	3.1
45–54	%	8.3	6.9	8.3	11.3	8.6	8.9	np	np	3.7
55–64	%	8.2	10.3	8.2	9.8	10.1	11.3	9.8	53.5	3.9
65–69	%	12.6	14.3	16.7	14.9	16.1	17.8	np	np	6.6
70–74	%	13.7	18.2	19.3	18.1	17.0	17.9	np	np	7.7
75 and over	%	11.7	8.2	15.0	13.7	10.6	11.7	np	np	5.6
Total male adults	%	3.3	3.3	3.3	3.9	2.7	5.0	3.0	22.3	1.6
Total male adults number	('000)	66.9	44.4	38.3	24.6	11.5	6.1	3.3	10.8	90.2
Female adults										
18–24	%	9.0	10.7	7.7	8.3	11.5	12.6	9.0	np	3.6
25–34	%	4.7	6.6	7.3	7.1	7.0	10.6	np	np	2.9
35–44	%	4.5	6.7	7.3	6.9	8.8	13.3	np	np	2.9
45–54	%	5.9	8.8	7.6	10.2	9.5	11.7	np	np	3.6
55–64	%	7.7	10.3	7.6	10.8	10.3	9.1	8.7	np	4.3
65–69	%	9.1	14.1	13.6	14.7	14.7	18.7	15.1	np	4.8
70–74	%	14.0	13.7	15.1	15.9	13.7	17.5	26.0	np	7.2
75 and over	%	10.2	8.0	10.7	15.9	11.4	12.0	22.6	np	4.9
Total female adults	%	2.8	3.5	3.0	4.0	3.7	4.3	4.1	11.9	1.6
Total female adults number	('000)	55.1	55.0	38.7	24.1	14.6	6.9	4.0	5.5	98.7
All adults										
18–24	%	6.3	6.8	4.8	5.0	5.9	8.5	np	np	2.7

Table NHA.5.4 **RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by sex and age, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
25–34	%	3.7	5.0	5.9	5.0	5.2	7.0	4.2	20.5	2.2
35–44	%	4.0	4.7	5.2	5.9	5.1	9.3	np	np	2.1
45–54	%	4.8	6.0	6.0	8.8	5.8	6.7	6.1	14.9	2.7
55–64	%	5.8	6.6	6.3	7.0	6.8	7.2	6.7	47.2	2.8
65–69	%	8.2	9.0	11.8	10.0	10.9	14.7	np	np	4.1
70–74	%	10.0	12.1	12.2	12.5	10.6	14.7	np	np	5.3
75 and over	%	8.1	5.7	8.4	11.4	7.6	6.3	np	np	3.7
Total adults	%	2.2	2.4	2.5	3.2	2.3	3.0	2.4	11.2	1.1
Total adults number	('000)	93.4	73.9	60.1	38.2	20.3	8.8	4.7	11.6	139.7
				95 per cent confidence interval for Children						
Male children										
5–14	%	5.9	3.8	6.5	2.7	np	np	3.9	–	2.7
15–17	%	17.5	9.4	9.6	5.0	np	np	12.8	–	7.4
Total male children	%	6.1	3.5	5.4	2.6	8.6	7.2	4.0	–	2.7
Total male children number	('000)	26.6	9.8	14.7	3.4	6.3	1.9	0.8	–	33.5
Female children										
5–14	%	3.1	4.0	5.7	5.9	np	np	3.7	np	2.2
15–17	%	6.9	11.5	8.7	7.0	np	np	9.2	np	3.6
Total female children	%	2.8	3.7	4.9	4.6	np	3.2	4.2	np	1.8
Total female children number	('000)	11.1	10.9	12.0	6.0	np	0.9	0.9	np	21.3
All children										
5–14	%	3.2	2.7	4.6	3.2	np	5.0	2.4	np	1.8
15–17	%	9.3	6.9	7.4	4.4	np	5.5	7.5	np	4.1
Total children	%	3.4	2.5	4.0	2.7	np	4.0	2.6	np	1.7
Total children number	('000)	27.7	15.1	20.6	6.8	np	2.2	1.1	np	41.5

Table NHA.5.4 RSEs and 95 per cent confidence intervals for rates of obesity for adults and children, by sex and age, 2007-08 (a), (b), (c), (d)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Adults are defined as persons aged 18 years and over. Children are defined as persons aged 5–17 years.

(b) Obesity for adults is defined as BMI equal to or greater than 30. Obesity for children is defined as BMI (appropriate for age and sex) that is likely to be 30 or more at age 18 years.

(c) Includes measured persons only.

(d) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 yr ranges from 18 for adults, and 5 yr ranges from 0 for children).

– Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2007-08.

Table NHA.5.5 **Rates of obesity for adults and children, by Indigenous status, 2004-05 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Indigenous adults										
Age standardised rate	%	36.9	28.9	34.8	35.4	35.3	26.2	36.4	25.0	33.6
95 per cent confidence intervals		5.9	8.2	5.1	7.8	7.5	6.8	10.5	7.6	2.8
RSE	%	8.1	14.5	7.5	11.2	10.8	13.3	14.7	15.5	4.2
Number of obese population	('000)	20.1	3.1	20.8	8.7	3.9	2.0	0.7	7.5	67.7
Non-Indigenous adults										
Age standardised rate	%	17.7	17.0	18.3	17.2	19.3	19.3	14.8	18.5	17.7
95 per cent confidence intervals	%	1.2	1.5	1.7	2.0	1.6	2.3	8.5	2.0	0.7
RSE	%	3.5	4.6	4.7	5.8	4.3	6.1	29.2	5.5	2.0
Number of obese population	('000)	811.7	587.2	480.0	225.0	199.4	59.1	40.3	13.2	2 416
Indigenous children (15–17 yrs)										
Rate	%	na	na	na	na	na	na	na	na	na
95 per cent confidence intervals	%	na	na	na	na	na	na	na	na	na
RSE	%	na	na	na	na	na	na	na	na	na
Number of obese population	('000)	na	na	na	na	na	na	na	na	na
Non-Indigenous children (15–17 yrs)										
Rate	%	na	na	na	na	na	na	na	na	na
95 per cent confidence intervals	%	na	na	na	na	na	na	na	na	na
RSE	%	na	na	na	na	na	na	na	na	na
Number of obese population	('000)	na	na	na	na	na	na	na	na	na

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Adults are defined as persons aged 18 years and over. Children are defined as persons aged 15–17 years (different to 2007-08 data which was for persons aged 5–17 years).

(b) Obesity for adults is defined as BMI equal to or greater than 30. Obesity for children is defined as BMI (appropriate for age and sex) that is likely to be 30 or more at age 18 years. Data is self-reported data only.

Table NHA.5.5 Rates of obesity for adults and children, by Indigenous status, 2004-05 (a), (b), (c), (d)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(c) BMI calculated from self-reported height and weight. This differs from data reported in other tables which were for measured BMI. Data excludes persons for whom height or weight was not reported.

(d) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (10 year ranges from 18). Rates for children 15–17 are not age standardised.

na Not available. – Nil or rounded to zero.

Source : ABS (unpublished) *National Aboriginal and Torres Strait Islander Health Survey* , 2004-05 and ABS (unpublished) *National Health Survey* , 2004-05.

Table NHA.5.6 **Proportion of adults and children in BMI categories, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
						Adults				
Body Mass Index (measured)										
Underweight	%	1.9	1.5	3.1	1.6	2.3	2.1	1.3	–	2.0
Normal	%	37.3	37.4	35.6	35.4	36.9	35.2	39.7	36.8	36.7
Overweight	%	37.0	36.4	36.1	37.4	37.0	36.2	34.1	30.4	36.6
Obese	%	23.8	24.8	25.2	25.7	23.8	26.5	24.9	32.8	24.7
Total	('000)	3 799.4	2 772.0	2 225.1	1 191.2	741.2	248.7	186.7	92.1	11 256.3
						Children				
Body Mass Index (measured)										
Underweight	%	7.7	6.3	10.4	6.9	6.2	4.1	3.6	–	7.6
Normal	%	68.4	68.3	62.6	68.1	68.0	77.1	74.8	88.4	67.5
Overweight	%	14.9	18.9	17.7	19.6	18.4	12.1	np	np	17.0
Obese	%	8.9	6.5	9.3	5.4	7.4	6.8	np	np	7.9
Total	('000)	828.5	557.1	519.0	252.9	138.3	55.2	40.3	16.3	2 407.6

(a) Adults are defined as persons aged 18 years and over. Children are defined as persons aged 5–17 years.

(b) Obesity for adults is defined as BMI equal to or greater than 30. Obesity for children is defined as BMI (appropriate for age and sex) that is likely to be 30 or more at age 18 years.

(c) Measured persons only.

(d) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 year ranges from 18 for adults, selected ranges from 5–17 for children).

– Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2007-08.

Table NHA.5.7 **RSEs and 95 per cent confidence intervals for the proportion of adults and children in BMI categories, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
RSE for Adults										
Body Mass Index (measured)										
Underweight	%	19.2	21.1	22.4	21.0	20.3	29.2	28.0	–	10.8
Normal	%	3.3	3.6	3.7	4.7	3.8	4.8	3.8	17.2	1.7
Overweight	%	3.3	3.2	3.6	4.1	3.9	4.3	4.1	22.2	1.7
Obese	%	4.7	4.9	5.0	6.3	5.0	6.1	5.2	20.8	2.3
Total number	%	1.6	2.2	1.9	1.7	3.0	3.2	2.9	12.0	0.9
RSE for Children										
Body Mass Index (measured)										
Underweight	%	17.0	22.6	17.3	24.1	26.9	42.6	25.1	–	9.5
Normal	%	3.6	3.9	5.2	4.6	6.1	4.7	3.5	12.3	2.2
Overweight	%	12.6	12.1	14.9	14.0	17.7	22.6	np	np	6.3
Obese	%	19.2	20.9	21.9	25.9	30.1	29.1	np	np	11.1
Total number	%	3.5	4.5	4.2	4.2	5.4	4.9	4.6	25.9	*1.9*
95 per cent confidence interval for Adults										
Body Mass Index (measured)										
Underweight	%	0.7	0.6	1.4	0.6	0.9	1.2	0.7	–	0.4
Normal	%	2.4	2.6	2.6	3.3	2.7	3.3	3.0	12.4	1.2
Overweight	%	2.4	2.3	2.6	3.0	2.8	3.1	2.7	13.2	1.2
Obese	%	2.2	2.4	2.5	3.2	2.3	3.2	2.5	13.4	1.1
Total number	('000)	119.3	119.4	84.0	38.6	42.2	15.5	10.6	16.2	194.9
95 per cent confidence interval for Children										
Body Mass Index (measured)										
Underweight	%	2.6	2.8	3.5	3.2	3.3	3.4	1.7	–	1.4

Table NHA.5.7 **RSEs and 95 per cent confidence intervals for the proportion of adults and children in BMI categories, 2007-08 (a), (b), (c), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Normal	%	4.8	5.2	6.4	6.1	8.1	7.0	5.1	21.3	2.9
Overweight	%	3.7	4.5	5.2	5.4	6.4	5.4	np	np	2.1
Obese	%	3.4	2.6	4.0	2.8	4.4	3.9	np	np	1.7
Total number	('000)	56.9	49.1	43.1	21.0	14.7	5.3	3.7	8.3	90.2

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Adults are defined as persons aged 18 years and over. Children are defined as persons aged 5–17 years.

(b) Obesity for adults is defined as BMI equal to or greater than 30. Obesity for children is defined as BMI (appropriate for age and sex) that is likely to be 30 or more at age 18 years.

(c) Measured persons only.

(d) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 yr ranges from 18 for adults, selected ranges from 0–17 for children).

– Nil or rounded to zero. **np** Not published.

Source: ABS (unpublished) *National Health Survey*, 2007-08.

NHA Indicator 6:

Proportion of adults who are daily smokers

Table NHA.6.1 **Proportion of adults who are daily smokers, 2007-08**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Age standardised rate (a)					
Remoteness of residence										
Major cities	%	17.9	17.0	18.5	16.7	18.1	..	15.8	..	17.6
Inner regional	%	20.8	17.5	22.0	13.2	25.5	23.2	–	..	20.1
Outer regional	%	23.7	21.3	28.4	23.9	28.5	27.4	..	21.7	25.7
Remote	%	27.9	–	33.4	32.8	21.7	11.3	..	19.6	27.3
Very remote (b)	%	..	..	..	..	..	..	..	..	..
Index of disadvantage of residence										
Quintile 1	%	28.8	29.0	28.1	30.2	27.4	33.4	17.9	13.5	28.7
Quintile 2	%	19.3	17.8	28.0	23.1	24.2	24.4	26.7	18.7	21.6
Quintile 3	%	19.3	16.7	23.8	19.1	18.3	17.1	18.5	26.5	19.6
Quintile 4	%	15.6	17.4	16.2	16.2	14.1	18.9	16.6	13.7	16.2
Quintile 5	%	12.3	10.0	11.7	8.2	13.5	18.1	np	np	11.2
Total (c)	**%**	**19.0**	**17.3**	**21.6**	**17.3**	**20.2**	**24.3**	**15.7**	**21.1**	**19.1**
Total number of adult daily smokers	'000	975.4	682.5	665.2	268.6	232.9	85.1	41.9	28.8	2 980.3
					RSE (per cent)					
Remoteness of residence										
Major cities	%	6.1	5.2	7.2	7.1	5.8	..	6.4	..	2.9
Inner regional	%	11.3	10.1	9.2	19.7	20.5	9.3	–	..	5.3
Outer regional	%	13.2	34.7	9.6	12.0	12.6	9.7	..	28.5	6.1
Remote	%	58.7	–	24.6	26.5	24.8	29.1	..	30.5	13.7
Very remote (b)	%	..	..	..	..	..	..	..	..	..
Index of disadvantage of residence										
Quintile 1	%	7.4	9.6	10.0	11.1	8.2	9.2	41.9	69.9	4.2
Quintile 2	%	12.3	11.4	9.4	10.6	9.2	13.6	32.5	35.2	4.9

Table NHA.6.1 **Proportion of adults who are daily smokers, 2007-08**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Quintile 3	%	11.7	9.9	9.0	10.8	13.3	13.9	14.8	40.2	4.8
Quintile 4	%	10.6	11.7	11.1	16.0	12.5	22.3	13.5	136.5	5.5
Quintile 5	%	12.4	13.9	14.7	16.6	18.2	37.6	np	np	7.3
Total (c)	%	5.2	4.6	4.7	6.3	5.7	6.2	6.4	22.4	2.4
95 per cent confidence interval										
Remoteness of residence										
Major cities	%	2.1	1.7	2.6	2.3	2.1	..	2.0	..	1.0
Inner regional	%	4.6	3.5	4.0	5.1	10.2	4.2	–	..	2.1
Outer regional	%	6.1	14.5	5.3	5.6	7.0	5.2	..	12.1	3.1
Remote	%	32.2	–	16.1	17.0	10.5	6.4	..	11.7	7.3
Very remote (b)	%	..	..	..	..	..	..	..	..	..
Index of disadvantage of residence										
Quintile 1	%	4.2	5.4	5.5	6.5	4.4	6.0	14.7	18.5	2.4
Quintile 2	%	4.6	4.0	5.2	4.8	4.4	6.5	17.0	12.9	2.1
Quintile 3	%	4.4	3.2	4.2	4.0	4.8	4.6	5.4	20.8	1.8
Quintile 4	%	3.2	4.0	3.5	5.1	3.5	8.2	4.4	36.6	1.7
Quintile 5	%	3.0	2.7	3.4	2.7	4.8	13.3	np	np	1.6
Total (c)	%	1.9	1.6	2.0	2.1	2.3	3.0	2.0	9.3	0.9

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 year ranges from 18 years).

(b) Very remote data was not collected in the 2007-08 NHS.

(c) Includes persons for whom an Index of disadvantage of residence score was not known.

.. Not applicable. – Nil or rounded to zero.

Source : ABS (unpublished) *National Health Survey* , 2007-08.

Table NHA.6.2 **Proportion of adults who are daily smokers, by Indigenous status, 2007-08 (a)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Indigenous adults (b)					
Age standardised rate	%	47.6	46.6	42.8	39.6	47.0	44.2	29.8	46.6	44.8
95 per cent confidence intervals	%	4.6	4.1	4.3	4.5	5.7	5.7	7.6	5.1	2.0
RSE	%	4.9	4.5	5.1	5.8	6.2	6.6	13.1	5.6	2.3
Number of daily smokers	'000	42.5	9.3	36.6	17.2	7.9	5.1	0.9	19.2	138.7
					Non-Indigenous adults (c)					
Age standardised rate	%	18.8	17.3	21.5	16.9	20.0	23.5	16.0	22.2	18.9
95 per cent confidence intervals	%	1.9	1.6	2.0	2.0	2.3	3.1	2.0	12.3	0.9
RSE	%	5.1	4.8	4.6	6.2	5.8	6.7	6.4	28.2	2.4
Number of daily smokers	'000	947.0	673.0	642.3	256.9	229.5	78.6	24.7	41.5	2 893.4

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (10 year ranges from 18–55 years and over).

(b) Data for the Indigenous people are based on the ABS *National Aboriginal and Torres Strait Islander Social Survey* , 2008.

(c) Data for the non-Indigenous people are based on the ABS *National Health Survey* , 2007-08

Source : ABS (unpublished) *National Aboriginal and Torres Strait Islander Social Survey* , 2008; ABS (unpublished) *National Health Survey,* 2007-08.

NHA Indicator 7:

Proportion of adults at risk of long term harm from alcohol

Table NHA.7.1 **Proportion of adults at risk of long term harm from alcohol, 2007-08 (a)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Age standardised rate (b)	**%**	**13.1**	**10.7**	**14.8**	**16.5**	**11.3**	**13.7**	**12.1**	**21.6**	**13.1**
95 per cent confidence intervals	%	1.4	1.4	1.7	2.0	1.5	2.6	1.8	11.8	0.7
RSE	%	5.6	6.7	5.7	6.0	6.6	9.7	7.4	27.8	2.8
Number of adults at risk	('000)	685.9	423.8	464.0	260.9	135.1	49.0	31.2	25.4	2 075.3

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Risky/high risk alcohol consumption in the long term.

(b) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 year ranges from 18 years).

Source : ABS (unpublished) *National Health Survey* , 2007-08.

Table NHA.7.2 **Proportion of adults at risk of long term harm from alcohol, by remoteness and SEIFA, 2007-08 (a)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Age standardised rate (b)					
Remoteness of residence										
Major cities	%	11.7	10.2	13.3	14.8	11.1	..	12.2	..	11.8
Inner regional	%	17.3	12.8	15.2	17.5	10.6	12.7	–	..	14.9
Outer regional	%	np	7.6	16.8	28.0	9.7	np	..	14.0	15.8
Remote	%	np	–	29.7	18.9	20.6	np	..	43.3	26.0
Very remote (c)	%	..	..	..	..	..	..	..	..	..
SEIFA of residence										
Quintile 1	%	8.1	9.5	15.6	8.4	10.9	13.8	20.8	15.5	10.4
Quintile 2	%	11.8	12.3	17.8	15.5	12.1	15.3	17.7	18.1	13.7
Quintile 3	%	16.9	8.6	14.5	20.5	10.3	11.5	12.2	15.5	14.1
Quintile 4	%	15.1	10.6	14.1	15.4	12.1	14.3	11.4	22.3	13.3
Quintile 5	%	14.3	11.8	12.4	17.4	10.8	11.1	11.7	85.2	13.6
Total (d)	**%**	**13.1**	**10.7**	**14.8**	**16.5**	**11.3**	**13.7**	**12.1**	**21.6**	**13.1**
Total number of adults at risk	('000)	685.9	423.8	464.0	260.9	135.1	49.0	31.2	25.4	2 075
					RSE (per cent)					
Remoteness of residence										
Major cities	%	5.9	8.5	7.3	7.3	7.5	..	7.4	..	3.0
Inner regional	%	8.9	14.9	11.7	17.8	32.0	14.0	–	..	6.2
Outer regional	%	np	41.6	10.9	13.5	21.9	np	..	34.2	8.8
Remote	%	np	–	48.2	48.1	27.0	np	..	42.0	19.0
Very remote (c)	%	..	..	..	..	..	..	..	..	..
SEIFA of residence										
Quintile 1	%	12.7	16.1	12.9	26.9	11.9	22.8	26.7	55.5	5.8
Quintile 2	%	12.4	14.5	14.0	13.4	15.8	14.6	21.3	58.3	6.2

Table NHA.7.2 **Proportion of adults at risk of long term harm from alcohol, by remoteness and SEIFA, 2007-08 (a)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Quintile 3	%	14.6	18.3	11.1	11.4	19.6	19.5	22.9	59.4	7.0
Quintile 4	%	10.3	15.3	11.9	15.3	14.4	19.8	12.8	33.2	5.5
Quintile 5	%	10.7	14.6	15.5	11.4	22.1	36.7	11.8	47.2	5.8
Total (d)	%	5.6	6.7	5.7	6.0	6.6	9.7	7.4	27.8	2.8
95 per cent confidence interval										
Remoteness of residence										
Major cities	%	1.3	1.7	1.9	2.1	1.6	..	1.8	..	0.7
Inner regional	%	3.0	3.7	3.5	6.1	6.7	3.5	–	..	1.8
Outer regional	%	np	6.2	3.6	7.4	4.2	np	..	9.4	2.7
Remote	%	np	–	28.0	17.8	10.9	np	..	35.6	9.7
Very remote (c)	%	..	..	..	..	..	..	..	..	..
SEIFA of residence										
Quintile 1	%	2.0	3.0	3.9	4.4	2.5	6.2	10.9	16.8	1.2
Quintile 2	%	2.9	3.5	4.9	4.1	3.7	4.4	7.4	20.6	1.7
Quintile 3	%	4.8	3.1	3.2	4.6	4.0	4.4	5.5	18.1	1.9
Quintile 4	%	3.0	3.2	3.3	4.6	3.4	5.6	2.9	14.5	1.4
Quintile 5	%	3.0	3.4	3.8	3.9	4.7	8.0	2.7	78.8	1.6
Total (d)	%	1.4	1.4	1.7	2.0	1.5	2.6	1.8	11.8	0.7

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Risky/high risk alcohol consumption in the long term.

(b) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 year ranges from 18 years).

(c) Very remote data was not collected in the 2007-08 NHS.

(d) Includes persons for whom index of disadvantage was not able to be determined.

– Nil or rounded to zero. **np** Not published. .. Not applicable.

Source : ABS (unpublished) *National Health Survey,* 2007-08.

Table NHA.7.3 **Proportion of adults at risk of long term harm from alcohol, by Indigenous status, 2004-05 (a), (b)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Indigenous adults					
Age standardised rate	%	16.6	16.6	17.5	16.0	16.0	12.6	9.3	7.2	15.4
95 per cent confidence intervals	%	3.6	8.3	4.0	3.7	7.2	3.5	5.1	3.0	1.8
RSE	%	11.0	25.5	11.6	11.7	23.0	14.0	28.1	21.2	6.1
Number of adults at risk	('000)	13.0	2.7	13.4	6.9	2.5	1.2	0.3	2.6	42.5
					Non-Indigenous adults					
Age standardised rate	%	13.0	12.2	14.3	16.3	14.7	11.6	14.2	17.5	13.5
95 per cent confidence intervals	%	1.2	1.3	1.3	2.1	1.5	1.8	2.2	10.8	0.6
RSE	%	4.7	5.5	4.7	6.4	5.1	7.8	8.0	31.4	2.3
Number of adults at risk	('000)	645.7	458.6	399.9	231.1	165.0	39.3	34.3	16.1	1 990.0

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (10 year ranges from 0).

(b) Risky/high risk alcohol consumption in the long term.

Source : ABS (unpublished) *National Aboriginal and Torres Strait Islander Health Survey,* 2004-05*;* ABS (unpublished) *National Health Survey* , 2004-05.

NHA Indicator 8:

No data are currently available to inform this indicator

Proportion of men reporting unprotected anal intercourse with casual male partners

NHA Indicator 9:

Immunisation rates for vaccines in the national schedule

Table NHA.9.1 **Proportion of children aged five years who were fully vaccinated, by Indigenous status, remoteness and SEIFA, 30 June 2009 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Unit	%	%	%	%	%	%	%	%	%	no.
Indigneous status										
Indigenous	80.6	78.1	80.7	74.8	55.0	65.9	85.0	90.8	79.4	2 483
Other Australians (c)	82.0	85.9	82.7	80.6	76.4	79.4	84.4	79.6	82.6	53 410
Remoteness of residence (d)										
Major cities (e)	82.6	85.9	82.0	79.2	73.7	..	84.4	..	82.4	37 969
Inner regional	80.3	85.2	82.8	81.7	77.2	79.2	–	..	82.0	10 911
Outer regional (e)	80.9	86.4	82.9	81.7	82.7	77.4	..	78.5	82.0	5 339
Remote (e)	82.7	–	85.5	86.9	84.8	76.5	..	87.1	85.6	928
Very remote	74.2	..	93.4	84.4	71.9	–	..	92.4	89.1	695
SEIFA of residence (f)										
Quintile 1	81.1	86.1	82.6	85.3	87.7	76.6	84.9	90.1	82.2	12 109
Quintile 2	83.5	84.9	81.9	81.9	75.3	81.8	87.6	79.6	83.0	11 109
Quintile 3	82.8	85.2	83.3	79.1	76.8	77.6	85.8	82.0	82.5	11 873
Quintile 4	81.9	85.7	82.4	79.6	77.4	87.9	83.5	79.2	82.5	10 198
Quintile 5	80.5	86.9	82.2	77.8	71.7	..	82.0	86.9	81.9	9 467
Total	**82.0**	**85.8**	**82.5**	**80.3**	**75.6**	**78.6**	**84.4**	**84.8**	**82.4**	**55 893**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (g)	22 095	16 307	14 307	7 099	4 626	1 396	1 099	893	67 822	

(a) Includes children born 01/01/2004 to 31/03/2004.

(b) Fully vaccinated is defined as having received all age appropriate immunisations for Diptheria, Tetanus, Pertussis, Hepatitis B, Poliomyelitis, Haemophilus Influenzae Type B, Measles, Mumps and Rubella.

(c) Includes records for people whose Indigenous status is not known or not stated.

Table NHA.9.1 **Proportion of children aged five years who were fully vaccinated, by Indigenous status, remoteness and SEIFA, 30 June 2009 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(d) Excludes 51 records where postcode was invalid or did not map to a remoteness category.

(e) In Victoria, the outer regional and remote categories have been aggregated due to small cell sizes. In Tasmania, the remote and very remote categories have been aggregated due to small cell sizes. In the ACT, remoteness categories have been aggregated due to small cell sizes.

(f) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory. Excludes 1,137 records where postcode was invalid or did not map to a SEIFA quintile.

(g) Total number of children aged five years (date of birth 01/01/2004 to 31/03/2004) on the Australian Childhood Immunisation Register.

.. Not applicable. – Nil or rounded to zero.

Source: Department of Health and Ageing (unpublished) Australian Childhood Immunisation Register.

Table NHA.9.2 **Proportion of Australians aged 65 years or over who were fully vaccinated, 2006 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	%	%	%	%	%	%	%	%	%	no.
Remoteness of residence (c)										
Major cities	55.8	62.7	53.4	56.3	62.4	..	55.4	..	58.0	1 028 100
Inner regional	63.7	61.1	57.8	54.9	59.8	62.9	np	..	60.7	372 400
Outer regional	51.9	72.3	57.0	57.3	63.8	59.9	..	47.5	60.5	160 500
Remote, very remote	63.7	71.5	76.3	50.6	53.4	60.6	..	57.8	58.8	23 200
SEIFA of residence (d)										
Quintile 1	56.2	59.7	57.9	56.0	67.3	61.2	np	42.9	58.9	343 500
Quintile 2	61.2	71.4	61.5	53.7	60.3	73.1	np	np	63.0	369 900
Quintile 3	58.1	59.7	50.5	55.4	58.2	72.6	np	60.4	57.1	299 500
Quintile 4	62.6	58.5	52.9	54.6	55.2	44.8	np	45.8	57.1	268 500
Quintile 5	50.1	66.4	53.5	59.6	62.2	..	55.7	42.8	57.3	296 600
Total	**57.4**	**63.4**	**55.5**	**56.0**	**62.1**	**60.4**	**56.2**	**48.8**	**58.8**	**1 582 200**

(a) Rates are age standardised.

(b) Fully vaccinated for older adults includes vaccinations for influenza and pneumococcal disease. 193 records were excluded because fully vaccinated status could not be determined.

(c) 373 records were excluded because remoteness or vaccination status could not be determined.

(d) SEIFA quintiles are based on the postcode of patient residence and the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory. 351 records were excluded because SEIFA quintile or vaccination status could not be determined.

.. Not applicable. **np** Not published.

Source: AIHW (unpublished) 2006 Adult Vaccination Survey; ABS (unpublished) Estimated Resident Population, 30 June 2006.

Table NHA.9.3 Proportion of Indigenous Australians aged 50 years or over who were fully vaccinated against specific infections, 2004-05 (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	%	%	%	%	%	%	%	%	%	no.
Total	**18.8**	**23.0**	**36.6**	**29.6**	**35.9**	**32.7**	**8.6**	**54.7**	**31.1**	**15 274**
RSE	19.7	23.8	11.1	13.1	19.8	14.9	54.0	8.9	6.2	

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Fully vaccinated for older adults includes vaccinations for influenza and pneumococcal disease (influenza-vaccinated in last 12 months; pneumococcal disease - vaccinated in last 5 years).

Source : ABS (unpublished) *National Aboriginal and Torres Strait Islander Health Survey,* 2004-05.

NHA Indicator 10:

Breast cancer screening rates

Table NHA.10.1 Breast cancer screening rates for women aged 50 to 69 years participating in BreastScreen programs, January 2007 to December 2008 (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	%	%	%	%	%	%	%	%	%	no.
Indigenous status (b)										
Indigenous	np	np	np	np	np	np	np	np	36.0	10 184
Non-Indigenous	np	np	np	np	np	np	np	np	54.8	1 254 618
Remoteness of residence (c)										
Major cities	np	np	np	np	np	..	np	..	51.9	797 198
Inner regional	np	np	np	np	np	np	np	..	60.3	306 593
Outer regional	np	np	np	np	np	np	..	np	62.7	144 934
Remote	np	np	np	np	np	np	..	np	60.0	18 031
Very remote	np	..	np	np	np	np	..	np	51.1	6 472
SEIFA of residence (d)										
Quintile 1	np	np	np	np	np	np	np	np	55.9	262 064
Quintile 2	np	np	np	np	np	np	np	np	51.8	250 641
Quintile 3	np	np	np	np	np	np	np	np	58.0	259 986
Quintile 4	np	np	np	np	np	np	np	np	60.6	264 312
Quintile 5	np	np	np	np	np	..	np	np	49.7	236 225
Total	**54.3**	**53.4**	**57.4**	**55.3**	**57.4**	**54.5**	**53.7**	**40.4**	**54.9**	**1 273 228**

(a) Rates are age standardised to the Australian population as at 30 June 2001, using 5 year age groups.

(b) Indigenous status data is not of sufficient quality to allow for breakdown by State and Territory.

(c) Classified according to the Australian Standard Geographical classification (ASGC) Remoteness Area. Disaggregation by remoteness area is based on postcode of usual residence, not location of the service. Data are only available at the national level. Further breakdown by State and Territory would give inaccurate results.

(d) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the Index of Relative Socioeconomic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Disaggregation is based on postcode of usual residence, not location of the service. Data are only available at the national level. Further breakdown by State and Territory would give inaccurate results.

Table NHA.10.1 **Breast cancer screening rates for women aged 50 to 69 years participating in BreastScreen programs, January 2007 to December 2008 (a)**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust

np Not published. .. Not applicable.

Source : AIHW (unpublished) sourced from BreastScreen Australia State and Territory services; ABS (unpublished) Estimated Residential Population, 2007– 2008 ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 2007–2008, Series B, Cat. no. 3238.0.

NHA Indicator 11:

Cervical screening rates

Table NHA.11.1 **Cervical screening rates among women aged 20 to 69 years, January 2007 to December 2008 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	%	%	%	%	%	%	%	%	%	no.
Remoteness of residence (b)										
Major cities	np	np	np	np	np	..	np	..	61.4	2 528 302
Inner regional	np	np	np	np	np	np	np	..	60.9	668 486
Outer regional	np	np	np	np	np	np	..	np	61.7	322 708
Remote	np	np	np	np	np	np	..	np	54.6	45 827
Very remote	np	..	np	np	np	np	..	np	59.0	25 820
SEIFA of residence (c)										
Quintile 1	np	np	np	np	np	np	np	np	54.7	619 508
Quintile 2	np	np	np	np	np	np	np	np	57.0	654 514
Quintile 3	np	np	np	np	np	np	np	np	61.1	723 121
Quintile 4	np	np	np	np	np	np	np	np	63.1	747 261
Quintile 5	np	np	np	np	np	..	np	np	68.8	846 875
Total	**60.5**	**63.6**	**59.8**	**59.7**	**63.1**	**59.4**	**63.0**	**56.5**	**61.2**	**3 599 919**

(a) Rates are age standardised to the Australian population as at 30 June 2001, using 5 year age groups.

(b) Classified according to the Australian Standard Geographical Classification (ASGC) Remoteness Area. Disaggregation by remoteness area is based on postcode of usual residence, not location of the service. Data are only available at the national level. Further breakdown by State and Territory would give inaccurate results.

(c) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the Index of Relative Socioeconomic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Disaggregation is based on postcode of usual residence, not location of the service. Data are only available at the national level. Further breakdown by State and Territory would give inaccurate results.

.. Not applicable. **np** Not published.

Source: AIHW (unpublished) State and Territory Cervical Cytology Registry data; ABS (unpublished) Estimated Residential Population, 2007–2008.

Table NHA.11.2 Cervical screening rates among Indigenous women aged 20 to 69 years, who reported having a pap smear at least every 2 years, 2004-05 (per cent)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Age standardised rate (a)	%	41.5	44.6	53.1	42.6	48.0	52.7	53.2	68.5	49.5
95 per cent confidence intervals	%	7.3	14.4	7.1	6.4	9.1	9.8	12.2	7.9	3.3
RSE	%	8.9	16.5	6.8	7.6	9.7	9.5	11.7	5.9	3.4

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population.

Source: ABS (unpublished) *National Aboriginal and Torres Strait Islander Health Survey*, 2004-05; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021*, 30 June 2004, Series B, Cat. no. 3238.0.

NHA Indicator 12:

Bowel cancer screening rates

Table NHA.12.1 **Bowel cancer screening rates for people aged 50, 55 and 65 years participating in the National Bowel Cancer Screening Program, by sex, 2008 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	%	%	%	%	%	%	%	%	%	no.
Males										
Aged 50 years	17.1	17.8	18.5	18.7	19.8	15.9	17.6	14.3	17.9	26 179
Aged 55 years	32.7	35.4	46.7	47.7	53.2	54.9	39.8	28.8	40.0	51 339
Aged 65 years	41.5	39.8	58.3	58.3	63.9	62.9	50.3	40.1	48.6	43 283
Total in target age groups	28.6	29.4	38.3	38.2	42.6	41.8	32.8	24.4	33.2	120 801
Females										
Aged 50 years	20.3	21.1	21.9	23.5	23.7	19.3	21.6	17.7	21.4	31 710
Aged 55 years	39.5	42.3	56.0	56.3	64.0	65.7	46.5	32.0	47.9	63 096
Aged 65 years	45.9	44.8	65.0	63.2	68.9	66.8	54.9	35.3	53.5	47 699
Total in target age groups	33.4	34.4	44.4	44.4	49.4	47.8	37.7	25.7	38.6	142 505
Persons										
Aged 50 years	18.7	19.5	20.2	21.0	21.8	17.6	19.6	15.9	19.6	57 889
Aged 55 years	36.1	39.0	51.4	52.0	58.7	60.4	43.2	30.3	44.0	114 435
Aged 65 years	43.7	42.3	61.6	60.7	66.4	64.8	52.6	38.1	51.0	90 982
Total in target age groups	31.0	32.0	41.4	41.3	46.1	44.8	35.3	25.0	35.9	263 306

(a) Rates are age specific.

Source : AIHW (unpublished) National Bowel Cancer Screening Program, register data; ABS (unpublished) Estimated Residential Population, 30 June 2008.

Table NHA.12.2 **Bowel cancer screening rates for people aged 50, 55 and 65 years participating in the National Bowel Cancer Screening Program, by Indigenous status, remoteness area and SEIFA, 2008**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	%	%	%	%	%	%	%	%	%	no.
Indigenous status (a)										
Indigenous	np	np	np	np	np	np	np	np	np	np
Non-Indigenous	np	np	np	np	np	np	np	np	np	np
Remoteness of residence (b)										
Metropolitan	np	np	np	np	np	..	np	..	33.9	163 070
Inner regional	np	np	np	np	np	np	np	..	39.3	62 899
Outer regional	np	np	np	np	np	np	..	np	40.7	31 099
Remote	np	np	np	np	np	np	..	np	40.4	4 422
Very remote	np	..	np	np	np	np	..	np	35.2	1 684
SEIFA of residence (c)										
Quintile 1	np	np	np	np	np	np	np	np	34.0	50 754
Quintile 2	np	np	np	np	np	np	np	np	36.3	55 545
Quintile 3	np	np	np	np	np	np	np	np	36.6	52 275
Quintile 4	np	np	np	np	np	np	np	np	36.1	50 338
Quintile 5	np	np	np	np	np	..	np	np	34.7	51 517

(a) Non-response to this self-reported category mean results for Indigenous status are not reliable.

(b) Data are only available at the national level. Further breakdown by State and Territory would give inaccurate results.

(c) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the SEIFA Index for Relative Socio-economic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Data are only available at the national level. Further breakdown by State and Territory would give inaccurate results.

.. Not applicable. **np** Not published.

Source: AIHW (unpublished) National Bowel Cancer Screening Porgram, register data; ABS (unpublished) Estimated Residential Population, 30 June 2008; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021*, 30 June 2008, Series B, Cat. no. 3238.0.

NHA Indicator 13:

Proportion of children with 4th year developmental health check

Table NHA.13.1 **Proportion of children receiving a 4th year development health check, 2008-09**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	%	%	%	%	%	%	%	%	%	no.
Type of health check										
Aboriginal and Torres Strait Islander Child Health Check (a)	23.4	12.0	26.7	26.6	18.2	np	np	38.2	24.7	3 144
Healthy Kids Check (b), (c)	18.7	6.6	25.4	13.9	9.7	19.4	19.7	5.3	15.8	39 884
Remoteness of residence										
Major cities (d)	16.8	6.2	24.3	14.7	9.2	..	19.5	..	14.6	26 501
Inner regional	26.4	8.4	26.6	16.0	14.1	17.8	..	..	19.9	10 012
Outer regional	18.7	6.9	29.9	13.2	11.4	19.7	..	7.7	19.3	4 952
Remote/Very remote	37.2	np	19.6	13.4	8.3	np	..	31.6	20.2	1 555
SEIFA of residence (e)										
Quintile 1	14.5	6.6	22.3	17.6	9.1	17.5	np	21.9	14.6	8 274
Quintile 2	20.1	7.5	25.5	13.8	10.4	np	np	np	17.0	8 978
Quintile 3	23.8	6.0	30.3	15.3	12.5	20.1	np	6.8	17.9	9 527
Quintile 4	16.8	6.7	26.6	15.7	9.1	18.1	17.4	7.0	15.8	8 301
Quintile 5	19.4	6.6	22.1	9.9	10.2	..	20.1	np	14.9	7 494
Total (f)	**18.9**	**6.7**	**25.5**	**14.6**	**10.0**	**18.2**	**19.6**	**19.2**	**16.2**	**43 028**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total (g)	16 024	4 366	14 135	4 036	1 824	1 126	847	670	43 028	

(a) Includes claims for Medicare Benefits Schedule (MBS) Item 708 (Aboriginal and Torres Strait Islander Child Health Check) for children aged 3 to 5 years.

(b) Includes claims for MBS Items 709 and 711 (Healthy Kids Check) for children aged 3 to 5 years. The MBS items included in this indicator measure do not cover all developmental health check activity such as that conducted through State and Territory early childhood health assessments in preschools and community health centres. This is known to be a particular issue for Victoria, where the Victorian Maternal and Child Health Service provided a 3.5 year old Key Ages and Stages consultation to 39 213 children in the 2008-09 financial year.

Table NHA.13.1 **Proportion of children receiving a 4th year development health check, 2008-09**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(c) Note this includes Indigenous children who have received a Healthy Kids Check.

(d) ACT Major cities includes a small number of children living in Inner regional ACT.

(e) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each State or Territory.

(f) Total includes persons whose place of residence was not stated or who could not be assigned to a remoteness or SEIFA category.

(g) Number of children aged 3 to 5, who received a 4th year development health check.

.. Not applicable. **np** Not published.

Source : Department of Health and Ageing (unpublished) Medicare data; ABS (unpublished) Estimated Residential Population, 30 June 2008; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2008, Series B, Cat. no. 3238.0.

NHA Indicator 14:

No data are currently available to inform this indicator

Waiting times for GPs

NHA Indicator 15:

No data are currently available to inform this indicator

Waiting times for public dentistry

NHA Indicator 16:

No data are currently available to inform this indicator

People deferring recommended treatment due to financial barriers

NHA Indicator 17:

No data are currently available to inform this indicator

Proportion of people with diabetes with HbA1c below 7 per cent

NHA Indicator 18:

Life expectancy

Table NHA.18.1 **Estimated life expectancies at birth by sex, 2007 (years)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Life expectancy at birth									
Males	79.1	79.5	78.9	79.2	78.8	77.7	80.3	72.4	79.0
Females	83.8	83.8	83.6	84.0	83.9	82.4	84.0	78.4	83.7
Difference between male and female life expectancies at birth (a)	4.7	4.4	4.7	4.7	5.1	4.7	3.7	6.0	4.7

(a) Differences are based on unrounded estimates.

Source: ABS (2008) and (unpublished) *Deaths, Australia, 2007*, Cat. no. 3302.0.

Table NHA.18.2 **Estimated life expectancies at birth, by Indigenous status and sex, 2005–2007 (years) (a)**

	NSW	*Qld*	*WA*	*NT*	*Aust* (b)
Indigenous					
Life expectancy at birth					
Males	69.9	68.3	65.0	61.5	67.2
Females	75.0	73.6	70.4	69.2	72.9
Persons (c)	72.4	70.9	67.6	65.3	70.0
Upper and lower 95 per cent confidence intervals					
Males	68.6–71.2	67.3–69.3	63.8–66.2	60.5–62.5	66.3–68.1
Females	73.9–76.1	72.8–74.4	69.4–71.4	68.4–70.0	72.1–73.7
Persons	na	na	na	na	na
Non-Indigenous					
Life expectancy at birth					
Males	78.7	78.6	79.0	75.7	78.7
Females	82.5	82.5	82.9	81.2	82.6
Difference between Indigenous and non-Indigenous life expectancies at birth					
Males (d)	8.8	10.4	14.0	14.2	11.5
Females (d)	7.5	8.9	12.5	11.9	9.7
Persons (e), (c)	8.2	9.6	13.3	13.1	10.6

(a) Indigenous estimates of life expectancy are not available for Victoria, SA, Tasmania or the ACT due to the small number of Indigenous deaths in these jurisdictions.

(b) Australian total includes all states and territories.

(c) Life tables are constructed separately for Males and Females. Life tables were not constructed for Persons, therefore life expectancy estimates for Persons are a weighted combination of Male and Female life expectancies.

(d) Based on unrounded estimates.

(e) Based on rounded estimates.

na Not available.

Source: ABS (2009) *Experimental Life Tables for Aboriginal and Torres Strait Islander Australians, Australia, 2005–2007*, Cat. no. 3302.0.

NHA Indicator 19:

Infant and young child mortality rate

Table NHA.19.1 **All causes infant and child mortality, by age group, by State and Territory, 2005–2007 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (d)
Infants (0–1 year) (e)										
Number of deaths	no.	1 236	874	851	327	238	75	65	101	3 767
Rate	per 1000 live births (f)	4.7	4.4	5.1	3.9	4.3	3.9	4.8	9.0	4.6
Child (1–4 years)										
Number of deaths	no.	225	126	169	72	52	15	10	19	688
Rate	per 1000 population (g)	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.5	0.2
Child (0–4 years) (e)										
Number of deaths	**no.**	**1 461**	**1 000**	**1 020**	**399**	**290**	**90**	**75**	**120**	**4 455**
Rate	**per 1000 population (h)**	**1.1**	**1.1**	**1.3**	**1.0**	**1.1**	**1.0**	**1.2**	**2.3**	**1.1**

(a) Data are presented in five-year groupings due to volitility of the small numbers involved.

(b) Data based on reference year. See data quality statements for a more detailed explanation.

(c) 2007 data is preliminary and will be subject to a revision process. See Causes of Death, 2007, 3303.0 Explanatory Note 4 for further information.

(d) All states and territories including other territories.

(e) Includes all deaths within the first year of life.

(f) For infant deaths (less than one year), the rates represent the number of deaths per 1000 live births.

(g) For child deaths (1–4 years), the rates represent the number of deaths per 1000 Estimated Resident Population (1-4 years) for the mid point year.

(h) For child deaths (0–4 years), the rates represent the number of deaths per 1000 Estimated Resident Population (0–4 years) for the mid point year.

Source : ABS (unpublished) *Causes of Death, Australia* , Cat. no. 3303.0.

Table NHA.19.2 All causes infant (0–1 year) mortality, by Indigenous status, NSW, Queensland, WA, SA, NT and Australia, 2003–2007 (a), (b), (c), (d), (e), (f), (g)

	Unit	*NSW*	*Qld*	*WA*	*SA*	*NT*	*Aust* (h)
Number of deaths							
Indigenous	no.	147	176	104	28	121	608
Other (i)	no.	1 886	1 167	422	329	50	5 542
Percentage							
Indigenous	%	7.2	13.1	19.8	7.8	70.8	9.9
Other (i)	%	92.8	86.9	80.2	92.2	29.2	90.1
Rate (j)							
Indigenous	per 1000 live births	8.6	9.5	11.3	8.0	15.5	9.7
Other (i)	per 1000 live births	4.5	4.8	3.4	3.9	4.6	4.4
Rate ratio (k)		1.9	2.0	3.3	2.1	3.4	2.2
Rate difference (l)		4.1	4.7	7.9	4.2	10.9	5.3

(a) Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

(b) Includes all deaths within the first year of life.

(c) Data are reported by jurisdiction of residence for NSW, Queensland, WA, SA and the NT only. These five states and territories are considered to have adequate levels of Indigenous identification in mortality data.

(d) Data are presented in five-year groupings because of small numbers each year.

(e) Although most deaths of Indigenous people are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these data are likely to underestimate the Indigenous all causes mortality rate.

(f) Data based on reference year. See data quality statements for a more detailed explanation.

(g) 2007 data is preliminary and will be subject to a revision process. See Causes of Death, 2007, 3303.0 Explanatory Notes 4 for further information.

(h) All states and territories including other territories.

(i) 'Other' includes mortality of non-Indigenous people and those for whom Indigenous status was not stated.

(j) For infant deaths (less than one year), the rates represent the number of deaths per 1000 live births.

(k) Rate ratio is the Indigenous mortality rate divided by the non-Indigenous mortality rate.

(l) Rate difference is the Indigenous mortality rate less the non-Indigenous mortality rate.

Source : ABS (unpublished) *Causes of Death, Australia,* Cat. no. 3303.0.

Table NHA.19.3 All causes child (1–4 years) mortality, by Indigenous status, NSW, Queensland, WA, SA, NT and Australia, 2003–2007 (a), (b), (c), (d), (e), (f), (g)

	Unit	*NSW*	*Qld*	*WA*	*SA*	*NT*	*Aust* (h)
Number of deaths							
Indigenous	no.	22	43	25	5	21	121
Other (i)	no.	393	253	102	79	11	1 095
Percentage							
Indigenous	%	5.3	14.5	19.7	6.0	65.6	10.0
Other (i)	%	94.7	85.5	80.3	94.0	34.4	90.0
Rate (j)							
Indigenous	per 1000 population	0.3	0.6	1.9	np	0.6	0.5
Other (i)	per 1000 population	0.2	0.3	0.2	0.2	0.3	0.2
Rate ratio (k)		1.2	2.2	9.0	np	2.3	2.1
Rate difference (l)		0.1	0.3	1.7	np	0.4	0.2

(a) Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

(b) Includes all deaths aged 1–4 years.

(c) Data are reported by jurisdiction of residence for NSW, Queensland, WA, SA and the NT only. These five states and territories are considered to have adequate levels of Indigenous identification in mortality data.

(d) Data are presented in five-year groupings because of small numbers each year.

(e) Although most deaths of Indigenous people are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these data are likely to underestimate the Indigenous all causes mortality rate.

(f) Data based on reference year. See data quality statements for a more detailed explanation.

(g) 2007 data is preliminary and will be subject to a revision process. See Causes of Death, 2007, 3303.0 Explanatory Notes 4 for further information.

(h) All states and territories including other territories.

(i) 'Other' includes mortality of non-Indigenous people and those for whom Indigenous status was not stated.

(j) For child deaths (1–4 years), the rates represent the number of deaths per 1000 Estimated Resident Population (1–4 years) for the mid point year.

(k) Rate ratio is the Indigenous mortality rate divided by the non-Indigenous mortality rate.

(l) Rate difference is the Indigenous mortality rate less the non-Indigenous mortality rate.

np Not published.

Source : ABS (unpublished) *Causes of Death, Australia* , Cat. no. 3303.0.

Table NHA.19.4 All causes child (0–4 years) mortality, by Indigenous status, NSW, Queensland, WA, SA, NT and Australia, 2003–2007 (a), (b), (c), (d), (e), (f), (g)

	Unit	*NSW*	*Qld*	*WA*	*SA*	*NT*	*Aust* (h)
Number of deaths							
Indigenous	no.	169	219	129	33	142	729
Other (i)	no.	2 279	1 420	524	408	61	6 637
Percentage							
Indigenous	%	6.9	13.4	19.8	7.5	70.0	9.9
Other (i)	%	93.1	86.6	80.2	92.5	30.0	90.1
Rate (j)							
Indigenous	per 1000 population	1.8	2.3	3.0	2.0	3.6	2.3
Other (i)	per 1000 population	1.1	1.2	0.9	1.0	1.2	1.1
Rate ratio (k)		1.6	2.0	3.4	2.1	2.9	2.1
Rate difference (l)		0.7	1.1	2.1	1.0	2.3	1.2

(a) Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

(b) Includes all deaths aged 0–4 years.

(c) Data are reported by jurisdiction of residence for NSW, Queensland, WA, SA and the NT only. These five states and territories are considered to have adequate levels of Indigenous identification in mortality data.

(d) Data are presented in five-year groupings because of small numbers each year.

(e) Although most deaths of Indigenous people are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these data are likely to underestimate the Indigenous all causes mortality rate.

(f) Data based on reference year. See data quality statements for a more detailed explanation.

(g) 2007 data is preliminary and will be subject to a revision process. See Causes of Death, 2007, 3303.0 Explanatory Notes 4 for further information.

(h) All states and territories including other territories.

(i) ‘Other’ includes mortality of non-Indigenous people and those for whom Indigenous status was not stated.

(j) For child deaths (0–4 years), the rates represent the number of deaths per 1000 Estimated Resident Population (0–4 years) for the mid point year.

(k) Rate ratio is the Indigenous mortality rate divided by the non-Indigenous mortality rate.

(l) Rate difference is the Indigenous mortality rate less the non-Indigenous mortality rate.

Source: ABS (unpublished) *Causes of Death, Australia,* Cat. no. 3303.0.

NHA Indicator 20:

Potentially avoidable deaths

Table NHA.20.1 **Age standardised mortality rates of potentially avoidable deaths, under 75 years, 2007 (a), (b), (c), (d), (e)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (f)
					Potentially preventable deaths (g)					
Number of deaths	no.	6 281	4 463	3 650	2 030	1 609	638	243	377	19 291
Rate	**per 100 000 persons**	**87.6**	**82.8**	**86.0**	**95.7**	**93.2**	**116.3**	**75.9**	**226.5**	**88.9**
					Potentially treatable deaths (h)					
Number of deaths	no.	4 254	2 851	2 451	1 178	1 055	346	174	197	12 505
Rate	**per 100 000 persons**	**58.9**	**52.8**	**57.6**	**55.5**	**60.4**	**61.6**	**55.7**	**123.8**	**57.4**
					All potentially avoidable deaths (b)					
Number of deaths	no.	10 534	7 313	6 101	3 207	2 664	984	417	574	31 796
Rate	**per 100 000 persons**	**146.5**	**135.6**	**143.5**	**151.2**	**153.6**	**177.6**	**131.5**	**351.1**	**146.3**

(a) Age standardised death rates enable the comparison of death rates between populations with different age structures by relating them to a standard population. The ABS standard populations relate to the years ending in 1 (e.g. 2001). The current standard population is all persons in the Australian population at 30 June 2001. SDRs are expressed per 1,000 or 100,000 persons. Age standardised rates in this table have been calculated using the indirect method and are not comparable to rates calculated using the direct method.

(b) Avoidable mortality has been defined in the Public Health Information Development Unit's (PHIDU) report, Australian and New Zealand Atlas of Avoidable Mortality (2006), and in reports by NSW Health and Victorian Department of Human Services as mortality before the age of 75 years, from conditions which are potentially avoidable within the present health system.

(c) Data based on reference year. See data quality statements for a more detailed explanation.

(d) Causes of death data for 2007 is subject to revision. All coroner certified deaths registered after 1 January 2007 will be subject to a revision process. This is a change from previous years where all ABS processing of causes of death data for a particular reference period was finalised approximately 13 months after the end of the reference period. Where insufficient information was available to code a cause of death (e.g. a coroner certified death was yet to be finalised by the Coroner), less specific ICD codes were assigned as required by the ICD coding rules. The revision process will enable the use of additional information relating to coroner certified deaths as it becomes available over time. This will result in increased specificity of the assigned ICD-10 codes.Causes of death data for 2007 coroner certified deaths will be updated as more information becomes available to the ABS.

Table NHA.20.1 **Age standardised mortality rates of potentially avoidable deaths, under 75 years, 2007 (a), (b), (c), (d), (e)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (f)

Revised data for 2007 will be published both on a year registration basis and a year of occurrence basis in the 2008 Causes of death publication, due to be released in March 2010, and again in the publication relating to the 2009 collection due for release in 2011. Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Causes of Death, 2007, 3301.0.

(e) Scope is persons aged less than 75 years.

(f) All states and territories including other territories.

(g) Preventable deaths are those which are amenable to screening and primary prevention, such as immunisation, and reflect the effectiveness of the current preventative health activities of the health sector.

(h) Treatable deaths are those which are amenable to therapeutic interventions, and reflecting the safety and quality of the current treatment system.

Source: ABS (unpublished) *Causes of Death, Australia* , Cat. no. 3303.0.

Table NHA.20.2 Age standardised mortality rates of potentially avoidable deaths, under 75 years, by Indigenous status, 2007 (a), (b), (c), (d), (e), (f)

	Unit	*NSW* (g)	*Qld* (g)	*WA* (g)	*SA* (g)	*NT* (g)	*Aust* (h)
			Potentially preventable deaths (i)				
Indigenous people (c)							
Number of deaths	no.	206	218	186	51	193	914
Rate (a)	per 100 000	232.1	279.6	470.7	323.2	539.1	314.9
Non-Indigenous people (j)							
Number of deaths	no.	6 075	3 432	1 844	1 558	185	18 377
Rate (a)	per 100 000	85.7	82.4	88.6	91.1	141.1	85.9
			Potentially treatable deaths (k)				
Indigenous people (c)							
Number of deaths	no.	118	109	107	34	110	499
Rate (a)	per 100 000	137.0	146.1	288.3	228.6	330.0	180.2
Non-Indigenous people (j)							
Number of deaths	no.	4 136	2 342	1 071	1 021	88	12 006
Rate (a)	per 100 000	58.0	56.0	51.4	58.9	69.5	55.8
			All potentially avoidable deaths (b)				
Indigenous people (c)							
Number of deaths	no.	324	327	293	85	302	1 413
Rate (a)	per 100 000	369.4	426.8	760.2	551.4	870.7	496.0
Non-Indigenous people (j)							
Number of deaths	no.	10 210	5 774	2 914	2 579	272	30 383
Rate (a)	per 100 000	143.7	138.3	139.9	150.0	211.2	141.7

(a) Age standardised death rates enable the comparison of death rates between populations with different age structures by relating them to a standard population. The ABS standard populations relate to the years ending in 1 (e.g. 2001). The current standard population is all persons in the Australian population at 30 June 2001. SDRs are expressed per 1,000 or 100,000 persons. Age standardised rates in this table have been calculated using the indirect method and are not comparable to rates calculated using the direct method.

(b) Avoidable mortality has been defined in the Public Health Information Development Unit's (PHIDU) report, Australian and New Zealand Atlas of Avoidable Mortality (2006), and in reports by NSW Health and Victorian Department of Human Services as mortality before the age of 75 years, from conditions which are potentially avoidable within the present health system.

(c) Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

(d) Data based on reference year. See data quality statements for a more detailed explanation.

Table NHA.20.2 **Age standardised mortality rates of potentially avoidable deaths, under 75 years, by Indigenous status, 2007 (a), (b), (c), (d), (e), (f)**

	Unit	*NSW* (g)	*Qld* (g)	*WA* (g)	*SA* (g)	*NT* (g)	*Aust* (h)

(e) Causes of death data for 2007 is subject to revision. All coroner certified deaths registered after 1 January 2007 will be subject to a revision process. This is a change from previous years where all ABS processing of causes of death data for a particular reference period was finalised approximately 13 months after the end of the reference period. Where insufficient information was available to code a cause of death (e.g. a coroner certified death was yet to be finalised by the Coroner), less specific ICD codes were assigned as required by the ICD coding rules. The revision process will enable the use of additional information relating to coroner certified deaths as it becomes available over time. This will result in increased specificity of the assigned ICD-10 codes.Causes of death data for 2007 coroner certified deaths will be updated as more information becomes available to the ABS.

Revised data for 2007 will be published both on a year registration basis and a year of occurrence basis in the 2008 Causes of death publication, due to be released in March 2010, and again in the publication relating to the 2009 collection due for release in 2011. Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Causes of Death, 2007, 3301.0.

(f) Scope is persons aged less than 75 years.

(g) Data are reported by jurisdiction of residence for NSW, Queensland, WA, SA and the NT only. These five states and territories are considered to have adequate levels of Indigenous identification in mortality data.

(h) All states and territories including other territories.

(i) Preventable deaths are those which are amenable to screening and primary prevention such as immunisation, and reflecting the effectiveness of the current preventative health activities of the health sector).

(j) ‘Non-indigenous’ includes mortality of non-Indigenous people and those for whom Indigenous status was not stated.

(k) Treatable deaths are those which are amenable to therapeutic interventions, and reflecting the safety and quality of the current treatment system.

Source: ABS (unpublished) *Causes of Death, Australia* , Cat. no. 3303.0.

NHA Indicator 21:

Treatment rates for mental illness

Table NHA.21.1 **Proportion of people receiving clinical mental health services by service type, 2007-08**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Age standardised rate (a)					
Public (b)										
Number	no.	108 755	57 197	75 541	37 566	27 793	11 651	6 801	4 721	330 025
Rate	%	1.6	1.1	1.8	1.8	1.8	2.4	2.0	2.1	1.6
Private (c)										
Number	no.	7 286	6 144	4 919	np	np	np	np	..	23 180
Rate	%	0.1	0.1	0.1	np	np	np	np	..	0.1
MBS										
Number	no.	343 242	284 343	182 247	85 877	73 223	20 305	13 793	3 955	1006 985
Rate: Total MBS (d)	%	5.0	5.4	4.3	4.0	4.7	4.3	3.9	1.8	4.8
Rate: Psychiatrist (e)	%	1.3	1.4	1.2	1.0	1.5	0.9	1.0	0.4	1.3
Rate: Clinical psychologist (f)	%	0.6	0.6	0.4	1.0	0.7	0.9	0.6	0.1	0.6
Rate: GP (g)	%	3.7	3.9	3.1	3.0	3.2	3.2	2.8	1.4	3.5
Rate: Other allied health (h)	%	1.3	1.8	1.4	0.6	0.9	1.1	1.2	0.4	1.3

(a) Rates are age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years.

(b) SA and Tas submitted data that was not based on unique patient identifier or data matching approaches. Therefore caution needs to be taken when making interjurisdictional comparisons.

(c) Private psychiatric hospital figures are not published for WA, SA, Tasmania, and the ACT due to confidentiality reasons but are included in the Australia figures.

(d) MBS services are those provided under any of the Medicare-funded service types described at (e) to (h). Persons seen by more than one provider type are counted only once in the total.

(e) Psychiatrist services are MBS items 134, 136,138, 140, 142, 289,291, 293, 296, 297, 299, 300, 302, 304,306, 308, 310, 312, 314, 316, 318, 319, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 342, 344, 346, 348, 350, 352, 353, 355, 356, 357, 358, 359, 361, 364, 366, 367, 369, 370, 855, 857, 858, 861, 864, 866, 14224.

(f) Clinical psychologist services are MBS items 80000, 80005, 80010, 80015, 80020.

(g) GP services are MBS items 170, 171, 172, 2574, 2575, 2577, 2578, 2704, 2705, 2707, 2708, 2710, 2712, 2713, 2721, 2723, 2725, 2727.

Table NHA.21.1 **Proportion of people receiving clinical mental health services by service type, 2007-08**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(h) Other allied health services are MBS items 10956, 10968, 80100, 80105, 80110, 80115, 80120, 80125, 80130, 80135, 80140, 80145, 80150, 80155, 80160, 80165, 80170, 82000, 82015.

.. Not applicable. **np** Not published.

Source : Department of Health and Ageing (unpublished) Medicare data.

Table NHA.21.2 **Proportion of people receiving clinical mental health services by service type and Indigenous status, 2007-08 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	Age standardised rate (b)									
	%	%	%	%	%	%	%	%	%	no.
Public (c)										
Indigenous	4.5	3.1	3.9	3.5	5.0	1.6	5.1	2.9	3.8	19 213
Other Australians (d)	1.5	1.1	1.7	1.7	1.7	2.4	1.9	1.9	1.5	310 812
Private (e)										
Indigenous	na	na	na	na	na	na	na	..	na	na
Other Australians	na	na	na	na	na	na	na	..	na	na
MBS										
Indigenous	np	np	np	np	np	np	np	np	np	np
Other Australians	np	np	np	np	np	np	np	np	np	np

(a) The Indigenous status rates should be interpreted with caution due to the varying and, in some instances, unknown quality of Indigenous identification across jurisdictions.

(b) Rates are age-standardised using 5-year age groups to 64 years.

(c) SA and Tasmania submitted data that was not based on unique patient identifier or data matching approaches. Therefore caution needs to be taken when making interjurisdictional comparisons.

(d) Includes contacts where Indigenous status was missing or not reported.

(e) Indigenous information is not collected for private psychiatric hospitals.

na Not available. .. Not applicable. **np** Not published.

Source : Department of Health and Ageing (unpublished) Medicare data.

Table NHA.21.3 Proportion of people receiving clinical mental health services by service type and remoteness area, 2007-08 (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	Age standardised rate (b)									
	%	%	%	%	%	%	%	%	%	no.
Public (c)										
Major cities	1.2	0.9	1.4	1.3	1.6	..	3.7	..	1.1	160 965
Inner regional	2.6	1.6	2.5	3.8	1.7	1.5	np	..	2.8	109 719
Outer regional	3.4	1.8	2.1	2.1	2.6	2.4	..	2.0	2.4	46 230
Remote	4.3	1.1	1.8	0.9	1.9	4.0	..	2.2	1.9	5 891
Very remote	12.5	..	3.8	5.3	2.1	–	..	2.1	3.7	6 292
Private (d)										
Major cities	0.1	0.1	0.2	np	np	..	np	..	0.1	19 596
Inner regional	0.1	–	0.1	np	np	np	np	..	0.1	2 887
Outer regional	–	–	–	np	np	np	..	..	–	558
Remote	–	–	–	np	np	np	..	..	–	62
Very remote	–	..	–	np	np	np	..	..	–	29
MBS										
Major cities	5.2	5.7	4.9	4.5	5.1	..	3.9	..	5.1	751 449
Inner regional	4.9	5.1	4.2	3.6	4.4	4.8	4.2	..	4.7	186 849
Outer regional	3.6	3.5	2.8	3.4	3.1	3.4	..	2.4	3.1	60 869
Remote	2.4	4.6	1.7	1.4	2.4	2.1	..	0.9	1.7	5 460
Very remote	2.4	..	1.1	0.7	2.6	5.4	..	1.2	1.2	2,000

(a) Disaggregation by remoteness area is based on a person's usual residence, not the location of the service provider. Not all remoteness areas are represented in each state or territory.

(b) Rates are age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years.

Table NHA.21.3 **Proportion of people receiving clinical mental health services by service type and remoteness area, 2007-08 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(c) SA and Tasmania submitted data that was not based on unique patient identifier or data matching approaches. Therefore caution needs to be taken when making interjurisdictional comparisons.

(d) Private psychiatric hospital figures are not published for WA, SA, Tasmania, and ACT due to confidentiality reasons but are included in the Australia figures.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : Department of Health and Ageing (unpublished) Medicare data.

Table NHA.21.4 **Proportion of people receiving clinical mental health services by service type and SEIFA, 2007-08 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	Age standardised rate (b)									
	%	%	%	%	%	%	%	%	%	no.
Public (c)										
Quintile 1 (most disadvantaged)	1.7	1.4	3.2	2.7	2.7	2.3	np	1.7	2.1	56 989
Quintile 2	2.0	1.5	2.0	2.3	2.0	2.1	6.2	4.1	1.9	83 827
Quintile 3	1.6	1.3	1.9	1.9	1.4	1.5	3.8	4.6	1.7	71 441
Quintile 4	1.3	0.9	1.5	1.5	1.2	0.9	2.4	1.4	1.3	61 485
Quintile 5 (least disadvantaged)	1.3	0.7	1.0	1.4	0.8	..	1.6	0.1	1.1	48 736
Private (d)										
Quintile 1 (most disadvantaged)	0.1	0.2	0.1	np	np	np	np	..	0.1	2 757
Quintile 2	0.1	0.0	0.1	np	np	np	np	..	0.0	2 263
Quintile 3	0.1	0.1	0.1	np	np	np	np	..	0.1	3 453
Quintile 4	0.1	0.1	0.2	np	np	np	np	..	0.1	5 493
Quintile 5 (least disadvantaged)	0.2	0.2	0.2	np	np	..	np	..	0.2	9 161
MBS										
Quintile 1 (most disadvantaged)	4.1	4.9	3.9	1.8	4.5	4.1	4.0	0.8	4.1	109 830
Quintile 2	5.1	5.0	4.2	4.0	4.4	3.5	4.2	1.2	4.7	208 693
Quintile 3	5.0	5.0	4.1	3.8	4.1	4.7	3.9	1.5	4.5	195 282
Quintile 4	5.1	5.4	4.5	3.8	4.9	5.2	4.1	1.7	4.8	237 627
Quintile 5 (least disadvantaged)	5.3	6.2	4.8	4.6	5.3	..	3.8	1.4	5.3	245 032

(a) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Disaggregation by SEIFA area is based on a person's usual residence, not the location of the service provider. SEIFA quintiles have an equal number of SLAs nationally, but do not necessarily have the same population size nationally or within any state or territory.

(b) Rates are age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years.

Table NHA.21.4 **Proportion of people receiving clinical mental health services by service type and SEIFA, 2007-08 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(c) SA and Tasmania submitted data that was not based on unique patient identifier or data matching approaches. Therefore caution needs to be taken when making interjurisdictional comparisons.

(d) Private psychiatric hospital figures are not published for WA, SA, Tasmania, and ACT due to confidentiality reasons but are included in the Australia figures.

.. Not applicable. **np** Not published.

Source : Department of Health and Ageing (unpublished) Medicare data.

Table NHA.21.5 **Proportion of people receiving clinical mental health services by service type and age, 2007-08**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
					Age specific rate (b)					
	%	%	%	%	%	%	%	%	%	no.
Public (a)										
Less than 15 years	0.8	0.5	1.4	0.9	1.7	1.4	0.6	1.1	0.9	38 129
15-24 years	2.1	1.3	2.6	2.1	2.2	2.6	2.9	3.1	2.0	60 538
25-34 years	2.2	1.4	2.5	2.5	2.4	2.3	2.6	3.2	2.1	62 883
35-44 years	2.2	1.4	2.2	2.3	2.2	2.2	2.6	2.9	2.0	61 915
45-54 years	1.6	1.1	1.6	1.6	1.7	1.6	1.9	2.0	1.5	43 400
55-64 years	1.1	0.9	1.1	1.3	1.1	1.1	1.3	1.2	1.1	25 141
65+ years	1.1	1.3	1.3	1.9	0.9	1.7	2.0	1.4	1.3	35 201
All ages (b)	**1.6**	**1.1**	**1.8**	**1.8**	**1.8**	**2.4**	**2.0**	**2.2**	**1.6**	**330 025**
Private (c)										
Less than 15 years	–	–	–	–	–	–	–	..	–	–
15-24 years	0.1	0.1	0.1	np	np	np	np	..	0.1	2 138
25-34 years	0.1	0.1	0.1	np	np	np	np	..	0.1	3 510
35-44 years	0.2	0.2	0.2	np	np	np	np	..	0.2	4 775
45-54 years	0.2	0.2	0.2	np	np	np	np	..	0.2	4 697
55-64 years	0.2	0.2	0.3	np	np	np	np	..	0.2	4 481
65+ years	0.1	0.2	0.2	np	np	np	np	..	0.1	3 459
All ages (b)	0.1	0.1	0.1	np	np	np	np	..	0.1	**23 180**
MBS										
Less than 15 years	1.4	1.6	1.3	1.2	1.5	1.0	1.0	0.3	1.4	57 980
15-24 years	4.7	5.1	4.3	4.5	4.8	5.1	4.2	1.7	4.7	138 752
25-34 years	6.7	7.7	6.0	6.2	6.7	6.9	5.7	2.7	6.7	196 376
35-44 years	7.6	8.3	6.6	6.0	6.8	6.5	6.2	2.9	7.3	224 548

Table NHA.21.5 **Proportion of people receiving clinical mental health services by service type and age, 2007-08**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
45-54 years	6.9	7.4	5.9	5.1	6.3	5.4	5.0	2.6	6.5	189 319
55-64 years	5.7	6.0	4.8	4.0	5.1	4.1	3.9	2.1	5.3	122 754
65+ years	3.1	3.1	2.5	2.1	2.4	1.7	2.4	1.1	2.8	77 255
All ages (b)	**5.0**	**5.4**	**4.3**	**4.1**	**4.6**	**4.1**	**4.0**	**1.8**	**4.8**	**1 006 985**

(a) SA and Tasmania submitted data that was not based on unique patient identifier or data matching approaches. Therefore caution needs to be taken when making interjurisdictional comparisons.

(b) Includes contacts where age was missing or not reported.

(c) Private psychiatric hospital figures are not published for WA, SA, Tasmania and ACT due to confidentiality reasons but are included in the Australia figures.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : Department of Health and Ageing (unpublished) Medicare data.

NHA Indicator 22:

Selected potentially preventable hospitalisations

Table NHA.22.1 Selected potentially preventable hospitalisations, 2007-08 (a), (b)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	Age standardised rate per 100 000 population									no.
Vaccine-preventable conditions	68.9	68.8	77.0	65.3	76.2	41.9	77.5	238.0	71.7	15 440
Potentially preventable acute conditions	1 239.9	1 440.1	1 379.1	1 323.7	1 534.8	1 106.9	1 061.3	1 909.7	1 348.2	288 198
Potentially preventable chronic conditions (c)	1 560.4	1 855.6	1 996.2	3 713.5	1 707.3	2 111.7	1 126.4	2 829.2	1 956.8	433 569
Total (d)	**2 855.5**	**3 351.2**	**3 435.6**	**5 083.2**	**3 300.0**	**3 243.3**	**2 256.9**	**4 897.2**	**3 361.0**	**733 767**

(a) Data are presented by the state/territory of usual residence of the patient, not by state/territory of hospitalisation.

(b) Rates are age standardised to the Australian estimated resident population at 30 June 2001.

(c) There is some variation in the recording of diabetes as an additional diagnosis. The number of separations for WA was markedly higher for chronic potentially preventable conditions, mainly due to the inclusion of renal dialysis admissions in the chronic disease category ‘Complications of diabetes’.

(d) More than one category of potentially preventable conditions may be reported during the same hospitalisation. Therefore, the total rate is not necessarily equal to the sum of the components.

Source : AIHW (unpublished) National Hospital Morbidity Database; ABS (unpublished) Estimated Residential Population, 30 June 2007; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2007, Series B, Cat. no. 3238.0.

Table NHA.22.2 Selected potentially preventable hospitalisations, by Indigenous status, remoteness and SEIFA, 2007-08 (a), (b)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
				Age standardised rate per 100 000 population						no.
					Vaccine preventable conditions					
Indigenous status (e)										
Indigenous	114.3	110.8	138.4	346.1	288.3	np	np	616.2	219.8	1 049
Other Australians	49.9	52.9	57.6	42.6	58.6	np	np	65.5	50.3	13 879
Remoteness of residence (f)										
Major cities	60.9	71.0	78.7	52.2	75.4	..	77.6	..	67.3	9 810
Inner regional	81.9	58.4	78.8	53.9	66.8	42.9	–	..	69.8	3 081
Outer regional	104.4	89.2	62.8	99.1	80.6	41.1	..	151.2	82.8	1 693
Remote	124.7	np	97.2	163.0	65.6	–	..	314.7	143.1	447
Very remote	107.2	..	113.4	248.4	274.7	np	..	390.8	236.4	383
SEIFA of residence (g)										
Quintile 1	81.3	90.9	84.4	182.3	86.2	43.5	–	361.9	89.3	3 902
Quintile 2	69.5	68.4	82.1	83.3	96.1	77.2	np	183.5	75.3	3 320
Quintile 3	69.0	66.5	72.6	56.5	66.3	40.4	81.5	261.7	68.0	2 908
Quintile 4	62.3	64.7	78.7	55.6	57.6	23.9	80.5	156.4	66.4	2 714
Quintile 5	58.5	61.3	68.4	43.2	59.0	..	79.2	103.2	60.2	2 577
					Potentially preventable acute conditions					
Indigenous status (e)										
Indigenous	2 002.8	1 600.3	2 558.2	3 840.9	3 605.7	np	np	3 356.4	2 543.6	13 775
Other Australians	966.8	1 156.0	1 073.5	1 005.8	1 249.8	np	np	816.9	1 023.1	264 863
Remoteness of residence (f)										
Major cities	1 121.3	1 401.4	1 233.4	1 212.5	1 398.6	..	1 060.8	..	1 246.2	181 677
Inner regional	1 459.4	1 536.7	1 468.5	1 323.9	1 497.5	1 089.6	np	..	1 444.4	61 574
Outer regional	1 829.8	1 732.7	1 554.4	1 503.9	2 251.4	1 127.3	..	1 323.3	1 629.9	32 725

Table NHA.22.2 Selected potentially preventable hospitalisations, by Indigenous status, remoteness and SEIFA, 2007-08 (a), (b)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Remote	2 765.6	1 963.6	2 603.4	2 050.3	1 776.0	1 418.3	..	2 635.8	2 300.4	7 158
Very remote	2 668.5	..	3 034.5	2 925.4	3 611.7	2 105.6	..	2 717.6	2 931.5	4 625
SEIFA of residence (g)										
Quintile 1	1 417.9	1 526.8	1 708.3	2 601.6	1 797.6	1 101.0	np	2 319.6	1 576.2	68 185
Quintile 2	1 274.9	1 612.4	1 522.2	1 373.4	1 462.0	1 466.4	910.3	1 581.6	1 411.3	61 253
Quintile 3	1 265.8	1 436.5	1 353.4	1 201.2	1 515.4	1 166.4	1 477.3	2 692.7	1 343.3	57 237
Quintile 4	1 155.3	1 409.1	1 287.0	1 250.1	1 330.2	923.6	1 105.0	1 248.9	1 272.0	51 897
Quintile 5	1 041.5	1 303.1	1 037.9	1 199.8	1 354.0	..	1 032.9	1 578.6	1 149.7	49 305
Potentially preventable chronic conditions (c)										
Indigenous status (e)										
Indigenous	4 303.1	5 439.3	5 593.5	47 745.6	6 765.6	np	np	4 740.2	10 629.6	38 307
Other Australians	824.9	1 031.0	1 039.1	1 512.9	961.3	np	np	927.4	965.3	379 260
Remoteness of residence (f)										
Major cities	1 382.3	1 693.4	1 822.9	3 382.4	1 591.3	..	1 126.8	..	1 758.9	259 539
Inner regional	1 761.6	2 154.1	2 293.7	2 583.3	1 629.5	2 071.7	np	..	2 039.8	98 621
Outer regional	2 395.3	2 720.0	2 024.3	4 019.5	2 369.5	2 213.6	..	2 276.8	2 475.1	53 788
Remote	3 906.7	2 181.7	2 716.4	10 739.4	1 750.3	2 085.8	..	3 391.9	5 006.3	15 232
Very remote	2 727.0	..	3 197.2	7 722.3	3 007.1	1 512.9	..	3 862.0	4 562.6	6 060
SEIFA of residence (g)										
Quintile 1	2 044.7	2 411.6	2 512.5	9 644.8	2 215.2	2 434.3	np	3 474.5	2 506.7	116 002
Quintile 2	1 665.4	2 165.4	2 439.0	4 648.2	1 731.4	2 499.4	1 465.2	2 619.4	2 169.1	102 884
Quintile 3	1 625.0	1 912.9	1 967.2	3 717.4	1 540.3	1 641.1	1 318.1	3 623.6	2 125.6	92 203
Quintile 4	1 271.3	1 623.6	1 717.0	2 921.9	1 385.0	1 255.4	1 317.1	1 920.3	1 639.1	65 785
Quintile 5	1 010.3	1 352.4	1 255.0	2 172.4	1 102.8	..	1 033.7	1 890.7	1 289.9	56 426

Table NHA.22.2 Selected potentially preventable hospitalisations, by Indigenous status, remoteness and SEIFA, 2007-08 (a), (b)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
					All potentially preventable hospitalisations (d)					
Indigenous status (e)										
Indigenous	6 381.2	7 126.9	8 206.7	51 747.7	10 542.9	np	np	8 465.6	13 294.5	52 762
Other Australians	1 833.3	2 231.8	2 160.1	2 550.4	2 257.8	np	np	1 799.2	2 029.9	655 058
Remoteness of residence (f)										
Major cities	2 552.2	3 152.2	3 120.5	4 631.8	3 047.3	..	2 256.9	..	3 058.6	449 006
Inner regional	3 287.3	3 737.5	3 825.2	3 948.9	3 179.0	3 186.4	np	..	3 539.5	162 589
Outer regional	4 310.3	4 524.5	3 619.5	5 596.7	4 679.5	3 365.3	..	3 712.5	4 166.1	87 746
Remote	6 764.8	4 241.5	5 379.4	12 895.3	3 576.3	3 489.5	..	6 245.0	7 403.7	22 695
Very remote	5 464.8	..	6 295.4	10 792.0	6 843.9	3 717.3	..	6 772.8	7 637.6	10 940
SEIFA of residence (g)										
Quintile 1	3 527.7	4 010.9	4 281.8	12 369.4	4 077.1	3 557.9	np	6 017.6	4 150.1	187 096
Quintile 2	2 994.3	3 831.3	4 022.8	6 082.7	3 268.0	4 030.7	2 393.8	4 316.9	3 638.2	166 647
Quintile 3	2 944.4	3 402.1	3 378.8	4 957.3	3 103.6	2 830.2	2 865.9	6 518.3	3 521.3	151 669
Quintile 4	2 477.4	3 085.3	3 067.3	4 211.8	2 759.3	2 198.1	2 492.2	3 273.7	2 964.2	119 854
Quintile 5	2 101.4	2 707.4	2 352.1	3 403.5	2 504.0	..	2 138.0	3 557.7	2 490.2	107 895

(a) Data are presented by the state of usual residence of the patient, not by state of hospitalisation.

(b) Rates are age standardised to the Australian estimated resident population at 30 June 2001.

(c) There is some variation in the recording of diabetes as an additional diagnosis. The number of separations for WA was markedly higher for chronic potentially preventable conditions, mainly due to the inclusion of renal dialysis admissions in the chronic disease category ‘Complications of diabetes’.

(d) More than one category of potentially preventable conditions may be reported during the same hospitalisation. Therefore, the total rate is not necessarily equal to the sum of the components.

(e) The Australian totals for Indigenous/Other Australians do not include data for the ACT or Tasmania.

Table NHA.22.2 **Selected potentially preventable hospitalisations, by Indigenous status, remoteness and SEIFA, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(f) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Not all remoteness areas are represented in each state or territory. The remoteness area 'Major city' does not exist within Tasmania or the NT, 'Inner regional' does not exist within the NT, 'Remote' does not exist in the ACT and 'Very remote' does not exist in Victoria or the ACT. However, interstate visitors residing in these remoteness areas may be treated in those states and territories and rates cannot be calculated for those cases.

(g) SEIFA quintiles are based on the SEIFA IRSD, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory. Disaggregation by SEIFA is based on the patient's usual residence, not the location of the hospital.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : AIHW; ABS (unpublished) Estimated Residential Population, 30 June 2007; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2007, Series B, Cat. no. 3238.0.

NHA Indicator 23:

Selected potentially avoidable GP-type presentations to emergency departments

Table NHA.23.1 **Selected potentially avoidable GP-type presentations to emergency departments, 2007-08 (number) (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Indigenous status									
Indigenous	20 169	7 043	25 114	11 605	3 057	2 004	785	10 818	80 595
Other Australians	629 192	552 704	355 883	194 667	110 156	48 618	42 787	23 766	1 957 773
Remoteness of residence (d)									
Major cities	435 885	353 328	207 185	106 328	105 058	..	43 396	..	1 251 180
Inner regional	193 558	163 902	99 415	64 942	4 852	24 511	51	..	551 231
Outer regional	16 429	41 185	44 428	29 673	1 596	24 710	..	21 440	179 461
Remote	2 125	633	14 069	2 823	670	1 255	..	9 314	30 889
Very remote	168	..	15 424	1 880	739	70	..	3 747	22 028
SEIFA of residence (e)									
Quintile 1	132 926	108 613	94 624	13 958	39 206	38 358	57	9 322	437 064
Quintile 2	203 466	103 873	76 594	45 688	23 787	2 508	1 349	2 424	459 689
Quintile 3	136 382	153 525	72 451	77 764	17 768	6 670	2 008	12 924	479 492
Quintile 4	84 276	110 840	90 260	36 664	18 944	3 010	11 928	8 181	364 103
Quintile 5	91 679	82 198	46 598	31 574	13 236	..	28 138	1 654	295 077
Total	**649 361**	**559 747**	**380 997**	**206 272**	**113 213**	**50 622**	**43 572**	**34 584**	**2 038 368**

(a) GP-type emergency department presentations were defined as presentations for which the Type of visit was reported as Emergency presentation, which did not arrive by Ambulance or by Police or other correctional vehicle, with a Triage category of Semi-urgent or Non-urgent, and where the episode end status was not Admitted to this hospital, or Referred to another hospital, or Died.

(b) Data are presented by the state/territory of usual residence of the patient, not by the state/territory of hospitalisation.

(c) Limited to peer group A and B public hospitals.

Table NHA.23.1 **Selected potentially avoidable GP-type presentations to emergency departments, 2007-08 (number) (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(d) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Not all remoteness areas are represented in each state or territory. The remoteness area 'Major city' does not exist within Tasmania or the Northern Territory, 'Inner regional' does not exist within the Northern Territory, 'Remote' does not exist in the Australian Capital Territory and 'Very remote' does not exist in Victoria or the Australian Capital Territory. However, interstate visitors residing in these remoteness areas may be treated in those states and territories and rates cannot be calculated for those cases.

(e) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Disaggregation by SEIFA area is by usual residence, not SEIFA of hospital 'site'. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory.

.. Not applicable.

Source: AIHW (unpublished) National Non-admitted Emergency Department Care Database.

NHA Indicator 24:

GP-type services

Table NHA.24.1 **GP-type service use, 2008-09 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	Age standardised rate per 1000 population									no.
Indigenous status										
Indigenous	np	np	np	np	np	np	np	np	np	np
Non-Indigenous	np	np	np	np	np	np	np	np	np	np
Remoteness of residence										
Major cities	6 244.5	5 573.5	5 727.7	4 833.2	5 559.2	..	4 365.2	..	5 725.0	84 896 127
Inner regional	4 819.1	4 932.2	5 408.4	4 644.2	5 072.9	4 945.8	np	..	4 986.2	22 079 032
Outer regional	4 615.0	4 561.0	4 919.0	4 172.2	5 160.7	4 883.6	..	3 716.3	4 671.8	9 732 151
Remote	5 578.3	5 085.9	4 624.6	3 453.8	4 732.0	4 907.1	..	2 140.8	4 084.0	1 255 708
Very remote	6 617.8	..	3 708.8	2 342.3	3 958.8	5 174.1	..	3 608.4	3 422.1	510 574
SEIFA of residence (d)										
Quintile 1	6 639.9	6 087.0	5 702.8	3 550.8	5 833.0	4 972.1	np	1 726.1	5 934.2	26 193 954
Quintile 2	5 659.7	5 430.9	5 312.4	5 571.9	5 510.0	4 647.0	4 181.5	3 327.4	5 510.4	24 612 425
Quintile 3	5 760.2	5 345.0	5 577.8	4 148.5	5 244.6	4 700.6	4 361.8	2 551.2	5 253.2	22 736 398
Quintile 4	5 659.5	5 172.3	5 562.2	4 591.5	5 057.9	4 860.6	4 416.9	2 624.2	5 267.8	22 270 025
Quintile 5	5 208.0	4 912.8	5 131.7	4 269.0	4 845.6	..	4 251.7	2 716.9	4 919.2	21 444 192
Total (c)	**5 834.1**	**5 384.3**	**5 490.1**	**4 631.7**	**5 412.0**	**4 915.6**	**4 366.8**	**3 312.4**	**5 429.4**	**118 512 704**
Unit	no. services									
Total (c)	41 774 736	29 241 729	23 653 287	9 111 330	10 045 949	2 562 924	646 281	1 476 468	118 512 704	

(a) Rates are age standardised.

(b) Includes GP/VRGP non-referred attendances; Enhanced primary care; Practice nurse services; Other referred attendances.

(c) Total includes persons whose place of residence was not stated or who could not be assigned to a remoteness or SEIFA category.

(d) SEIFA quintiles are based on the postcode of patient residence and the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory.

Table NHA.24.1 **GP-type service use, 2008-09 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

.. Not applicable. **np** Not published.

Source Department of Health and Ageing (unpublished) Medicare data; ABS (unpublished) Estimated Residential Population, 30 June 2008.

NHA Indicator 25:

Number of specialist services

Table NHA.25.1 **Specialist services, 2008-09 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Unit	Age standardised rate per 1000 population									no. services (c)
Indigenous status										
Indigenous	np	np	np	np	np	np	np	np	np	np
Non-Indigenous	np	np	np	np	np	np	np	np	np	np
Remoteness of residence										
Major cities	7 165.5	6 351.9	6 446.7	5 789.2	6 172.4	..	5 897.7	..	6 565.8	98 078 267
Inner regional	6 142.2	5 825.8	5 724.4	5 710.2	5 853.8	5 620.7	7 994.3	..	5 887.5	26 728 302
Outer regional	5 770.9	5 457.6	5 523.9	5 370.5	5 600.6	5 095.4	..	4 928.7	5 478.1	11 577 487
Remote	5 634.8	5 247.9	4 877.3	4 485.5	5 323.4	4 769.0	..	3 420.7	4 769.9	1 454 815
Very remote	7 938.5	..	3 693.7	4 172.9	4 031.8	4 437.0	..	6 463.6	4 713.9	699 475
SEIFA of residence (d)										
Quintile 1	6 924.7	6 200.1	5 753.2	4 967.4	5 925.3	5 250.3	4 473.4	2 921.9	6 170.6	27 599 545
Quintile 2	6 574.5	5 877.5	5 725.9	6 416.1	5 902.9	5 312.3	5 598.5	4 336.0	6 202.8	28 302 147
Quintile 3	6 758.8	6 049.1	6 074.1	4 825.9	5 968.8	5 488.3	5 657.8	3 470.5	6 001.3	26 193 562
Quintile 4	6 677.9	6 085.9	6 333.1	5 475.1	6 011.0	5 688.7	5 875.4	3 433.3	6 185.5	26 211 913
Quintile 5	7 016.9	6 390.7	6 515.2	5 719.5	6 305.5	..	5 807.2	3 897.9	6 490.9	28 647 142
Total (c)	**6 833.8**	**6 182.7**	**6 090.7**	**5 650.8**	**6 011.9**	**5 411.2**	**5 901.2**	**4 898.1**	**6 278.8**	**138 591 358**
Unit	no. services									
Total	49 681 769	34 037 968	26 360 849	12 306 654	10 431 425	2 881 137	1 969 642	921 914	138 591 358	

(a) Rates are age standardised.

(b) Services include specialist attendance, obstetrics, anaesthetics, pathology, diagnostic imaging, operations, assistance at operations, radiotherapy and therapuetic nuclear medicine provided to out-of-hospital private patients.

(c) Total includes persons whose place of residence was not stated or who could not be assigned to a remoteness or SEIFA category.

Table NHA.25.1 **Specialist services, 2008-09 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(d) SEIFA quintiles are based on the postcode of patient residence and the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory.

.. Not applicable. **np** Not published.

Source : Department of Health and Ageing (unpublished) Medicare data; ABS (unpublished) Estimated Residential Population, 30 June 2008.

NHA Indicator 26:

Number of dental services

Table NHA.26.1 **Use of dental services, by provider and service type, 2008 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
					Age standardised rate per 1000 population					no.
Emergency services										
Public providers	15.9	19.9	30.7	10.0	25.0	25.1	20.4	23.8	20.6	405 400
Private providers	106.8	104.0	92.0	80.2	102.5	90.3	105.7	118.3	100.3	2 028 100
Total providers	122.8	123.9	122.7	90.2	127.6	115.4	126.1	142.1	120.9	2 433 500
General services										
Public providers	39.6	53.4	92.1	125.6	70.0	101.7	75.1	145.4	68.3	1 348 900
Private providers	454.6	437.1	428.5	435.1	396.6	404.0	455.0	300.6	434.7	8 737 300
Total providers	494.1	490.5	520.6	560.7	466.6	505.7	530.1	446.0	503.0	10 086 200
All services										
Public providers	55.5	73.3	122.8	135.6	95.0	126.8	95.5	169.2	88.9	1 754 300
Private providers	561.4	541.1	520.5	515.3	499.1	494.3	560.7	418.9	535.0	10 765 400
Total	**616.9**	**614.4**	**643.3**	**650.9**	**594.2**	**621.0**	**656.2**	**588.1**	**623.9**	**12 519 700**
Unit					no. services					
Total	4 040 800	3 050 500	2 580 900	1 320 500	902 000	295 100	206 000	121 700	12 519 700	
					RSE					
	%	%	%	%	%	%	%	%	%	
Emergency services										
Public providers	24.9	21.8	25.8	35.5	30.7	29.3	36.3	31.4	12.4	
Private providers	8.9	9.2	10.6	15.1	14.4	15.4	13.6	14.1	4.7	
Total providers	8.3	8.3	10.0	14	12.8	13.5	12.6	12.5	4.4	
General services										
Public providers	16.8	15.0	11.3	9.4	16.6	13.5	16.9	11.5	6.0	

Table NHA.26.1 **Use of dental services, by provider and service type, 2008 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Private providers	3.5	3.7	4.3	5.0	5.7	6.5	5.3	7.7	1.9
Total providers	3.3	3.3	3.5	3.8	4.6	5.0	4.5	5.6	1.6
All services									
Public providers	13.7	12.2	10.2	8.9	14.1	12.1	14.6	10.3	5.3
Private providers	2.9	3.1	3.6	4.2	4.8	5.3	4.3	6.1	1.6
Total	2.6	2.6	2.8	3.2	3.8	4.0	3.6	4.4	1.3

(a) Rates are age standardised to the Australian population as at 30 June 2001.

(b) Limited to dentate persons aged 5 years or over

Source: AIHW (unpublished) National Dental Telephone Interview Survey; ABS (unpublished) Estimated Residential Population, 30 June 2008.

Table NHA.26.2 Use of dental services, by provider and service type, by remoteness and SEIFA, 2008 (a), (b)

	Emergency services			General services		
	Aust	RSE	Aust	Aust	RSE	Aust
	per 1000 population	%	no.	per 1000 population	%	no.
Public providers						
Remoteness of residence (c)						
Metropolitan: Major cities	16.3	15.8	213 800	61.3	8.1	797 100
Inner regional	27.2	26.0	100 300	69.8	11.5	283 500
Outer regional	42.1	32.9	81 300	108.1	13.6	213 300
Remote	np	np	np	115.8	24.0	34 000
Very remote	67.1	28.3	4 100	90.9	35.4	21 000
SEIFA of residence (d)						
Quintile 1	36.4	27.1	140 000	101.9	13.1	375 800
Quintile 2	24.2	23.0	88 000	76.4	13.1	291 800
Quintile 3	28.5	23.1	99 800	78.6	11.6	292 400
Quintile 4	10.8	29.2	40 700	73.7	12.3	263 800
Quintile 5	10.7	27.0	36 900	34.6	16.3	125 100
Private providers						
Remoteness of residence (c)						
Metropolitan: Major cities	92.4	5.9	1 284 000	470.0	2.2	6 481 700
Inner regional	112.7	10.0	456 300	372.0	4.6	1 509 800
Outer regional	118.0	12.6	227 700	319.7	7.3	606 700
Remote	126.8	25.2	42 800	324.1	10.7	74 700
Very remote	90.4	38.8	17 300	475.3	8.8	64 400
SEIFA of residence (d)						
Quintile 1	99.1	12.1	393 300	317.6	6.3	1 321 800
Quintile 2	117.8	11.2	468 900	360.0	5.2	1 518 900
Quintile 3	117.4	9.6	474 900	395.9	4.5	1 669 100
Quintile 4	96.8	9.6	379 300	439.4	3.9	1 804 300
Quintile 5	76.1	10.1	311 700	568.2	2.9	2 423 200

(a) Rates are age standardised to the Australian population as at 30 June 2001.

(b) Limited to dentate persons aged 5 years or over.

(c) Remoteness is based on the ABS' Australian Standard Geographical Classification.

(d) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged.

np not published

Source: AIHW (unpublished) National Dental Telephone Interview Survey; ABS (unpublished) Estimated Residential Population, 30 June 2008.

Table NHA.26.3 **Use of dental services, by Indigenous status, 2004-05 (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
					Age standardised rate per 1000 population					no. services
Indigenous status of user										
Indigenous (d)	350.0	383.0	395.0	291.0	365.0	394.0	416.0	305.0	353.0	181.4
Non-Indigenous (e)	463.6	483.1	495.8	501.1	514.8	448.8	531.0	428.4	482.8	9 051.9

(a) Rates are age standardised.

(b) Persons aged two years and over who consulted a dentist or dental professional within the 12 months prior to the survey.

(c) The population includes people who don't know if they visited the dentist in the last year.

(d) Data for Indigenous people are based on the NATSIHS.

(e) Data for non-Indigenous people are based on the NHS.

Source : ABS (unpublished) N*ational Aboriginal and Torres Strait Islander Health Survey 2004-05* and ABS (unpublished) *National Health Survey, 2004-05.*

NHA Indicator 27:

Optometry services

Table NHA.27.1 **Optometry services, 2008-09 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Unit	Age standardised rate per 1000 population									no. (b)
Indigenous status										
Indigenous	np	np	np	np	np	np	np	np	np	np
Non-Indigenous	np	np	np	np	np	np	np	np	np	np
Remoteness of residence										
Metropolitan	297.0	274.4	310.4	261.5	261.2	..	295.4	..	286.5	4 238 045
Inner regional	276.4	273.1	282.2	235.6	245.5	294.2	np	..	274.1	1 252 202
Outer regional	254.6	255.1	268.1	215.7	233.3	261.0	..	309.1	256.6	549 845
Remote	225.4	211.2	245.2	196.7	236.3	200.8	..	149.5	214.4	66 345
Very remote	297.3	..	209.6	150.8	177.8	187.6	..	246.4	197.0	28 530
SEIFA of residence (c)										
Quintile 1	296.1	267.4	272.0	182.3	240.2	262.5	np	109.4	269.5	1 200 528
Quintile 2	278.7	264.4	282.7	267.1	249.6	254.2	300.7	232.7	272.4	1 234 793
Quintile 3	290.4	271.8	289.6	212.0	256.5	295.7	302.1	206.5	269.4	1 167 940
Quintile 4	271.9	267.0	309.9	244.8	264.1	321.8	288.6	198.7	277.0	1 174 701
Quintile 5	300.3	282.6	319.5	269.8	275.2	..	291.3	211.3	291.9	1 281 408
Total (b)	**290.5**	**274.1**	**295.7**	**248.7**	**254.7**	**280.5**	**295.5**	**258.1**	**279.8**	**6 137 638**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total (b)	2 087 042	1 487 945	1 282 646	546 015	436 044	149 907	99 971	48 068	6 137 638	

(a) Rates are age standardised.

(b) Total includes persons whose place of residence was not stated or who could not be assigned to a remoteness or SEIFA category.

(c) SEIFA quintiles are based on the postcode of patient residence and the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory.

.. Not applicable. **np** Not published.

Source: Department of Health and Ageing (unpublished) Medicare data; ABS (unpublished) Estimated Residential Population, 30 June 2008.

NHA Indicator 28:

Public sector community mental health services

Table NHA.28.1 Community mental health service contacts provided by public sector community mental health services, 2007-08

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	Age standardised rate per 1000 population (a)									no.
Sex										
Males	355	351	301	245	306	267	563	179	328	3 407 402
Females	227	310	258	273	253	294	627	143	268	2 841 436
Indigenous status (b)										
Indigenous	1 231	943	679	412	729	194	1 077	172	737	362 429
Non-Indigenous (c)	284	327	266	256	287	305	593	157	294	6 011 838
Remoteness of residence (d)										
Major cities	252	304	277	278	308	..	577	..	286	4 164 097
Inner regional	380	415	301	223	160	307	np	..	344	1 340 584
Outer regional	341	425	255	213	198	229	..	175	274	520 190
Remote	446	400	224	231	164	227	..	194	233	72 893
Very remote	848	. .	366	145	117	219	..	85	210	35 317
SEIFA of residence (e)										
1 (most disadvantaged)	299	453	381	284	365	282	np	134	351	1 431 701
2	362	377	304	283	312	220	946	169	342	1 393 252
3	285	370	290	271	222	266	946	300	304	1 290 545
4	227	274	250	245	214	315	711	140	258	1 068 000
5 (least disadvantaged)	220	229	171	236	147	..	498	59	227	971 510
Total (f)	**304**	**331**	**280**	**262**	**295**	**300**	**598**	**161**	**304**	**6 374 267**
	Number of contacts									
Total (f)	2 072 440	1 736 456	1 162 557	554 558	456 942	147 701	207 467	36 146	6 374 267	

(a) Rates are age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years.

Table NHA.28.1 **Community mental health service contacts provided by public sector community mental health services, 2007-08**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(b) The Indigenous status rates should be interpreted with caution due to the varying, and in some instances unknown, quality of Indigenous identification across jurisdictions. Rates are age-standardised using 5-year age groups to 64 years.

(c) Includes contacts where Indigenous status was missing or not reported.

(d) Disaggregation by remoteness area is based on a person's usual residence, not the location of the service provider. Not all remoteness areas are represented in each state or territory.

(e) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Disaggregation by SEIFA area is based on a person's usual residence, not the location of the service provider. SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory.

(f) Includes contacts where sex, Indigenous status, Statistical Local Area or postcode of residence was missing or not reported.

.. Not applicable. **np** Not published.

Source : AIHW (unpublished) National Community Mental Health Care Database.

Table NHA.28.2 **Community mental health service contacts provided by public sector community mental health services by sex and age, 2007-08**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust	
	Age specific rates per 1000 population									no.
Males										
Less than 15 years	80	107	175	135	200	190	256	62	126	263 238
15–24 years	380	363	356	230	270	223	870	185	351	531 687
25–34 years	734	636	527	378	556	405	1 008	384	614	903 409
35–44 years	590	515	419	318	457	306	685	276	491	753 677
45–54 years	390	358	285	251	341	307	466	159	340	490 227
55–64 years	221	243	179	216	170	161	240	87	211	245 561
65 years and over	108	261	150	210	110	255	365	94	171	214 019
All ages (a)	351	350	298	244	298	257	584	186	325	3 407 402
Females										
Less than 15 years	56	77	128	84	117	166	332	31	90	178 317
15–24 years	285	405	344	320	264	347	1 109	186	344	495 958
25–34 years	337	383	351	323	335	302	643	229	354	516 530
35–44 years	345	402	342	358	388	329	652	220	367	571 065
45–54 years	278	355	277	325	299	309	525	181	307	450 799
55–64 years	185	273	191	266	218	200	353	118	221	258 187
65 years and over	144	360	189	322	177	487	742	75	242	366 733
All ages (a)	225	315	256	276	249	304	628	150	268	2 841 436
Persons (b)										
Less than 15 years	68	93	152	111	159	178	293	47	108	441 670
15–24 years	334	383	350	274	267	284	987	186	348	1 027 961
25–34 years	535	510	439	351	447	352	828	308	485	1 420 455
35–44 years	468	458	380	338	422	318	669	249	429	1 325 737

Table NHA.28.2 **Community mental health service contacts provided by public sector community mental health services by sex and age, 2007-08**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
45–54 years	333	357	281	288	320	308	497	170	323	941 210
55–64 years	203	258	185	241	194	180	298	101	216	503 865
65 years and over	128	316	171	270	147	382	573	85	210	580 857
All ages (a)	**300**	**333**	**277**	**262**	**288**	**299**	**608**	**168**	**302**	**6 374 267**
					Number of contacts					
Males (a)	1 200 743	906 012	625 063	260 826	232 893	62 527	98 692	20 646	3 407 402	
Females (a)	785 095	830 400	537 415	288 596	200 195	76 035	108 200	15 500	2 841 436	
Total (b)	2 072 440	1 736 456	1 162 557	554 558	456 942	147 701	207 467	36 146	6 374 267	

(a) Includes contacts where age was missing or not reported.

(b) Includes contacts where sex was missing or not reported.

Source: AIHW (unpublished) National Community Mental Health Care Database.

NHA Indicator 29:

Private sector mental health services

Table NHA.29.1 **Rate of ambulatory mental health services provided, by MBS service stream, 2008-09**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	Age standardised rate per 1000 population (a)									no.
Service stream										
Psychiatrist (b)	85.5	117.9	82.9	58.6	105.4	85.6	55.8	19.2	90.6	1 967 222
Clinical psychologist (c)	43.3	43.0	26.3	66.6	49.9	61.1	40.0	8.0	42.6	904 835
GP (d)	77.5	84.9	69.7	64.1	72.6	61.0	53.9	30.1	74.7	1 600 063
Other allied health (e)	83.1	114.8	79.2	40.5	45.6	55.8	73.5	22.4	81.6	1 734 728
Total	**289.4**	**360.6**	**258.1**	**229.8**	**273.5**	**263.6**	**223.2**	**79.6**	**289.6**	**6 206 848**

(a) Rates are age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years.

(b) Psychiatrist services: MBS items 134, 136,138, 140, 142, 289,291, 293, 296, 297, 299, 300, 302, 304,306, 308, 310, 312, 314, 316, 318, 319, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 342, 344, 346, 348, 350, 352, 353, 355, 356, 357, 358, 359, 361, 364, 366, 367, 369, 370, 855, 857, 858, 861, 864, 866, 14224.

(c) Clinical psychologist services: MBS items 80000, 80005, 80010, 80015, 80020.

(d) GP services: MBS items 170, 171, 172, 2574, 2575, 2577, 2578, 2704, 2705, 2707, 2708, 2710, 2712, 2713, 2721, 2723, 2725, 2727.

(e) Other allied health services: MBS items 10956, 10968, 80100, 80105, 80110, 80115, 80120, 80125, 80130, 80135, 80140, 80145, 80150, 80155, 80160, 80165, 80170, 82000, 82015.

(f) Total includes all MBS services described at (b) to (e). Persons seen by more than one provider stream are counted only once in the total.

Source : Department of Health and Ageing (unpublished) Medicare data; ABS (unpublished) Estimated Residential Population, 30 June 2008.

Table NHA.29.2 **Rate of ambulatory mental health services provided, by MBS sex, Indigenous status, remoteness and SEIFA,**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
	Age standardised rate per 1000 population (a)									no.
Sex										
Males	219.2	258.0	181.9	156.1	202.9	176.5	152.8	56.2	209.6	2 238 841
Females	358.5	461.8	333.9	306.2	343.6	348.4	292.5	104.9	369.1	3 968 007
Indigenous status										
Indigenous	np	np	np	np	np	np	np	np	np	np
Non-Indigenous	np	np	np	np	np	np	np	np	np	np
Remoteness of residence (b)										
Major cities	317.0	396.7	310.5	269.1	315.3	..	223.2	..	330.1	4 894 118
Inner regional	239.9	272.9	228.6	166.4	221.6	316.2	np	..	245.7	1 000 865
Outer regional	152.4	159.1	134.7	150.1	117.2	169.5	..	110.3	141.9	279 706
Remote	70.3	216.3	71.8	52.2	106.7	103.0	..	38.9	67.8	21 647
Very remote	97.9	..	38.5	25.7	56.1	204.9	..	41.9	41.5	6 772
SEIFA of residence (c)										
1 (most disadvantaged)	144.3	159.5	114.2	46.6	155.4	125.3	126.8	27.6	135.4	567 463
2	237.2	332.0	305.9	136.5	349.4	841.2	105.5	63.0	271.0	1 142 978
3	360.2	240.4	236.3	215.8	161.0	228.3	231.9	65.1	261.0	1 123 350
4	323.6	493.0	296.8	267.8	400.8	514.4	182.1	82.8	359.8	1 546 654
5 (least disadvantaged)	409.2	497.8	352.9	306.2	356.9	..	239.4	70.4	398.5	1 750 542

(a) Rates are age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years.

(b) Disaggregation by remoteness area is based on a person's usual residence, not the location of the service provider. Not all remoteness areas are represented in each State or Territory.

(c) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the ABS Index of Relative Socio-economic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Disaggregation by SEIFA area is based on a person's usual residence, not the location of the service provider. SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each State or Territory.

Table NHA.29.2 **Rate of ambulatory mental health services provided, by MBS sex, Indigenous status, remoteness and SEIFA,**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

.. Not applicable. **np** Not published.

Source : Department of Health and Ageing (unpublished) Medicare data; ABS (unpublished) Estimated Residential Population, 30 June 2008; ABS (2009) Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021, 30 June 2008, Series B, Cat. no. 3238.0.

Table NHA.29.3 **Rate of ambulatory mental health services provided by MBS age, 2008-09**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust	
	Age-specific rates per 1000 population									no.
Males										
Less than 15 years	98.2	119.8	89.2	75.3	111.3	72.0	66.9	19.2	97.9	207 343
15–24 years	175.1	205.5	151.8	152.1	174.6	166.7	126.4	34.4	172.8	266 043
25–34 years	273.5	329.9	219.0	226.0	254.4	253.1	222.1	72.7	266.7	400 544
35–44 years	346.3	400.1	274.5	223.8	288.7	266.1	234.2	100.1	321.7	497 863
45–54 years	315.7	369.9	259.5	198.8	285.0	253.0	214.2	88.0	297.6	436 397
55–64 years	259.1	297.8	216.9	167.3	248.6	183.6	154.0	67.0	244.2	293 694
65 and over	110.4	129.3	99.1	75.9	94.4	69.1	72.8	30.2	106.5	136 957
All ages (a)	219.1	258.5	182.0	157.9	202.9	171.8	156.8	57.6	210.0	2 238 841
Females										
Less than 15 years	64.3	77.7	60.8	53.2	62.5	52.4	41.7	12.8	64.3	129 075
15–24 years	336.2	429.4	295.5	326.7	329.6	377.5	317.1	94.4	347.5	508 058
25–34 years	494.3	658.2	465.4	477.5	490.0	519.6	424.0	161.8	523.1	776 351
35–44 years	583.6	761.5	544.7	491.2	522.9	569.1	496.8	179.3	600.9	941 243
45–54 years	538.6	686.4	497.9	416.9	522.3	499.7	416.6	147.2	546.3	815 891
55–64 years	421.5	529.8	404.9	321.6	419.5	376.5	292.0	121.9	429.4	519 475
65 and over	175.8	220.7	171.9	136.1	162.5	133.7	131.4	51.0	179.7	277 914
All ages (a)	357.0	462.5	333.5	306.5	339.6	337.5	302.2	107.6	368.4	3 968 007
Persons										
Less than 15 years	81.7	99.3	75.4	64.6	87.4	62.5	54.5	16.1	81.5	336 418
15–24 years	253.8	314.4	222.2	236.2	250.2	269.6	218.6	63.1	257.9	774 101
25–34 years	384.1	493.4	341.3	347.8	370.6	388.6	322.4	116.8	394.1	1 176 895
35–44 years	466.0	583.0	410.6	355.2	405.7	421.4	366.8	138.6	462.1	1 439 106
45–54 years	428.3	530.0	380.0	307.1	405.1	378.4	318.4	116.5	423.1	1 252 288
55–64 years	340.6	415.6	310.1	243.0	335.8	280.6	224.4	91.8	337.1	813 169

Table NHA.29.3 **Rate of ambulatory mental health services provided by MBS age, 2008-09**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
65 and over	146.4	179.6	138.0	108.2	132.3	104.4	105.0	39.9	146.5	414 871
All ages (a)	288.7	361.4	257.8	231.2	272.1	255.8	230.1	81.7	289.6	6 206 848

(a) Includes contacts where age was missing or not reported.

Source : Department of Health and Ageing (unpublished) Medicare data; ABS (unpublished) Estimated Residential Population, 30 June 2008.

NHA Indicator 30:

Proportion of people with diabetes who have a GP annual cycle of care

Table NHA.30.1 **Proportion of people with diabetes who have a GP annual cycle of care, 2008-09 (per cent) (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)
Indigenous status									
Indigenous	np	np	np	np	np	np	np	np	np
Non-Indigenous	np	np	np	np	np	np	np	np	np
Remoteness of residence (d)									
Major cities	15.7	20.4	17.4	18.4	20.0	..	14.2	..	17.8
Inner regional	25.4	23.2	20.6	18.0	26.3	21.1	–	..	23.1
Outer regional	20.9	18.9	20.2	18.6	29.0	24.5	..	11.6	21.0
Remote	17.5	27.3	12.9	6.4	27.3	15.4	..	10.3	14.3
Very remote	20.2	..	2.5	6.6	9.3	15.2	..	13.3	8.0
SEIFA of residence (e), (f)									
Quintile 1	15.5	24.8	19.0	12.9	22.8	23.2	33.1	8.1	19.3
Quintile 2	22.0	19.7	19.7	19.0	22.1	29.0	16.6	9.1	20.9
Quintile 3	21.0	21.2	18.3	18.8	18.8	20.0	15.2	12.0	20.0
Quintile 4	16.5	20.4	17.6	16.6	23.5	15.8	13.4	11.7	18.2
Quintile 5	13.6	18.0	15.6	15.4	22.0	..	14.2	8.6	15.9
Total (g)	**18.1**	**20.9**	**18.2**	**17.7**	**22.1**	**22.1**	**14.1**	**11.8**	**19.1**

(a) The Indicator appears reliable at a national level. However, comparison between jurisdictions and population groups may be problematic due to different population structures (include relative prevalence of Type 1 and Type 2 diabetes) which have not been accounted for in the calculation of this indicator.

(b) Compared with other states, results for the ACT and NT appear to be less reliable, perhaps due to their smaller population and lower coverage of services in the NT.

(c) Includes 344 people where geographical location was unknown.

(d) Denominator excludes 3273 people on National Diabetes Services Scheme (NDSS) dataset where postcode was invalid or did not map to a remoteness area. Numerator excludes 39 records on Medicare Benefits Schedule (MBS) dataset for the same reason.

(e) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the SEIFA Index for Relative Socio-economic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Excludes 9 818 people where postcode was invalid or did not map to a SEIFA quintile.

(f) Numerator excludes 1572 records on MBS dataset where postcode was invalid or did not map to a SEIFA quintile. Denominator excludes 9 818 people on NDSS dataset for the same reason.

(g) Denominator includes only Type 1 and Type 2 diabetes. Excludes 5235 people diagnosed with 'other diabetes'.

np Not published. .. Not applicable. – Nil or rounded to zero.

Source : Department of Health and Ageing (unpublished) Medicare data; Department of Health and Ageing (unpublished) National Diabetes Services Scheme (NDSS) database.

NHA Indicator 31:

Proportion of people with asthma with a written asthma plan

Table NHA.31.1 **Proportion of people with asthma with a written asthma plan, by remoteness and SEIFA, 2007-08 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
						Proportion				
Remoteness of residence										
Major cities	%	20.9	22.7	21.4	14.6	19.4	..	21.8	..	20.7
Inner regional	%	14.9	np	21.6	27.8	np	19.2	..	..	21.5
Outer regional	%	33.1	np	np	np	28.3	np	..	50.0	20.9
Remote	%	–	–	np	np	np	np	..	–	13.4
Very remote	%	..	..	..	..	..	..	..	..	. .
Index of disadvantage of residence										
Quintile 1	%	16.7	27.3	15.2	np	np	11.1	–	–	17.3
Quintile 2	%	25.5	19.3	18.0	21.9	22.8	np	np	–	21.8
Quintile 3	%	18.6	21.2	23.1	30.1	13.4	16.9	np	np	22.0
Quintile 4	%	12.8	19.5	24.9	np	21.4	np	25.6	56.4	19.3
Quintile 5	%	23.8	30.9	18.2	11.6	25.4	33.3	19.3	–	23.5
Total (d)	**%**	**20.4**	**22.9**	**19.7**	**17.4**	**21.9**	**17.1**	**21.8**	**40.9**	**20.8**
Total number of people with written asthma plans	'000	136.0	106.4	96.2	35.5	32.7	9.9	7.2	6.0	429.8
						RSE				
Remoteness of residence										
Major cities	%	13.7	12.9	16.4	21.5	14.1	..	12.1	..	5.8
Inner regional	%	26.6	np	22.2	31.0	np	23.1	..	..	10.7
Outer regional	%	45.4	np	np	np	41.2	np	..	43.4	19.2
Remote	%	–	–	np	np	np	np	..	–	51.1
Very remote	%	..	..	..	..	..	..	..	..	. .
Index of disadvantage of residence										
Quintile 1	%	35.0	27.0	27.6	np	np	34.5	–	–	14.9
Quintile 2	%	19.1	41.1	22.7	28.7	30.0	np	np	–	11.0
Quintile 3	%	35.7	25.5	24.8	24.7	35.0	43.1	np	np	11.3

Table NHA.31.1 **Proportion of people with asthma with a written asthma plan, by remoteness and SEIFA, 2007-08 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Quintile 4	%	33.2	23.0	23.7	np	26.4	np	20.6	52.9	12.1
Quintile 5	%	24.6	21.3	46.3	51.9	21.6	40.5	16.2	–	12.6
Total (d)	**%**	**11.2**	**10.9**	**11.4**	**17.6**	**13.4**	**18.8**	**12.1**	**47.0**	**5.6**
Total number of people with written asthma plans	'000	12.9	12.4	12.1	20.8	15.5	19.5	12.9	58.1	6.4
					95 per cent confidence interval					
Remoteness of residence										
Major cities	%	5.6	5.8	6.9	6.2	5.3	..	5.2	..	2.3
Inner regional	%	7.8	np	9.4	16.9	np	8.7	..	..	4.5
Outer regional	%	29.4	np	np	np	22.9	np	..	42.5	7.9
Remote	%	–	–	np	np	np	np	..	–	13.4
Very remote	%	..	..	..	..	..	..	..	..	..
Index of disadvantage of residence										
Quintile 1	%	11.5	14.5	8.2	np	np	7.5	–	–	5.0
Quintile 2	%	9.6	15.5	8.0	12.3	13.4	np	np	–	4.7
Quintile 3	%	13.1	10.6	11.2	14.5	9.2	14.3	np	np	4.9
Quintile 4	%	8.4	8.8	11.6	np	11.1	np	10.3	58.5	4.6
Quintile 5	%	11.5	12.9	16.5	11.8	10.8	26.4	6.2	–	5.8
Total (d)	**%**	**4.5**	**4.9**	**4.4**	**6.0**	**5.7**	**6.3**	**5.2**	**37.7**	**2.3**
Total number of people with written asthma plans	'000	34.4	25.9	22.7	14.5	9.9	3.8	1.8	6.8	54.1

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Persons who have been told by a doctor they have asthma, and the asthma is current and long-term.

(b) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 yr ranges from 0).

(c) Very remote data was not collected in the 2007-08 National Health Survey.

(d) Includes persons for whom index of disadvantage was not able to be determined.

Table NHA.31.1 **Proportion of people with asthma with a written asthma plan, by remoteness and SEIFA, 2007-08 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : ABS (Unpublished) *National Health Survey, 2007-08.*

Table NHA.31.2 **Proportion of people with asthma with a written asthma plan, by Indigenous status, 2004-05 (a), (b)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Indigenous people					
Proportion	%	30.2	22.5	17.2	11.9	20.4	29.8	20.5	7.9	20.4
95 per cent confidence interval	%	9.2	19.1	9.8	4.9	9.6	17.8	16.0	3.1	3.9
RSE	%	15.6	43.3	28.9	21.0	24.1	30.5	39.7	19.9	9.7
Number of Indigenous people with a written asthma plan	'000	7.0	1.5	3.1	1.4	0.8	1.0	0.1	0.4	15.4
					Non-Indigenous people					
Proportion	%	23.6	26.3	20.5	15.8	21.9	17.5	28.3	–	22.5
95 per cent confidence interval	%	5.5	4.8	4.3	4.9	4.4	4.3	8.6	–	2.4
RSE	%	11.8	9.2	10.7	15.8	10.2	12.6	15.6	–	5.4
Number of Non-Indigenous people with a written asthma plan	'000	141.1	131.1	81.7	32.5	36.3	9.9	9.1	–	441.8

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Persons who have been told by a doctor they have asthma, and the asthma is current and long-term.

(b) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (10 year ranges from 0).

– Nil or rounded to zero.

Source : ABS (Unpublished) *National Aboriginal and Torres Strait Islander Health Survey* , 2004-05 and ABS (Unpublished) *National Health Survey* , 2004-05.

NHA Indicator 32:

Proportion of people with mental illness with GP care plans

Table NHA.32.1 **People with mental illness with GP care plans, 2008-09 (a)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Age standardised rate (b)	%	17.5	18.9	15.5	14.1	14.7	14.3	14.1	7.3	16.7
Number of people	no.	186 485	156 436	102 204	47 568	35 987	10 894	7 940	2 427	549 941

(a) People aged 16–84 with selected 12-month mental disorders.

(b) Rates are age standardised to the Australian population aged 16–84 years as at 30 June 2001.

Source : Department of Health and Ageing (unpublished) Medicare data; ABS (unpublished) Estimated Residential Population, 30 June 2008; ABS (unpublished) *National Survey of Mental Health and Wellbeing,* 2007.

Table NHA.32.2 **People with mental illness with GP care plans, by age, 2008-09**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	age specific rate (%)
Age										
0–15 years	17 497	14 007	10 503	4 350	3 926	913	640	159	51 995	np
16–24 years	29 579	25 631	17 289	8 208	6 360	2 116	1 487	380	91 050	12.6
25–34 years	42 621	37 506	23 685	11 698	7 923	2 364	2 091	653	128 541	17.4
35–44 years	46 062	39 176	25 519	11 772	8 367	2 517	1 873	659	135 945	18.6
45–54 years	35 600	28 893	19 061	8 443	6 927	2 137	1 391	469	102 921	15.9
55–64 years	21 239	16 955	11 317	5 014	4 215	1 240	775	203	60 958	18.4
65–74 years	8 057	6 004	4 012	1 769	1 550	398	243	49	22 082	17.1
75–84 years	3 327	2 271	1 321	664	645	122	np	np	8 444	15.1
85 and over	512	461	226	115	119	16	np	np	1 466	np
Total (a)	**204 494**	**170 904**	**112 933**	**52 033**	**40 032**	**11 823**	**8 595**	**2 588**	**603 402**	

(a) Includes contacts where age was missing or not reported.

np Not published.

Source : Department of Health and Ageing (unpublished) Medicare data.

Table NHA.32.3 People with mental illness with GP care plans, by remoteness area and SEIFA, 2008-09 (a)

	Age-standardised rates (per cent) (b)	*Number*
Remoteness of residence (c)		
Major cities	16.8	393 846
Inner regional	18.2	113 728
Outer regional	12.6	37 855
Remote	np	3 300
Very remote	np	1 009
SEIFA of residence (d)		
Quintile 1 (most disadvantaged)	13.9	59 148
Quintile 2	17.0	119 393
Quintile 3	16.4	112 819
Quintile 4	16.4	129 999
Quintile 5 (least disadvantaged)	16.5	122 759

(a) People aged 16–84 years with selected 12-month mental disorders.

(b) Rates are age-standardised to the Australian population aged 16–84 years as at 30 June 2001.

(c) Disaggregation by remoteness area is based on a person's usual residence, not the location of the service provider.

(d) Socio-Economic Indexes for Area (SEIFA) quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Disaggregation by SEIFA area is based on a person's usual residence, not the location of the service provider. SEIFA quintiles have an equal number of statistical local areas nationally, but do not necessarily have the same population size nationally or within any State or Territory.

np Not published.

Source: Department of Health and Ageing (unpublished) Medicare data; ABS (unpublished) Estimated Resident Population, 30 June 2008; ABS (unpublished) *National Survey of Mental Health and Wellbeing,* 2007, Cat. no. 4326.0.

NHA Indicator 33:

Women with at least one antenatal visit in the first trimester of pregnancy

Table NHA.33.1 Proportion of pregnancies with an antenatal visit in the first trimester, 2007 (a), (b), (c)

	NSW	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA*	*Tas* (d)	*ACT* (d)	*NT*	*Aust*
Unit	%	%	%	%	%	%	%	%	%
Indigenous status									
Indigenous	66.5	na	na	na	42.0	na	na	41.9	na
Non-Indigenous	80.0	na	na	na	71.9	na	na	59.6	na
Remoteness of residence									
Major cities	76.9	na	na	na	72.7	..	na	..	na
Inner regional	81.4	na	na	na	71.3	na	..	..	na
Outer regional	80.4	na	na	na	61.5	na	..	53.4	na
Remote and very remote	74.4	..	na	na	59.0	..	..	52.1	na
SEIFA of residence (e)									
Quintile 1	72.8	na	na	na	67.5	na	..	51.2	na
Quintile 2 (f)	82.2	na	na	na	69.6	na	..	59.1	na
Quintile 3 (f)	72.3	na	na	na	76.6	na	..	54.0	na
Quintile 4	81.2	na	na	na	73.5	na	na	53.8	na
Quintile 5 (f)	80.6	na	na	na	74.5	..	na	50.2	na
Total	**77.8**	**na**	**na**	**na**	**70.9**	**na**	**na**	**52.8**	**na**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.
Total number (g)	71 779	na	na	na	8 963	na	na	1 846	na

(a) Percentages calculated after excluding records with missing or null values.

(b) First trimester includes gestational age of 13 completed weeks or less.

(c) Data are by place of usual residence of the mother. Women who gave birth in NSW, SA or NT but reside in another jurisdiction are not reported for this reason. Table excludes Australian non-residents, residents of external territories and not stated State/Territory of residence.

(d) The Perinatal NMDS did not include antenatal care data items in 2007. Data are not available for Victoria, Queensland, WA and Tasmania. Data are available in ACT but are not of sufficient quality to publish.

(e) The Socio-Economic Indexes for Areas (SEIFA) Index for Relative Socio-economic Disadvantage quintiles assign those resident in the most disadvantaged areas to Quintile 1 and those in the least disadvantaged areas to Quintile 5.

(f) These cells should be interpreted with caution as they are based on denominators of fewer than 500.

(g) Number of women in each category attending for antenatal care before 14 weeks gestation.

na Not available. .. Not applicable.

Source : AIHW (unpublished) National Perinatal Data Collection.

NHA Indicator 34:

Waiting times for elective surgery

Table NHA.34.1 **Waiting times for elective surgery in public hospitals, by procedure, 2007-08 (days) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
				Peer group A hospitals					
50th percentile									
Cataract extraction	138	55	45	110	92	592	np	258	88
Cholecystectomy	51	50	37	47	58	83	np	76	48
Coronary artery bypass graft	14	11	10	22	20	30	np	..	14
Cystoscopy	24	21	35	22	35	47	np	56	26
Haemorrhoidectomy	53	79	38	63	49	56	np	77	56
Hysterectomy	48	57	35	44	53	55	np	82	47
Inguinal herniorrhaphy	43	53	36	52	63	140	np	71	47
Myringoplasty	161	91	60	188	272	572	np	319	106
Myringotomy	65	28	36	122	56	44	np	40	46
Prostatectomy	47	22	38	39	59	36	np	np	41
Septoplasty	258	187	68	196	168	508	np	165	158
Tonsillectomy	196	71	41	209	111	96	np	94	92
Total hip replacement	144	124	60	84	103	301	np	146	106
Total knee replacement	263	166	76	129	172	401	np	312	168
Varicose veins stripping & ligation	56	174	52	119	223	110	np	123	84
Total (b)	**32**	**29**	**27**	**29**	**42**	**39**	**np**	**37**	**31**
90th percentile									
Cataract extraction	330	271	330	321	243	680	np	534	329
Cholecystectomy	219	219	117	201	165	413	np	384	195
Coronary artery bypass graft	99	152	68	56	112	149	np	..	95
Cystoscopy	151	188	156	147	122	172	np	210	165
Haemorrhoidectomy	312	285	238	342	171	630	np	330	288
Hysterectomy	247	169	120	192	172	161	np	165	196
Inguinal herniorrhaphy	213	254	149	217	202	584	np	461	223
Myringoplasty	371	367	342	420	559	1 378	np	777	428

Table NHA.34.1 **Waiting times for elective surgery in public hospitals, by procedure, 2007-08 (days) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Myringotomy	325	132	168	434	161	151	np	95	203
Prostatectomy	238	303	157	154	201	135	np	np	223
Septoplasty	378	443	632	479	501	1 421	np	1 913	454
Tonsillectomy	356	251	184	480	408	633	np	385	360
Total hip replacement	363	399	229	283	373	673	np	1 019	364
Total knee replacement	373	499	294	368	456	748	np	714	388
Varicose veins stripping & ligation	281	504	332	616	640	381	np	798	473
Total (b)	**276**	**226**	**144**	**224**	**204**	**370**	**np**	**331**	**231**
				Peer group B hospitals					
50th percentile									
Cataract extraction	285	68	87	38	31	np	np	..	95
Cholecystectomy	50	49	34	39	41	np	np	..	47
Coronary artery bypass graft	..	np	..	..	..	np	np	..	np
Cystoscopy	32	19	24	9	39	np	np	..	21
Haemorrhoidectomy	48	49	22	50	65	np	np	..	46
Hysterectomy	44	42	45	50	83	np	np	..	49
Inguinal herniorrhaphy	63	48	48	36	44	np	np	..	54
Myringoplasty	157	51	..	178	np	np	np	..	63
Myringotomy	30	49	..	70	58	np	np	..	54
Prostatectomy	51	21	28	10	129	np	np	..	28
Septoplasty	132	80	..	160	153	np	np	..	102
Tonsillectomy	73	60	np	105	107	np	np	..	71
Total hip replacement	169	150	70	149	139	np	np	..	145
Total knee replacement	246	178	82	151	382	np	np	..	195
Varicose veins stripping & ligation	77	81	86	41	337	np	np	..	84
Total (b)	**42**	**39**	**27**	**29**	**53**	np	np	**..**	**39**

Table NHA.34.1 Waiting times for elective surgery in public hospitals, by procedure, 2007-08 (days) (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
90th percentile									
Cataract extraction	363	251	158	287	83	np	np	..	320
Cholecystectomy	173	132	118	308	127	np	np	..	176
Coronary artery bypass graft	..	np	..	..	..	np	np	..	np
Cystoscopy	183	121	67	29	112	np	np	..	128
Haemorrhoidectomy	231	202	93	323	323	np	np	..	208
Hysterectomy	191	150	123	126	180	np	np	..	164
Inguinal herniorrhaphy	234	147	134	302	215	np	np	..	226
Myringoplasty	352	298	..	296	np	np	np	..	326
Myringotomy	265	108	..	164	134	np	np	..	124
Prostatectomy	209	197	105	33	340	np	np	..	195
Septoplasty	342	336	..	290	354	np	np	..	343
Tonsillectomy	315	301	np	195	287	np	np	..	303
Total hip replacement	349	530	244	356	685	np	np	..	380
Total knee replacement	358	580	289	358	720	np	np	..	491
Varicose veins stripping & ligation	299	446	462	191	499	np	np	..	387
Total (b)	**281**	**208**	**112**	**205**	**275**	np	np	**..**	**238**
Peer group C hospitals									
50th percentile									
Cataract extraction	173	24	48	32	6	..	..	..	76
Cholecystectomy	57	40	42	25	13	..	..	..	44
Coronary artery bypass graft	..	..	..	..	..	..	..	..	..
Cystoscopy	26	22	28	37	7	..	..	..	29
Haemorrhoidectomy	53	58	50	25	10	..	..	..	45
Hysterectomy	80	42	68	41	30	..	..	..	63
Inguinal herniorrhaphy	76	48	45	28	15	..	..	..	54
Myringoplasty	268	np	np	145	np	..	..	..	195

Table NHA.34.1 **Waiting times for elective surgery in public hospitals, by procedure, 2007-08 (days) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Myringotomy	np	78	33	42	..	..	..	..	42
Prostatectomy	49	18	59	27	7	..	..	..	28
Septoplasty	287	57	78	105	9	..	..	..	160
Tonsillectomy	156	41	25	70	7	..	..	..	88
Total hip replacement	62	51	..	57	..	..	..	..	57
Total knee replacement	74	52	..	56	..	..	..	..	65
Varicose veins stripping & ligation	98	136	106	110	np	..	..	..	111
Total (b)	**59**	**33**	**34**	**31**	**8**	**..**	**..**	**..**	**42**
90th percentile									
Cataract extraction	338	63	124	210	68	..	..	..	313
Cholecystectomy	171	126	120	89	48	..	..	..	143
Coronary artery bypass graft	..	..	..	..	..	..	..	..	..
Cystoscopy	130	116	89	316	45	..	..	..	172
Haemorrhoidectomy	217	189	141	118	43	..	..	..	189
Hysterectomy	266	160	126	156	64	..	..	..	219
Inguinal herniorrhaphy	244	150	160	97	64	..	..	..	213
Myringoplasty	350	np	np	419	np	..	..	..	366
Myringotomy	np	200	161	184	..	..	..	..	184
Prostatectomy	250	81	117	105	39	..	..	..	169
Septoplasty	364	246	351	329	28	..	..	..	357
Tonsillectomy	319	90	246	302	193	..	..	..	305
Total hip replacement	328	245	..	165	..	..	..	..	292
Total knee replacement	348	257	..	152	..	..	..	..	326
Varicose veins stripping & ligation	306	332	390	268	np	..	..	..	308
Total (b)	**281**	**145**	**117**	**177**	**82**	**..**	**..**	**..**	**234**
				All hospitals					
50th percentile									

Table NHA.34.1 **Waiting times for elective surgery in public hospitals, by procedure, 2007-08 (days) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Cataract extraction	169	43	48	62	72	258	176	251	88
Cholecystectomy	52	50	37	35	50	78	83	80	47
Coronary artery bypass graft	14	11	10	22	20	30	13	..	14
Cystoscopy	26	21	33	20	35	49	51	56	26
Haemorrhoidectomy	50	63	36	40	48	66	72	77	50
Hysterectomy	52	52	36	43	54	68	85	82	49
Inguinal herniorrhaphy	55	50	40	36	52	91	90	67	50
Myringoplasty	177	62	62	166	194	481	417	407	103
Myringotomy	62	39	36	72	57	44	94	47	48
Prostatectomy	47	22	37	28	58	36	46	np	37
Septoplasty	223	104	68	154	153	507	196	160	138
Tonsillectomy	151	66	40	143	110	96	290	95	87
Total hip replacement	136	120	62	80	114	294	185	146	106
Total knee replacement	234	160	77	106	202	385	222	312	156
Varicose veins stripping & ligation	71	134	57	66	258	45	401	123	90
Total (b)	**38**	**32**	**27**	**31**	**42**	**36**	**73**	**43**	**34**
90th percentile									
Cataract extraction	340	229	317	271	226	675	484	551	324
Cholecystectomy	200	190	117	202	154	413	233	418	185
Coronary artery bypass graft	99	154	68	56	112	149	84	..	95
Cystoscopy	156	163	137	168	119	176	279	207	159
Haemorrhoidectomy	248	252	168	245	175	504	168	330	242
Hysterectomy	241	160	121	161	170	237	308	165	193
Inguinal herniorrhaphy	229	226	145	202	200	424	237	461	222
Myringoplasty	365	322	358	409	558	1 485	860	1 043	412
Myringotomy	316	113	168	358	159	151	418	96	182
Prostatectomy	232	228	155	123	223	135	189	np	204

Table NHA.34.1 **Waiting times for elective surgery in public hospitals, by procedure, 2007-08 (days) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Septoplasty	369	361	625	392	459	1 421	645	1 913	391
Tonsillectomy	350	270	188	448	399	563	679	399	349
Total hip replacement	357	412	231	234	489	681	478	1 019	360
Total knee replacement	366	507	294	301	659	748	496	714	385
Varicose veins stripping & ligation	290	473	353	397	604	331	867	798	420
Total (b)	**277**	**217**	**138**	**208**	**209**	**344**	**372**	**344**	**233**

(a) The data presented for this indicator are sourced from linked records in the National Hospital Morbidity Database and National Elective Surgery Waiting Times Data Collection. The linked records represent about 97% of all records in National Elective Surgery Waiting Times Data Collection for 2007-08.

(b) Total includes all removals for elective surgery procedures, including but not limited to the procedures listed above.

.. Not applicable. **np** Not published.

Source: Linked AIHW (unpublished) National Hospital Morbidity Database; AIHW (unpublished) National Elective Surgery Waiting Times Data Collection.

Table NHA.34.2 Waiting times for elective surgery in public hospitals, by Indigenous status and procedure, 2007-08 (days) (a)

	Indigenous									*Other Australians*								
	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (b)	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (b)
									All hospitals									
50th percentile																		
Cataract extraction	163	104	83	141	69	np	np	316	134	169	43	46	61	72	np	np	221	84
Cholecystectomy	54	40	44	48	70	np	np	168	54	52	50	36	34	50	np	np	69	46
Coronary artery bypass graft	35	np	14	19	17	np	np	..	17	14	11	10	23	21	np	np	..	13
Cystoscopy	31	24	40	35	51	np	np	55	36	25	21	33	20	35	np	np	57	25
Haemorrhoidectomy	30	np	np	np	np	np	np	np	36	50	63	35	40	48	np	np	61	50
Hysterectomy	48	57	35	19	np	np	np	99	49	53	52	36	44	54	np	np	77	48
Inguinal herniorrhaphy	48	25	23	28	np	np	np	120	42	55	50	40	36	52	np	np	67	49
Myringoplasty	300	np	130	173	np	np	np	409	198	172	63	58	166	194	np	np	404	92
Myringotomy	63	27	66	54	93	np	np	64	64	61	39	35	74	56	np	np	44	46
Prostatectomy	45	np	55	np	np	np	np	np	47	47	22	36	28	58	np	np	np	37
Septoplasty	211	np	np	np	np	np	np	np	169	223	104	68	154	154	np	np	153	135
Tonsillectomy	182	111	51	249	117	np	np	96	106	147	66	39	143	109	np	np	95	84
Total hip replacement	201	np	np	np	np	np	np	np	153	135	119	62	81	114	np	np	146	101
Total knee replacement	297	np	167	np	np	np	np	np	266	233	160	77	106	203	np	np	312	151
Varicose veins stripping & ligation	59	np	90	np	np	np	np	np	87	72	134	56	65	258	np	np	123	86
Total (c)	**40**	**40**	**31**	**31**	**37**	**np**	**np**	**62**	**37**	**38**	**32**	**27**	**31**	**42**	**np**	**np**	**37**	**34**
90th percentile																		
Cataract extraction	341	270	322	399	235	np	np	1 035	426	340	229	316	271	225	np	np	400	320
Cholecystectomy	208	197	170	296	120	np	np	728	243	200	190	115	198	155	np	np	197	174
Coronary artery bypass graft	129	np	63	70	63	np	np	..	70	97	154	68	55	114	np	np	..	91
Cystoscopy	168	178	299	219	116	np	np	220	203	156	162	136	167	119	np	np	181	154

Table NHA.34.2 **Waiting times for elective surgery in public hospitals, by Indigenous status and procedure, 2007-08 (days) (a)**

	Indigenous									*Other Australians*								
	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (b)	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (b)
Haemorrhoidectomy	167	np	np	..	np	np	np	np	216	249	251	167	245	175	np	np	330	241
Hysterectomy	217	201	127	91	np	np	np	197	201	241	160	120	164	170	np	np	145	189
Inguinal herniorrhaphy	194	126	144	286	np	np	np	638	193	230	226	145	202	198	np	np	343	214
Myringoplasty	406	np	623	300	np	np	np	1 043	749	363	322	300	410	543	np	np	832	369
Myringotomy	351	121	257	489	152	np	np	96	315	315	113	161	344	159	np	np	96	168
Prostatectomy	306	np	325	np	..	np	np	..	256	232	228	153	125	223	np	np	np	205
Septoplasty	370	np	np	np	np	np	np	np	378	369	361	623	392	459	np	np	1 789	378
Tonsillectomy	356	250	194	464	408	np	np	474	356	350	270	188	448	399	np	np	351	344
Total hip replacement	358	np	np	np	np	np	np	..	380	357	412	230	234	484	np	np	1 019	355
Total knee replacement	376	np	416	np	np	np	np	np	382	366	507	292	299	659	np	np	714	377
Varicose veins stripping & ligation	289	np	1054	np	np	np	np	np	559	290	473	352	397	604	np	np	677	394
Total (c)	**290**	**221**	**174**	**272**	**202**	**np**	**np**	**533**	**276**	**277**	**216**	**136**	**207**	**209**	**np**	**np**	**282**	**228**

(a) The data presented for this indicator are sourced from linked records in the National Hospital Morbidity Database and National Elective Surgery Waiting Times Data Collection. The linked records represent about 97 per cent of all records in National Elective Surgery Waiting Times Data Collection for 2007-08.

(b) The Australian totals for Indigenous/Other Australians do not include data for the Australian Capital Territory or Tasmania.

(c) Total includes all removals for elective surgery procedures, including but not limited to the procedures listed above.

.. Not applicable. **np** Not published.

Source : Linked AIHW (unpublished) National Hospital Morbidity Database; AIHW (unpublished) National Elective Surgery Waiting Times Data Collection

Table NHA.34.3 Waiting times for elective surgery in public hospitals, by remoteness area, 2007-08 (days) (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					All hospitals				
50th percentile									
Major cities	35	34	26	32	44	np	75	np	34
Inner regional	43	27	28	28	35	37	np	6	35
Outer regional	50	23	29	29	31	34	np	36	35
Remote	32	18	31	28	37	27	np	43	33
Very remote	26	10	33	28	27	31	..	71	42
90th percentile									
Major cities	263	217	134	211	212	np	379	np	224
Inner regional	301	216	139	183	190	355	np	51	258
Outer regional	293	211	148	189	189	335	np	301	253
Remote	244	140	165	214	183	319	np	348	231
Very remote	225	282	170	213	130	229	..	551	310

(a) The data presented for this indicator are sourced from linked records in the National Hospital Morbidity Database and National Elective Surgery Waiting Times Data Collection. The linked records represent about 97 per cent of all records in National Elective Surgery Waiting Times Data Collection for 2007-08.

.. Not applicable. **np** Not published.

Source: Linked AIHW (unpublished) National Hospital Morbidity Database; AIHW (unpublished) National Elective Surgery Waiting Times Data Collection.

Table NHA.34.4 **Waiting times for elective surgery in public hospitals, by SEIFA, 2007-08 (days) (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					All hospitals				
50th percentile									
Quintile 1	41	36	28	28	44	36	np	57	36
Quintile 2	48	32	28	31	42	28	63	40	38
Quintile 3	37	33	27	30	42	36	79	37	33
Quintile 4	32	34	26	32	40	39	79	35	32
Quintile 5	26	25	24	32	39	..	71	np	28
90th percentile									
Quintile 1	276	223	151	204	222	348	np	476	244
Quintile 2	308	221	148	213	208	291	315	339	267
Quintile 3	277	212	132	202	203	366	343	281	218
Quintile 4	246	220	132	213	195	362	377	301	211
Quintile 5	175	200	120	208	189	..	378	np	194

(a) The data presented for this indicator are sourced from linked records in the National Hospital Morbidity Database and National Elective Surgery Waiting Times Data Collection. The linked records represent about 97 per cent of all records in National Elective Surgery Waiting Times Data Collection for 2007-08.

(b) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Disaggregation by SEIFA area is by usual residence, not SEIFA of hospital 'site'. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory.

.. Not applicable. **np** Not published.

Source: Linked AIHW (unpublished) National Hospital Morbidity Database; AIHW (unpublished) National Elective Surgery Waiting Times Data Collection.

NHA Indicator 35:

Waiting times for emergency department care

Table NHA.35.1 **Patients treated within national benchmarks for emergency department waiting time, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas* (c)	*ACT* (c)	*NT* (d)	*Aust*	
					Peer group A hospitals					
Unit	%	%	%	%	%	%	%	%	%	no.
Triage category 1	100	100	98	99	100	99	np	100	100	32 970
Triage category 2	80	77	67	65	73	72	np	58	74	365 112
Triage category 3	66	68	54	49	54	42	np	42	60	1 259 216
Triage category 4	72	63	58	51	56	47	np	35	62	1 592 865
Triage category 5	87	87	83	79	79	81	np	69	85	336 612
Total (e)	**72**	**69**	**59**	**55**	**60**	**50**	**np**	**41**	**65**	**..**
	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (e), (f)	1 179 132	893 370	756 080	272 826	272 137	74 402	np	88 159	3 587 862	
					Peer group B hospitals					
Unit	%	%	%	%	%	%	%	%	%	no.
Triage category 1	100	100	98	97	100	np	np	..	99	4 338
Triage category 2	84	87	85	75	51	np	np	..	81	73 316
Triage category 3	73	78	71	60	32	np	np	..	70	329 267
Triage category 4	74	69	74	62	50	np	np	..	69	597 603
Triage category 5	89	82	91	85	87	np	np	..	86	202 589
Total (e)	**76**	**75**	**77**	**65**	**44**	**np**	**np**	**..**	**73**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (e), (f)	380 907	339 564	177 448	181 924	39 385	np	np	..	1 207 700	
					Total (Peer group A and B hospitals)					
Unit	%	%	%	%	%	%	%	%	%	no.
Triage category 1	100	100	98	99	100	99	100	100	100	37 308
Triage category 2	81	79	69	67	71	74	81	58	75	438 428
Triage category 3	67	70	56	53	51	54	52	42	62	1 588 483
Triage category 4	72	65	61	56	55	58	51	35	64	2 190 468

Table NHA.35.1 **Patients treated within national benchmarks for emergency department waiting time, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas* (c)	*ACT* (c)	*NT* (d)	*Aust*	
Triage category 5	87	85	87	82	80	86	78	69	86	539 201
Total (e)	**73**	**70**	**63**	**59**	**58**	**60**	**58**	**41**	**67**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (e), (f)	1 560 039	1 232 934	933 528	454 750	311 522	116 757	97 873	88 159	4 795 562	

(a) Data represent the proportion of presentations for which the waiting time to service delivery was within the time specified in the definition of the triage category.

(b) It should be noted that the data presented here are not necessarily representative of the hospitals not included in the NNAPEDCD. Peer group A and B hospitals provided approximately 69 per cent of Emergency Department services.

(c) Data for peer group A and B for the ACT have been suppressed as there is only one hospital in each category. Data for peer group B in Tasmania have been suppressed as there is only one hospital in this category.

(d) There are no peer group B public hospitals in the NT.

(e) The totals include records for which the triage category was not assigned or not reported.

(f) The totals include only those emergency presentations that are treated. They exclude episodes with an episode end status of 'Did not wait to be attended by a health care professional' or 'Dead on arrival, not treated in emergency department'.

np Not published .. Not applicable.

Source : AIHW (unpublished), National Non-admitted Patient Emergency Department Care Database.

Table NHA.35.2 **Patients treated within national benchmarks for emergency department waiting time, by Indigenous status, 2007-08 (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
					Total (Peer group A and B hospitals)					
Unit	%	%	%	%	%	%	%	%	%	no.
Indigenous										
Triage category 1	100	100	99	100	99	100	100	100	100	1 223
Triage category 2	80	81	76	70	72	71	84	57	72	13 354
Triage category 3	67	77	63	60	49	52	51	48	60	57 157
Triage category 4	71	71	67	62	51	58	53	37	61	87 946
Triage category 5	87	89	91	80	78	88	80	66	87	23 315
Total (d)	**73**	**77**	**70**	**64**	**56**	**59**	**58**	**44**	**65**	**..**
	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (d), (e)	42 972	13 981	53 747	24 394	7 323	4 046	1 694	34 858	183 015	
Unit	%	%	%	%	%	%	%	%	%	no.
Non-Indigenous										
Triage category 1	100	100	98	99	100	99	100	100	100	36 085
Triage category 2	81	79	69	67	71	74	81	58	75	425 074
Triage category 3	67	70	56	53	51	54	52	38	62	1 531 326
Triage category 4	72	65	61	56	55	58	51	34	64	2 102 522
Triage category 5	87	85	86	82	80	86	78	70	85	515 886
Total (d)	**73**	**70**	**62**	**58**	**58**	**60**	**58**	**39**	**67**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (d), (e)	1 517 067	1 218 953	879 781	430 356	304 199	112 711	96 179	53 301	4 612 547	

(a) Data represent the proportion of presentations for which the waiting time to service delivery was within the time specified in the definition of the triage category.

(b) It should be noted that the data presented here are not necessarily representative of the hospitals not included in the NNAPEDCD. Peer group A and B hospitals provided approximately 69 epr cent of Emergency Department services.

(c) The quality of the identification of Indigenous patients in National Non-admitted Patient Emergency Department Care Database has not been assessed. Identification of Indigenous patients is not considered to be complete, and completeness may vary among the states and territories.

Table NHA.35.2 **Patients treated within national benchmarks for emergency department waiting time, by Indigenous status, 2007-08 (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(d) The totals include records for which the triage category was not assigned or not reported.

(e) The totals include only those emergency presentations that are treated. They exclude episodes with an episode end status of 'Did not wait to be attended by a health care professional' or 'Dead on arrival, not treated in emergency department'.

.. Not applicable.

Source : AIHW (unpublished), National Non-admitted Patient Emergency Department Care Database.

Table NHA.35.3 **Patients treated within national benchmarks for emergency department waiting time, by remoteness area, 2007-08 (a), (b), (c), (d)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT* (e)	*Aust*	
					Total (Peer group A and B hospitals)					
Unit	%	%	%	%	%	%	%	%	%	no.
Major cities										
Triage category 1	100	100	98	100	100	100	99	100	100	25 596
Triage category 2	80	78	66	66	71	77	80	55	75	307 665
Triage category 3	67	67	52	49	51	51	52	41	60	1 065 254
Triage category 4	72	61	57	51	55	57	51	35	62	1 368 588
Triage category 5	87	81	83	78	80	83	77	78	83	320 685
Total (f)	**73**	**67**	**58**	**55**	**58**	**60**	**58**	**41**	**65**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (f), (g)	1 112 944	820 214	539 829	240 338	282 468	1 810	89 243	2 424	3 089 270	
Unit	%	%	%	%	%	%	%	%	%	no.
Inner regional										
Triage category 1	100	100	97	97	99	99	100	np	99	6 954
Triage category 2	82	81	68	66	72	73	85	68	76	85 914
Triage category 3	70	76	62	52	52	44	50	42	66	344 224
Triage category 4	73	71	64	52	56	49	55	34	67	547 679
Triage category 5	89	89	87	80	79	82	80	69	88	145 570
Total (f)	**75**	**76**	**66**	**56**	**59**	**52**	**60**	**41**	**70**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (f), (g)	389 288	318 768	213 805	123 559	17 330	60 665	5 630	1 423	1 130 468	
Unit	%	%	%	%	%	%	%	%	%	no.
Outer regional										
Triage category 1	100	100	99	98	100	98	100	100	99	2 631

Table NHA.35.3 Patients treated within national benchmarks for emergency department waiting time, by remoteness area, 2007-08 (a), (b), (c), (d)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT* (e)	*Aust*	
Triage category 2	80	87	85	89	74	75	86	55	80	29 265
Triage category 3	70	85	68	87	55	67	52	28	68	119 332
Triage category 4	71	79	67	92	62	69	52	27	69	183 819
Triage category 5	89	92	88	98	85	89	82	60	91	43 612
Total (f)	**74**	**84**	**71**	**91**	**63**	**70**	**59**	**31**	**72**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (f), (g)	37 483	77 383	112 774	46 957	7 206	49 852	2 544	44 464	378 663	
Unit	%	%	%	%	%	%	%	%	%	no.
Remote										
Triage category 1	100	100	98	100	100	96	np	100	99	460
Triage category 2	81	90	81	69	72	77	82	60	71	5 134
Triage category 3	70	90	71	62	56	54	39	57	64	22 042
Triage category 4	73	84	79	67	64	56	61	49	66	29 484
Triage category 5	92	93	93	85	92	85	92	88	92	9 957
Total (f)	**76**	**88**	**81**	**67**	**65**	**59**	**57**	**55**	**69**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (f), (g)	3 227	3 689	25 082	6 031	2 686	3 742	155	22 466	67 078	
Unit	%	%	%	%	%	%	%	%	%	no.
Very remote										
Triage category 1	np	np	100	100	95	np	..	100	100	289
Triage category 2	75	89	84	73	76	64	..	60	71	2 699
Triage category 3	70	88	79	65	57	67	38	53	65	13 304
Triage category 4	73	67	85	67	62	72	67	39	67	20 211
Triage category 5	93	88	94	84	88	100	np	69	93	9 764

Table NHA.35.3 Patients treated within national benchmarks for emergency department waiting time, by remoteness area, 2007-08 (a), (b), (c), (d)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT* (e)	*Aust*	
Total (f)	**76**	**78**	**87**	**69**	**64**	**71**	**60**	**48**	**72**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (f), (g)	463	239	24 340	4 486	854	218	31	15 636	46 267	

(a) Data represent the proportion of presentations for which the waiting time to service delivery was within the time specified in the definition of the triage category.

(b) It should be noted that the data presented here are not necessarily representative of the hospitals not included in the NNAPEDCD. Peer group A and B hospitals provided approximately 69 per cent of Emergency Department services.

(c) Area of usual residence was not reported or not mappable to remoteness areas for approximately 84 000 records.

(d) Remoteness areas are based on the usual residential address of the patient. Not all remoteness areas are represented in each State or Territory. The remoteness area 'Major city' does not exist within Tasmania or the NT, 'Inner regional' does not exist within the NT, 'Remote' does not exist in the ACT and 'Very remote' does not exist in Victoria or the ACT. However, data are reported for the state/territory where the hospital was located. This means, for example, that although there is no ‘major city’ classification in Tasmania, Tasmanian hospitals may treat some patients whose usual residence is a major city in another jurisdiction.

(e) The NT did not report any presentations with a triage category of 1 or 2 for people living in remote or very remote areas.

(f) The totals include records for which the triage category was not assigned or not reported.

(g) The totals include only those emergency presentations that are treated. They exclude episodes with an episode end status of 'Did not wait to be attended by a health care professional' or 'Dead on arrival, not treated in emergency department'.

.. Not applicable. **np** Not published.

Source : AIHW (unpublished) National Non-admitted Patient Emergency Department Care Database.

Table NHA.35.4 **Patients treated within national benchmarks for emergency department waiting time, by SEIFA, 2007-08 (a), (b), (c), (d), (e)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
					Total (Peer group A and B hospitals)					
Unit	%	%	%	%	%	%	%	%	%	no.
Quintile 1										
Triage category 1	100	100	98	100	100	99	100	100	99	8 206
Triage category 2	77	83	66	67	75	71	81	58	75	91 245
Triage category 3	59	70	50	53	54	45	40	42	57	363 095
Triage category 4	68	62	52	53	53	48	54	33	58	471 477
Triage category 5	85	86	79	81	75	82	89	66	83	116 389
Total (f)	**67**	**69**	**55**	**58**	**59**	**51**	**55**	**40**	**62**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (f), (g)	335 103	239 772	231 116	24 639	108 770	83 572	1 345	26 814	1 051 131	
Unit	%	%	%	%	%	%	%	%	%	no.
Quintile 2										
Triage category 1	100	100	99	98	100	98	100	100	100	7 058
Triage category 2	78	79	66	66	69	72	83	58	74	89 172
Triage category 3	66	76	57	50	48	52	55	40	63	317 562
Triage category 4	70	72	64	50	53	57	52	32	66	459 639
Triage category 5	86	89	90	79	81	86	78	68	87	147 148
Total (f)	**72**	**77**	**65**	**54**	**56**	**59**	**60**	**39**	**69**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (f), (g)	450 395	224 174	167 851	94 808	65 224	6 091	4 603	7 839	1 020 985	
Unit	%	%	%	%	%	%	%	%	%	no.
Quintile 3										
Triage category 1	100	100	99	99	100	99	100	100	100	8 140

Table NHA.35.4 **Patients treated within national benchmarks for emergency department waiting time, by SEIFA, 2007-08 (a), (b), (c), (d), (e)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Triage category 2	82	81	71	68	69	74	84	58	76	92 794
Triage category 3	70	70	57	55	48	42	58	50	63	341 653
Triage category 4	75	65	61	60	54	51	51	43	65	518 401
Triage category 5	88	85	86	82	79	81	79	78	86	115 775
Total (f)	**75**	**70**	**62**	**62**	**56**	**53**	**60**	**48**	**68**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (f), (g)	330 703	308 728	185 756	151 135	48 623	17 179	5 702	29 105	1 076 931	
Unit	%	%	%	%	%	%	%	%	%	no.
Quintile 4										
Triage category 1	100	100	99	99	100	100	99	100	100	7 014
Triage category 2	82	78	68	66	69	76	80	56	74	85 716
Triage category 3	67	68	54	51	51	34	49	31	59	304 469
Triage category 4	73	61	59	51	58	44	52	28	61	399 256
Triage category 5	88	83	85	79	86	80	77	60	84	81 603
Total (f)	**73**	**68**	**59**	**55**	**59**	**48**	**57**	**33**	**64**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (f), (g)	209 016	256 464	225 188	78 247	52 063	8 796	30 405	18 124	878 303	
Unit	%	%	%	%	%	%	%	%	%	no.
Quintile 5										
Triage category 1	100	100	99	100	100	np	100	100	100	5 828
Triage category 2	85	73	73	66	70	77	81	56	76	73 556
Triage category 3	75	64	60	51	54	53	52	34	64	245 022
Triage category 4	78	59	64	55	64	54	51	31	65	313 253
Triage category 5	90	81	88	81	88	91	78	71	85	73 505

Table NHA.35.4 **Patients treated within national benchmarks for emergency department waiting time, by SEIFA, 2007-08 (a), (b), (c), (d), (e)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Total (f)	**80**	**65**	**65**	**57**	**62**	**59**	**58**	**36**	**68**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total number (f), (g)	233 473	196 046	112 434	72 542	35 908	649	55 655	4 557	711 264	

(a) Data represent the proportion of presentations for which the waiting time to service delivery was within the time specified in the definition of the triage category.

(b) SEIFA quintiles are based on the SEIFA IRSD, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged.

(c) It should be noted that the data presented here are not necessarily representative of the hospitals not included in the NNAPEDCD. Peer group A and B hospitals provided approximately 69 per cent of Emergency Department services.

(d) Area of usual residence was not reported or not mappable to SEIFA categories for approximately 59 000 records.

(e) Disaggregation by SEIFA area is by usual residence, not SEIFA of hospital 'site'. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory.

(f) The totals include records for which the triage category was not assigned or not reported.

(g) The totals include only those emergency presentations that are treated. They exclude episodes with an episode end status of 'Did not wait to be attended by a health care professional' or 'Dead on arrival, not treated in emergency department'.

.. Not applicable.

Source : AIHW (unpublished) National Non-admitted Patient Emergency Department Care Database.

NHA Indicator 36:

No data are currently available to inform this indicator

Waiting times for admission following emergency department care

NHA Indicator 37:

No data are currently available to inform this indicator

Waiting times for radiotherapy and orthopaedic specialists

NHA Indicator 38:

No data are currently available to inform this indicator

Adverse drug events in hospitals

NHA Indicator 39:

Healthcare-associated Staphylococcus aureus (including MRSA) bacteraemia in acute care hospitals

Table NHA.39.1 **Episodes of *Staphylococcus aureus* (including MRSA) bacteraemia (SAB) in acute care hospitals, 2008-09**

	NSW	*Vic*	*Qld* (a)	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Patient episodes of methicillin-resistant SAB associated with healthcare (b)									
Number	..	..	291	129	152	51	44	..	..

(a) The Queensland data only include episode in adult patients (for example, >14 years of age).

(b) The number of patient episodes of *Staphylococcus aureus* bacteraemia (both methicillin-resistant and methicillin-sensitive) where the time when the first positive blood culture was collected was 48 hours or more after admission to hospital

plus

The number of patient episodes of *Staphylococcus aureus* bacteraemia (both methicillin-resistant and methicillin-sensitive) where the time when the first positive blood culture was collected was within 48 hours of the time of a discharge from hospital

plus

The number of any additional patient episodes of *Staphylococcus aureus* bacteraemia (both methicillin-resistant and methicillin-sensitive) where the time when the first positive blood culture was collected was within 48 hours of the time of admission and one of the following clinical criteria were met:

- SAB is a complication of the presence of an indwelling medical device
- SAB occurs within 30 days of a surgical procedure and is related to the surgical site
- SAB occurs within 48 hours of, and is related to, an invasive instrumentation or incision
- SAB is associated with neutropenia ($<1\times10^9$/L) contributed to by cytotoxic therapy

.. Not applicable.

Source: AIHW (unpublished) sourced from State and Territory healthcare-associated infection surveillance data.

NHA Indicator 40:

No data are currently available to inform this indicator

Pressure ulcers in hospitals

NHA Indicator 41:

Falls resulting in patient harm in hospitals

Table NHA.41.1 Separations for falls that occurred in a health care setting, 2007-08

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Number									
Hospital sector									
Private	985	878	1 121	415	310	np	np	np	3 848
Public	4 881	3 710	2 098	1 199	977	np	np	np	13 457
Indigenous status (a)									
Indigenous	66	np	42	43	np	np	np	39	209
Other Australians	5 800	np	3 177	1 571	np	np	np	72	16 476
Remoteness of residence (b)									
Major cities	4 196	3 100	1 922	1 175	926	..	179	..	11 501
Inner regional	1 233	1 140	772	208	np	272	np	..	3 775
Outer regional	379	np	423	146	186	138	np	72	1 693
Remote and Very rem	19	np	92	80	np	np	..	37	274
SEIFA of residence (c)									
Quintile 1	1 254	824	810	117	464	264	np	np	3 775
Quintile 2	1 776	923	558	368	272	np	33	np	3 957
Quintile 3	1 050	956	705	462	204	70	np	np	3 493
Quintile 4	723	897	696	260	201	60	57	17	2 911
Quintile 5	1 047	988	440	405	146	..	107	np	3 141
Total (d)	**5 866**	**4 588**	**3 219**	**1 614**	**1 287**	**413**	**207**	**111**	**17 305**
Rate per 1000 separations									
Hospital sector									
Private	1.1	1.1	1.4	1.3	1.3	np	np	np	1.2
Public	3.3	2.7	2.5	2.6	2.7	3.2	2.1	1.2	2.8
Indigenous status (a)									
Indigenous	1.2	np	0.6	0.8	0.6	np	np	0.6	0.8
Other Australians	2.6	2.1	2.1	2.2	2.2	np	np	1.7	2.2

Table NHA.41.1 Separations for falls that occurred in a health care setting, 2007-08

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Remoteness of residence (b)									
Major cities	2.6	1.9	2.0	2.1	2.1	..	1.8	..	2.2
Inner regional	2.5	2.7	2.1	2.1	2.0	2.5	1.4	..	2.4
Outer regional	2.4	3.0	1.8	2.0	2.4	2.6	2.0	1.6	2.2
Remote and Very rem	1.2	np	1.7	1.4	1.9	np	..	0.7	1.3
SEIFA of residence (c)									
Quintile 1	2.5	2.2	2.0	1.8	2.2	2.8	np	0.8	2.2
Quintile 2	2.8	2.3	2.0	2.3	2.1	1.7	4.2	np	2.4
Quintile 3	2.7	2.1	2.1	1.8	2.2	2.1	np	1.7	2.2
Quintile 4	2.3	2.0	2.0	2.0	2.0	2.3	1.4	1.2	2.0
Quintile 5	2.2	2.0	1.8	2.3	1.8	..	1.8	np	2.0
Total (d)	**2.5**	**2.1**	**2.0**	**2.1**	**2.1**	**2.4**	**1.8**	**1.1**	**2.2**

(a) The Australian totals for Indigenous/Other Australians do not include data for the Australian Capital Territory or Tasmania.

(b) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Separations are reported by jurisdiction of hospital, regardless of the jurisdiction of usual residence. Not all remoteness areas are represented in each state or territory. However, interstate visitors residing in these remoteness areas may be treated in those states and territories.

(c) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence.

(d) Total includes separations for which place of residence was not known or not stated.

np Not published. .. Not applicable.

Source: AIHW (unpublished) National Hospital Morbidity Database (Admitted Patient Care National Minimum Data Set).

NHA Indicator 42:

Intentional self-harm in hospitals

Table NHA.42.1 Separations for intentional self-harm that occurred in a health care setting, 2007-08

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Number				
Hospital sector									
Private	73	94	104	102	32	np	np	np	410
Public	306	146	230	214	81	np	np	np	1 024
Indigenous status (a)									
Indigenous	12	np	12	6	np	np	np	np	38
Other Australians	367	np	322	310	np	np	np	np	1 351
Remoteness of residence (b)									
Major cities	270	173	224	266	75	..	27	..	1 036
Inner regional	81	50	69	27	13	12	np	..	253
Outer regional	20	np	np	np	15	4	np	np	112
Remote and Very remote	–	np	np	np	10	np	..	np	20
SEIFA of residence (c)									
Quintile 1	77	31	69	12	41	np	–	np	238
Quintile 2	97	39	37	65	21	np	np	np	261
Quintile 3	81	59	74	77	19	np	np	np	320
Quintile 4	42	52	83	75	19	np	8	np	284
Quintile 5	80	58	69	86	13	..	18	np	325
Total (c)	**379**	**240**	**334**	**316**	**113**	**17**	**28**	**7**	**1 434**
					Rate per 1000 separations				
Hospital sector									
Private	0.1	0.1	0.1	0.3	0.1	np	np	np	0.1
Public	0.2	0.1	0.3	0.5	0.2	np	np	np	0.2
Indigenous status (a)									
Indigenous	0.2	np	0.2	0.1	np	np	np	np	0.1
Other Australians	0.2	0.1	0.2	0.4	0.2	np	np	np	0.2

Table NHA.42.1 **Separations for intentional self-harm that occurred in a health care setting, 2007-08**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Remoteness of residence (b)									
Major cities	0.2	0.1	0.2	0.5	0.2	..	0.3	..	0.2
Inner regional	0.2	0.1	0.2	0.3	0.2	0.1	np	..	0.2
Outer regional	0.1	0.1	0.2	0.3	0.2	np	np	np	0.1
Remote and Very remote	–	np	np	np	np	np	..	np	0.1
SEIFA of residence (c)									
Quintile 1	0.2	0.1	0.2	0.2	0.2	0.1	–	np	0.1
Quintile 2	0.2	0.1	0.1	0.4	0.2	np	np	np	0.2
Quintile 3	0.2	0.1	0.2	0.3	0.2	np	np	0.3	0.2
Quintile 4	0.1	0.1	0.2	0.6	0.2	np	0.2	np	0.2
Quintile 5	0.2	0.1	0.3	0.5	0.2	..	0.3	np	0.2
Total (d)	**0.2**	**0.1**	**0.2**	**0.4**	**0.2**	**0.1**	**0.2**	**0.1**	**0.2**

(a) The Australian totals for Indigenous/Other Australians do not include data for the Australian Capital Territory or Tasmania.

(b) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Separations are reported by jurisdiction of hospital, regardless of the jurisdiction of usual residence. Not all remoteness areas are represented in each State or Territory. However, interstate visitors residing in these remoteness areas may be treated in those states and territories.

(c) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence.

(d) Total includes separations for which place of residence was not known or not stated.

– Nil or rounded to zero. **np** Not published. .. Not applicable.

Source: AIHW (unpublished) National Hospital Morbidity Database (Admitted Patient Care National Minimum Data Set).

NHA Indicator 43:

Unplanned/unexpected readmissions within 28 days of selected surgical admissions

Table NHA.43.1 **Rate of unplanned/unexpected readmission within 28 days of selected surgical admissions, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)	
Unit	Rate per 1000 separations									no.
Surgical procedure prior to separation										
Knee replacement	32.3	23.7	37.6	23.5	20.0	np	np	np	30.0	239
Hip replacement	16.4	24.6	22.9	15.4	15.1	np	np	np	19.6	124
Tonsillectomy and Adenoidectomy	26.8	30.9	35.0	38.5	28.1	42.7	29.0	64.9	30.5	516
Hysterectomy	29.8	35.0	37.8	31.2	24.6	47.6	np	np	32.7	324
Prostatectomy	34.3	28.5	40.6	30.1	39.7	np	np	np	34.2	237
Cataract surgery	3.5	3.5	3.4	3.7	4.2	np	np	18.0	3.7	159
Appendicectomy	22.5	25.4	26.1	27.3	27.7	31.3	15.5	21.6	24.4	455

(a) The reported rate is the number of unplanned/unexpected readmissions per 1000 separations.

(b) This indicator is limited to public hospitals.

(c) Total rates and numbers for Australia do not include WA.

np Not published.

Source: AIHW (unpublished) Admitted Patient Care National Minimum Data Set; WA Health (unpublished).

Table NHA.43.2 Rate of unplanned/unexpected readmission within 28 days of selected surgical admissions, by Indigenous status, remoteness and SEIFA, 2007-08 (a), (b)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)	
Unit				Rate per 1000 separations						no.
					Knee replacement					
Hospital peer group										
Peer group A	39.3	24.2	39.0	29.1	21.6	np	np	np	34.4	179
Peer group B	24.7	21.4	31.1	38.0	np	np	np	np	23.1	40
Other peer groups	16.6	24.3	np	15.5	np	np	np	np	19.1	20
Indigneous status (d)										
Indigenous	np	np	np	np	np	np	np	np	np	np
Other Australians	32.6	23.7	37.8	23.7	20.0	np	np	np	30.7	237
Remoteness of residence (e)										
Major cities	33.5	23.1	44.3	28.5	22.2	np	np	np	32.5	155
Inner regional	29.9	25.7	27.1	np	np	np	np	np	26.0	55
Outer regional	27.0	np	np	np	np	np	np	np	26.5	26
Remote & Very remote	np	np	np	np	np	np	np	np	np	3
SEIFA of residence (f)										
Quintile 1	29.5	20.8	31.6	np	20.2	np	np	np	26.3	64
Quintile 2	38.9	17.7	29.5	31.5	34.3	np	np	np	31.6	67
Quintile 3	37.1	17.8	45.6	np	np	np	np	np	29.7	44
Quintile 4	32.9	43.8	44.6	np	np	np	np	np	39.9	46
Quintile 5	np	np	np	np	np	np	np	np	np	18
					Hip replacement					
Hospital peer group										
Peer group A	19.5	22.9	24.6	np	18.3	np	np	np	21.1	90
Peer group B	11.4	40.5	np	np	np	np	np	np	18.3	23
Other peer groups	np	np	np	15.9	np	np	np	np	np	11
Indigneous status (d)										

Table NHA.43.2 Rate of unplanned/unexpected readmission within 28 days of selected surgical admissions, by Indigenous status, remoteness and SEIFA, 2007-08 (a), (b)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)	
Indigenous	np	np	np	np	np	np	np	np	np	np
Other Australians	16.5	24.7	23.0	15.5	15.3	np	np	np	20.1	123
Remoteness of residence (e)										
Major cities	13.4	31.3	23.5	19.5	np	np	np	np	18.9	68
Inner regional	23.7	18.8	27.6	np	np	np	np	np	21.7	39
Outer regional	np	np	np	np	np	np	np	np	20.8	17
Remote & Very remote	np	np	np	np	np	np	np	np	np	np
SEIFA of residence (f)										
Quintile 1	22.6	12.8	26.1	np	17.9	np	np	np	19.0	33
Quintile 2	14.0	14.4	np	np	np	np	np	np	15.7	27
Quintile 3	21.8	32.8	24.4	21.1	np	np	np	np	25.6	31
Quintile 4	np	40.7	14.6	np	np	np	np	np	19.6	18
Quintile 5	np	np	np	np	np	np	np	np	20.7	15
				Tonsillectomy and Adenoidectomy						
Hospital peer group										
Peer group A	29.0	35.2	37.1	57.0	33.3	np	31.1	np	34.0	373
Peer group B	26.9	27.4	np	14.2	np	np	np	np	26.4	84
Other peer groups	11.6	28.4	np	26.7	np	np	np	np	21.5	59
Indigneous status (d)										
Indigenous	21.3	np	33.0	np	np	np	np	np	26.5	20
Other Australians	27.2	np	35.2	39.2	np	np	np	np	30.6	493
Remoteness of residence (e)										
Major cities	26.9	31.1	48.6	49.7	29.9	np	33.0	np	33.0	331
Inner regional	27.1	29.1	13.1	47.1	np	np	np	np	25.0	117
Outer regional	24.0	35.6	14.7	np	29.7	np	np	np	31.9	58
Remote & Very remote	np	np	np	np	np	np	np	np	np	10

Table NHA.43.2 Rate of unplanned/unexpected readmission within 28 days of selected surgical admissions, by Indigenous status, remoteness and SEIFA, 2007-08 (a), (b)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)	
SEIFA of residence (f)										
Quintile 1	28.0	29.9	31.5	94.9	29.4	np	np	np	29.5	141
Quintile 2	23.6	33.0	32.5	44.0	19.3	np	np	np	27.9	124
Quintile 3	22.4	28.0	27.7	np	17.9	np	np	np	26.4	90
Quintile 4	21.1	39.2	47.1	38.5	45.2	np	np	np	38.4	99
Quintile 5	47.8	20.3	37.3	28.6	np	np	np	np	36.8	62
					Hysterectomy					
Hospital peer group										
Peer group A	28.4	39.1	34.5	35.1	np	np	np	np	32.2	202
Peer group B	25.5	31.7	40.2	32.6	np	np	np	np	31.3	62
Other peer groups	39.0	30.3	np	24.6	30.3	np	np	np	36.4	60
Indigneous status (d)										
Indigenous	np	np	np	np	np	np	np	np	np	11
Other Australians	29.7	34.2	37.7	31.3	25.1	np	np	np	32.3	311
Remoteness of residence (e)										
Major cities	25.0	35.6	34.1	49.3	17.6	np	np	np	29.1	162
Inner regional	38.2	33.4	41.6	np	np	np	np	np	37.2	102
Outer regional	33.1	37.3	45.0	33.0	28.7	np	np	np	36.8	51
Remote & Very remote	np	np	np	np	np	np	np	np	np	6
SEIFA of residence (f)										
Quintile 1	34.4	38.4	37.0	np	26.8	np	np	np	35.4	102
Quintile 2	32.4	27.7	31.4	37.0	23.1	np	np	np	30.5	80
Quintile 3	25.7	39.2	51.5	np	np	np	np	np	37.1	72
Quintile 4	24.5	45.6	30.1	np	np	np	np	np	31.7	48
Quintile 5	21.7	18.7	np	np	np	np	np	np	23.7	22
					Prostatectomy					

Table NHA.43.2 Rate of unplanned/unexpected readmission within 28 days of selected surgical admissions, by Indigenous status, remoteness and SEIFA, 2007-08 (a), (b)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)	
Hospital peer group										
Peer group A	38.4	32.0	34.8	50.0	45.3	np	np	np	36.4	162
Peer group B	17.9	15.6	78.1	23.6	29.6	np	np	np	25.0	35
Other peer groups	28.0	np	48.8	np	41.4	np	np	np	36.8	40
Indigneous status (d)										
Indigenous	np	np	np	np	np	np	np	np	np	2
Other Australians	34.2	28.5	41.2	28.6	39.8	np	np	np	34.0	232
Remoteness of residence (e)										
Major cities	34.5	23.4	40.0	46.4	39.8	np	np	np	32.2	133
Inner regional	36.5	35.6	30.2	84.2	np	np	np	np	35.8	63
Outer regional	24.7	36.9	np	np	np	np	np	np	34.5	32
Remote & Very remote	np	np	np	np	np	np	np	np	np	7
SEIFA of residence (f)										
Quintile 1	39.2	26.7	27.4	np	32.8	np	np	np	32.7	69
Quintile 2	29.3	34.5	23.0	np	50.8	np	np	np	32.0	57
Quintile 3	38.0	25.7	51.2	69.0	np	np	np	np	36.5	47
Quintile 4	36.3	31.0	np	21.3	np	np	np	np	37.9	38
Quintile 5	29.1	22.9	np	np	np	np	np	np	34.5	26
					Cataract surgery					
Hospital peer group										
Peer group A	4.3	3.1	3.8	13.8	8.9	np	np	19.8	4.8	91
Peer group B	np	np	np	np	np	np	np	np	np	35
Other peer groups	3.0	1.6	np	np	np	np	np	np	np	33
Indigneous status (d)										
Indigenous	np	np	np	np	np	np	np	np	np	7
Other Australians	3.5	3.5	3.1	3.4	4.1	np	np	17.1	3.6	151

Table NHA.43.2 Rate of unplanned/unexpected readmission within 28 days of selected surgical admissions, by Indigenous status, remoteness and SEIFA, 2007-08 (a), (b)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)	
Remoteness of residence (e)										
Major cities	5.2	4.7	2.3	np	5.4	np	np	np	4.5	112
Inner regional	1.1	1.3	5.1	7.2	np	np	np	np	1.5	17
Outer regional	2.0	np	5.4	np	np	np	np	np	3.9	23
Remote & Very remote	np	np	np	np	np	np	np	np	np	7
SEIFA of residence (f)										
Quintile 1	5.5	2.3	3.8	np	2.3	np	np	np	4.0	50
Quintile 2	1.3	2.6	1.8	np	9.2	np	np	np	2.5	30
Quintile 3	2.6	3.4	5.7	5.3	np	np	np	np	3.5	29
Quintile 4	4.3	4.2	np	6.5	np	np	np	np	4.0	25
Quintile 5	7.2	6.3	np	np	np	np	np	np	5.5	25
					Appendicectomy					
Hospital peer group										
Peer group A	24.3	24.4	25.0	27.1	30.9	32.2	np	22.5	24.8	349
Peer group B	18.8	28.1	36.0	27.8	24.2	np	np	np	24.8	79
Other peer groups	15.6	28.7	np	27.8	17.6	np	np	np	19.6	27
Indigneous status (d)										
Indigenous	np	np	np	41.4	np	np	np	np	np	12
Other Australians	22.8	25.0	26.1	26.2	28.3	np	np	np	24.6	434
Remoteness of residence (e)										
Major cities	22.0	26.0	28.1	33.1	32.7	np	14.8	np	24.8	294
Inner regional	27.5	24.8	19.6	np	np	31.8	np	np	24.7	103
Outer regional	13.4	25.9	22.2	np	22.3	np	np	np	21.7	43
Remote & Very remote	np	np	np	np	np	np	np	np	np	12
SEIFA of residence (f)										
Quintile 1	20.2	32.2	31.7	np	30.4	25.6	np	np	26.9	117

Table NHA.43.2 Rate of unplanned/unexpected readmission within 28 days of selected surgical admissions, by Indigenous status, remoteness and SEIFA, 2007-08 (a), (b)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)	
Quintile 2	23.2	23.9	34.9	np	18.9	np	np	np	24.5	99
Quintile 3	27.7	23.6	21.3	np	29.9	np	np	np	25.4	93
Quintile 4	18.3	24.7	19.4	np	25.9	np	np	np	21.1	75
Quintile 5	23.4	23.6	26.3	np	np	np	np	np	24.1	71

(a) The reported rate is the number of unplanned/unexpected readmissions per 1000 separations.

(b) The denominator for calculating the reported rate is limited to those separations which have a separation date between 1 July 2007 and 19 May 2008. In addition, the denominator excludes those separations where the patient died in hospital.

(c) Total rates and numbers for Australia do not include WA.

(d) The Australian totals for Indigenous/Other Australians do not include data for the ACT or Tasmania.

(e) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Separations are reported by jurisdiction of hospital, regardless of the jurisdiction of usual residence.

(f) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence.

np Not published.

Source: AIHW (unpublished) Admitted Patient Care National Minimum Data Set; WA Health (unpublished).

NHA Indicator 44:

Survival of people diagnosed with cancer

Table NHA.44.1 Five-year relative survival proportions for people diagnosed with cancer (relative rate) (a)

	Per cent	*95 per cent confidence interval*
Sex (b)		
Males	58.4	58.2–58.6
Females	64.1	63.9–64.3
Remoteness of residence (c)		
Major cities	61.2	61.0–61.3
Inner regional	60.3	60.0–60.6
Outer regional	58.5	58.0–58.9
Remote and Very remote	57.8	56.7–58.8
SEIFA of residence (d)		
Quintile 1	57.3	56.9–57.7
Quintile 2	60.1	59.8–60.5
Quintile 3	61.4	61.0–61.8
Quintile 4	63.4	63.0–63.8
Quintile 5	66.3	65.9–66.7

(a) Excluding non-melanocytic skin cancer which is not mandated for collection. Cancer cases diagnosed up to 2004 were observed for evidence of survival to 31 December 2006.

(b) Cancers diagnosed in 1998 to 2004.

(c) Cancers diagnosed in 1997 to 2004.

(d) Cancers diagnosed in 2000 to 2004. SEIFA quintiles are based on the SEIFA IRSD, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged.

Source: AIHW, Cancer Australia and Australasian Association of Cancer Registries (2008) *Cancer survival and prevalence in Australia: cancers diagnosed from 1982 to 2004,* Cancer Series no. 42, Cat. no. CAN 38.

NHA Indicator 45:

Rates of services: Overnight separations

Table NHA.45.1 **Overnight separations, 2007-08 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*	
					Age standardised rate per 1000 population					no.
Hospital sector										
Private	37.2	51.1	60.9	54.6	52.3	np	np	np	48.6	1 064 784
Public	115.3	108.1	101.2	106.6	120.7	89.2	117.8	186.3	110.4	2 380 460
Indigenous status (c)										
Indigenous	190.4	164.1	216.5	314.0	317.8	np	np	298.1	224.2	111 090
Other Australians	112.4	116.6	117.3	115.7	128.1	np	np	88.4	111.3	3 201 928
Remoteness of residence (d)										
Major cities	144.8	152.1	149.8	149.9	161.9	..	135.3	..	149.4	2 205 304
Inner regional	163.8	176.3	176.1	169.2	169.3	138.1	np	..	169.6	743 467
Outer regional	182.5	193.6	170.5	189.2	231.4	150.2	..	176.4	183.0	372 111
Remote	252.4	248.1	231.4	208.9	212.1	170.2	..	216.8	222.7	66 475
Very remote	271.2	..	256.8	256.6	256.6	173.8	..	270.6	263.3	39 807
SEIFA of residence (e)										
Quintile 1	168.2	167.1	191.1	261.2	199.7	145.8	np	241.4	179.6	788 637
Quintile 2	159.0	175.2	184.5	170.6	168.3	141.9	927.7	229.7	169.1	751 732
Quintile 3	152.0	163.0	154.6	154.9	179.5	147.8	298.6	284.8	158.7	684 297
Quintile 4	141.6	154.4	144.8	156.0	149.3	130.0	183.6	146.4	148.5	607 949
Quintile 5	135.5	144.2	137.6	142.1	142.1	..	127.3	172.3	139.1	605 538
Total	**152.5**	**159.2**	**162.2**	**161.1**	**173.0**	**np**	**np**	**np**	**159.0**	**..**
Unit	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total no.	1 096 829	865 632	681 609	337 839	296 833	np	np	np	3 445 244	..

(a) Rates are age standardised to the Australian population as at 30 June 2001.

(b) The high rates for ACT are due to in part to ACT separations that include interstate separations, and use ACT population as the denominator.

(c) The Australian totals for Indigenous/Other Australians do not include data for the ACT or Tasmania.

Table NHA.45.1 **Overnight separations, 2007-08 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*

(d) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each remoteness population group (regardless of where they reside) divided by the number of people in that remoteness population group in the jurisdiction of hospitalisation.

(e) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the ABS Index of Relative Socio-economic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each State or Territory. Disaggregation by SEIFA is based on the patient's usual residence, not the location of the hospital. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each SEIFA population group (regardless of where they reside) divided by the number of people in that SEIFA population group in the jurisdiction of hospitalisation.

.. Not applicable. **np** Not published.

Source : AIHW (unpublished), National Hospital Morbidity Database; ABS (unpublished) Estimated Residential Population, 30 June 2007; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2007, Series B, Cat. no. 3238.0.

NHA Indicator 46:

Rates of service: Outpatient occasions of service

Table NHA.46.1 **Public hospital outpatient occasions of service, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas* (c)	*ACT*	*NT*	*Aust*	
Unit	Rate per 1000 population									no.
Type of outpatient care										
Allied health	113.8	203.3	140.5	460.2	115.5	178.5	75.0	47.2	176.3	3 715 798
Dental	75.8	43.0	63.5	5.3	5.7	..	..	..	49.1	1 034 822
Dialysis	3.7	..	..	..	..	..	..	..	1.2	25 319
Drug and alcohol	197.5	4.6	17.4	..	..	..	..	..	69.3	1 460 393
Endoscopy	1.9	..	3.0	..	11.0	3.4	6.4	..	2.2	46 995
Mental health	108.8	132.6	22.6	24.2	16.7	..	4.8	..	76.8	1 617 869
Other medical/surgical/ obstetric	731.8	302.3	585.4	338.1	626.5	749.9	787.2	524.0	547.9	11 545 782
Total outpatient care (d), (e)	**1 233.2**	**685.7**	**832.4**	**827.7**	**775.4**	**931.7**	**873.5**	**571.2**	**922.9**	**..**

(a) Based on the ABS Estimated Resident Population at 30 June 2007.

(b) Public psychiatric hospitals are excluded.

(c) The Mersey Community Hospital is included in the data for Tasmania.

(d) It is possible that a single occasion of service may have more than one outpatient type recorded if a person attends multiple clinics in a single ‘session’, so the total could be less than the sum of the components.

(e) Total excludes Accident and Emergency, Pharmacy, Community Health, District nursing, Pathology, Radiology and organ imaging, and Other outreach.

.. Not applicable.

Source: AIHW (unpublished), National Public Hospital Establishments database; ABS (unpublished) Estimated Residential Population, 30 June 2007.

NHA Indicator 47:

Rates of services: Non-acute care separations

Table NHA.47.1 **Non-acute care separations, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Aust*	
Unit	Age standardised rate per 1000 population									no.
Hospital sector										
Private	2.0	2.7	2.0	1.5	1.9	np	np	np	2.1	48 165
Public	4.6	5.6	4.4	6.3	3.9	3.4	15.1	9.3	5.0	114 516
Indigenous status (d)										
Indigenous	3.6	4.1	6.3	8.0	4.4	np	np	6.9	5.2	2 100
Non-Indigenous	3.0	3.5	2.7	3.2	2.7	np	np	2.8	2.9	152 919
Remoteness of residence (e)										
Major cities	6.9	8.8	6.9	8.2	6.3	..	13.0	..	7.6	116 105
Inner regional	6.1	7.2	5.3	6.1	4.1	6.0	np	..	6.2	30 891
Outer regional	6.1	6.5	5.5	7.2	4.9	3.3	..	12.3	6.0	12 939
Remote	6.4	6.6	5.1	6.8	5.2	4.4	..	2.1	5.5	1 419
Very remote	5.3	..	6.7	8.4	6.8	2.8	..	6.9	7.3	783
SEIFA of residence (f)										
Quintile 1	6.3	7.5	6.5	8.9	5.9	4.2	np	8.8	6.5	31 105
Quintile 2	5.5	7.6	7.1	8.5	5.6	4.1	105.9	4.6	6.5	32 029
Quintile 3	7.2	8.3	5.6	7.5	6.0	6.1	27.8	19.4	7.2	31 816
Quintile 4	6.6	8.3	6.3	8.3	5.9	8.0	17.1	5.3	7.3	29 677
Quintile 5	8.3	9.5	6.5	7.0	5.9	..	12.0	5.2	8.3	37 813
Total (g)	**6.7**	**8.3**	**6.3**	**7.8**	**5.8**	**np**	**np**	**np**	**7.1**	
	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total no.	51 734	47 931	26 620	16 128	11 668	np	np	np	162 681	

(a) Rates are age standardised to the Australian population as at 30 June 2001.

(b) Non-acute care separations are for overnight admissions only and include the care types Rehabilitation, Palliative care, Geriatric evaluation and management, Psychogeriatic care and Maintenance care. Caution should be used in the interpretations of these data as there is some variation in the use of care type categories between jurisdictions.

(c) The high rates for ACT are due to in part to ACT separations that include interstate separations, and use ACT population as the denominator.

Table NHA.47.1 **Non-acute care separations, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Aust*

(d) The Australian totals for Indigneous/Other Australians do not include data for the ACT and Tasmania.

(e) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each remoteness population group (regardless of where they reside) divided by the number of people in that remoteness population group in the jurisdiction of hospitalisation.

(f) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the ABS Index of Relative Socio-economic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory. Disaggregation by SEIFA is based on the patient's usual residence, not the location of the hospital. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each SEIFA population group (regardless of where they reside) divided by the number of people in that SEIFA population group in the jurisdiction of hospitalisation.

(g) Total includes separations where place of residence was not stated.

.. Not applicable. **np** Not published.

Source : AIHW (unpublished) National Hospital Morbidity database; ABS (unpublished) Estimated Residential Population, 30 June 2007; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2007, Series B, Cat. no. 3238.0.

Table NHA 47.2 **Non-acute care separations, by care type, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Aust*	
Unit	Age standardised rate per 1000 population									no.
	Rehabilitation									
Hospital sector										
Private	2.0	2.4	1.2	0.6	1.8	np	np	np	1.8	40 250
Public	2.6	2.3	1.9	4.0	1.9	1.9	7.0	1.4	2.5	56 805
Indigenous status (d)										
Indigenous	2.2	2.8	3.1	4.5	2.1	np	np	1.5	2.6	1 035
Non-Indigenous	2.1	2.2	1.4	1.9	1.8	np	np	0.5	1.8	91 680
Remoteness of residence (e)										
Major cities	5.0	5.0	3.6	5.1	4.1	..	6.3	..	4.7	72 059
Inner regional	3.9	3.9	2.6	2.9	2.5	4.2	np	..	3.6	17 617
Outer regional	3.1	3.9	2.1	2.6	2.7	2.0	..	1.5	2.8	5 976
Remote	3.0	4.9	1.9	3.4	3.1	2.4	..	0.9	2.7	715
Very remote	2.7	..	2.0	4.2	3.4	np	..	1.7	2.8	321
SEIFA of residence (f)										
Quintile 1	3.8	3.9	3.2	3.7	3.6	2.6	np	1.5	3.6	16 921
Quintile 2	3.7	4.2	3.4	5.0	3.4	2.7	59.4	1.5	3.9	18 929
Quintile 3	4.8	4.5	2.7	4.4	3.8	4.5	15.1	2.0	4.2	18 397
Quintile 4	4.5	4.9	3.2	5.1	4.0	5.9	8.2	1.0	4.4	17 899
Quintile 5	6.4	5.8	3.5	4.3	4.0	..	5.8	0.4	5.4	24 767
Total (g)	**4.6**	**4.7**	**3.2**	**4.6**	**3.7**	**np**	**np**	**np**	**4.3**	
	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total no.	35 400	27 078	13 250	9 462	7 347	np	np	np	97 055	
	Palliative care									
Hospital sector										
Private	0.1	0.1	0.4	0.8	0.1	np	np	np	0.2	4 718
Public	1.0	0.9	0.9	0.6	0.7	0.5	1.9	2.8	0.9	20 059

Table NHA 47.2 **Non-acute care separations, by care type, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Aust*	
Indigenous status (d)										
Indigenous	0.6	0.5	1.3	1.3	0.9	np	np	1.2	0.9	338
Non-Indigenous	0.5	0.5	0.6	0.7	0.4	np	np	1.2	0.5	23 567
Remoteness of residence (e)										
Major cities	1.0	1.0	1.5	1.2	0.8	..	1.7	..	1.1	16 754
Inner regional	1.0	0.9	1.2	1.8	0.7	0.7	np	..	1.0	5 107
Outer regional	1.2	0.5	1.2	2.7	0.7	0.3	..	4.2	1.2	2 544
Remote	0.9	0.5	0.8	1.3	0.6	np	..	0.3	0.8	224
Very remote	np	..	0.9	1.4	0.8	np	..	0.9	1.0	108
SEIFA of residence (f)										
Quintile 1	1.2	1.0	1.4	3.1	0.8	0.5	np	3.2	1.2	5 544
Quintile 2	0.9	0.9	1.8	1.4	0.7	0.5	6.6	2.2	1.0	5 060
Quintile 3	1.1	1.0	1.2	1.4	1.0	0.7	2.7	3.1	1.1	5 024
Quintile 4	1.1	0.9	1.2	1.2	0.8	0.7	1.9	2.4	1.1	4 363
Quintile 5	0.9	1.0	1.4	1.2	0.6	..	1.7	2.9	1.1	4 770
Total (g)	**1.0**	**1.0**	**1.4**	**1.4**	**0.8**	**np**	**np**	**np**	**1.1**	
	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total no.	7 808	5 507	5 814	2 981	1 506	np	np	np	24 777	
				Geriatric evaluation and management						
Hospital sector										
Private	–	–	–	–	–	np	np	np	–	67
Public	0.2	1.8	0.1	0.3	0.1	–	1.9	1.1	0.6	14 593
Indigenous status (d)										
Indigenous	0.1	0.6	0.1	0.1	np	np	np	np	0.1	57
Non-Indigenous	0.1	0.6	–	0.1	np	np	np	0.3	0.2	14 059
Remoteness of residence (e)										
Major cities	0.2	2.0	0.2	0.4	0.1	..	1.7	..	0.7	11 226

Table NHA 47.2 **Non-acute care separations, by care type, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Aust*	
Inner regional	0.2	1.6	0.1	–	0.1	–	np	..	0.5	2 623
Outer regional	0.3	1.2	0.2	np	–	np	..	1.7	0.4	771
Remote	0.3	0.6	np	np	–	np	..	–	0.1	18
Very remote	–	..	np	np	np	–	..	0.2	–	5
SEIFA of residence (f)										
Quintile 1	0.1	2.0	0.1	np	0.1	–	np	0.9	0.5	2 492
Quintile 2	0.1	1.8	0.1	0.4	0.1	–	9.4	–	0.5	2 627
Quintile 3	0.4	2.1	0.1	0.3	np	np	2.4	3.2	0.7	3 253
Quintile 4	0.3	1.7	0.1	0.5	0.1	np	2.1	0.4	0.7	2 824
Quintile 5	0.2	1.7	0.2	0.2	0.1	..	1.7	–	0.7	3 454
Total (g)	**0.2**	**1.8**	**0.1**	**0.3**	**0.1**	**np**	**np**	**np**	**0.6**	
	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total no.	1 655	10 991	581	602	217	np	np	np	14 660	
Psychogeriatric care										
Hospital sector										
Private	–	0.2	–	–	–	np	np	np	0.1	1 495
Public	0.1	0.4	0.1	0.3	0.1	–	0.1	0.1	0.2	4 330
Indigenous status (d)										
Indigenous	–	0.2	np	np	np	np	np	–	–	19
Non-Indigenous	–	0.2	–	0.1	–	np	np	–	0.1	5 779
Remoteness of residence (e)										
Major cities	0.2	0.7	0.2	0.4	0.2	..	0.1	..	0.3	4 914
Inner regional	–	0.4	–	0.2	0.1	np	-	..	0.1	682
Outer regional	–	0.3	–	0.1	–	np	..	0.2	0.1	192
Remote	np	np	np	np	np	-	..	-	–	9
Very remote	–	..	np	np	-	-	..	-	np	np
SEIFA of residence (f)										

Table NHA 47.2 **Non-acute care separations, by care type, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Aust*	
Quintile 1	0.1	0.4	0.1	0.1	0.1	–	–	–	0.2	790
Quintile 2	–	0.4	0.2	0.5	0.2	–	–	–	0.2	917
Quintile 3	0.1	0.5	0.1	0.3	–	np	np	0.4	0.3	1 088
Quintile 4	0.1	0.6	0.2	0.4	0.2	–	0.1	np	0.3	1 152
Quintile 5	0.2	0.9	0.1	0.3	0.2	..	0.1	–	0.4	1 868
Total (g)	**0.1**	**0.6**	**0.1**	**0.4**	**0.1**	**np**	**np**	**np**	**0.3**	
	no.	no.	no.	no.	no.	no.	no.	no.	no.	
Total no.	914	3 422	496	705	255	np	np	np	5 825	
Maintenance care										
Hospital sector										
Private	–	–	0.3	0.1	–	np	np	np	0.1	1 635
Public	0.7	0.1	1.3	1.0	1.1	1.0	4.1	4.0	0.8	18 729
Indigenous status (d)										
Indigenous	0.6	–	1.9	2.1	1.3	np	np	4.2	1.5	651
Non-Indigenous	0.3	0.1	0.6	0.4	0.4	np	np	0.8	0.3	17 834
Remoteness of residence (e)										
Major cities	0.5	0.1	1.5	1.0	1.1	..	3.2	..	0.7	11 152
Inner regional	1.0	0.4	1.3	1.1	0.7	1.0	np	..	1.0	4 862
Outer regional	1.6	0.5	2.1	1.8	1.4	1.0	..	4.8	1.6	3 456
Remote	2.2	np	2.3	1.9	1.5	1.5	..	0.9	1.9	453
Very remote	2.0	..	3.8	2.6	2.6	np	..	4.2	3.4	347
SEIFA of residence (f)										
Quintile 1	1.1	0.2	1.7	1.9	1.2	1.0	np	3.2	1.1	5 358
Quintile 2	0.8	0.3	1.7	1.3	1.1	1.0	30.5	0.9	0.9	4 496
Quintile 3	0.7	0.2	1.4	1.1	1.2	0.9	7.5	10.7	0.9	4 054
Quintile 4	0.6	0.1	1.5	1.1	0.9	1.4	4.8	1.5	0.8	3 439
Quintile 5	0.4	–	1.3	0.9	1.0	..	2.8	1.9	0.6	2 954

Table NHA 47.2 **Non-acute care separations, by care type, 2007-08 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Aust*
Total (g)	**0.7**	**0.2**	**1.5**	**1.2**	**1.1**	**np**	**np**	**np**	**0.9**
	no.	no.	no.	no.	no.	no.	no.	no.	no.
Total no.	5 957	933	6 479	2 378	2 343	np	np	np	20 364

(a) Rates are age standardised to the Australian population as at 30 June 2001.

(b) Non-acute care separations are for overnight admissions only and include the care types Rehabilitation, Palliative care, Geriatric evaluation and management, Psychogeriatic care and Maintenance care. Caution should be used in the interpretations of these data as there is some variation in the use of care type categories between jurisdictions.

(c) The estimated resident population in quintile 2 of the ACT is very low. The high rate for the ACT in this areas reflects the relatively large number of interstate resident patients hospitalised in the ACT.

(d) The Australian totals for Indigenous/Other Australians do not include data for the ACT or Tasmania.

(e) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each remoteness population group (regardless of where they reside) divided by the number of people in that remoteness population group in the jurisdiction of hospitalisation.

(f) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the ABS Index of Relative Socio-economic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory. Disaggregation by SEIFA is based on the patient's usual residence, not the location of the hospital. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each SEIFA population group (regardless of where they reside) divided by the number of people in that SEIFA population group in the jurisdiction of hospital.

(g) Total includes separations where place of residence was not stated.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : AIHW (unpublished) National Hospital Morbidity database (Admitted Patient Care National Minimum Data Set); ABS (unpublished) Estimated Residential Population, 30 June 2007.

NHA Indicator 48:

Rates of services: hospital procedures

Table NHA.48.1 **Selected hospital procedures, 2007-08**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Number				
Procedure									
Cataract extraction (a)	62 766	45 065	40 312	18 047	14 493	6 110	1 882	887	189 562
Cholecystectomy	15 198	11 852	9 798	4 563	3 785	1 115	715	350	47 376
Coronary artery bypass graft (b)	4 434	3 469	3 025	843	1 343	286	212	..	13 612
Coronary angioplasty (b)	11 167	9 307	6 381	3 107	2 781	802	836	..	34 381
Cystoscopy	29 080	26 163	20 913	12 552	10 048	3 144	1 742	429	104 071
Haemorrhoidectomy	16 916	7 365	5 411	2 188	2 183	855	292	325	35 535
Hip replacement	9 576	8 098	5 070	3 247	2 818	919	676	61	30 465
Inguinal herniorrhaphy	15 646	11 932	9 903	4 931	3 686	1 191	774	356	48 419
Knee replacement	12 685	7 574	7 101	3 652	3 417	860	796	63	36 148
Lens insertion (a)	62 733	45 414	40 421	18 311	14 543	6 117	1 881	887	190 307
Myringotomy	9 282	8 449	6 312	4 051	4 096	689	765	176	33 820
Tonsillectomy	13 097	9 505	8 514	4 521	3 906	580	960	256	41 339
Varicose veins stripping and ligation	4 066	4 584	2 562	1 229	1 150	389	385	104	14 469
Septoplasty	6 653	7 095	3 583	1 845	2 357	204	622	138	22 497
Prostatectomy	9 923	8 598	5 374	2 648	2 639	881	544	100	30 707
Hysterectomy	8 489	6 300	5 737	2 707	2 483	692	498	209	27 115
					Age standardised rate per 1000 population (c)				
Procedure									
Cataract extraction (a)	8.3	8.0	9.8	8.9	7.5	10.5	7.0	9.0	8.5
Cholecystectomy	2.1	2.2	2.3	2.1	2.2	2.2	2.1	1.8	2.2
Coronary artery bypass graft (b)	0.6	0.6	0.7	0.4	0.7	0.5	0.7	..	0.6
Coronary angioplasty (b)	1.5	1.7	1.5	1.5	1.5	1.4	2.7	..	1.5
Cystoscopy	3.9	4.7	4.9	6.0	5.5	5.5	5.7	3.4	4.7
Haemorrhoidectomy	2.4	1.4	1.3	1.0	1.3	1.6	0.9	1.8	1.6

Table NHA.48.1 **Selected hospital procedures, 2007-08**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Hip replacement	1.3	1.4	1.2	1.6	1.5	1.6	2.4	0.6	1.4
Inguinal herniorrhaphy	2.2	2.2	2.3	2.3	2.1	2.2	2.4	2.0	2.2
Knee replacement	1.7	1.4	1.7	1.8	1.8	1.5	2.7	0.5	1.6
Lens insertion (a)	8.3	8.0	9.8	9.0	7.5	10.5	7.0	9.0	8.6
Myringotomy	1.4	1.7	1.5	2.0	2.9	1.5	2.4	0.7	1.7
Tonsillectomy	2.0	1.9	2.1	2.2	2.7	1.2	2.9	1.0	2.0
Varicose veins stripping and ligation	0.6	0.8	0.6	0.6	0.7	0.7	1.1	0.5	0.7
Septoplasty	1.0	1.3	0.8	0.9	1.5	0.4	1.8	0.6	1.1
Prostatectomy	2.8	3.3	2.6	2.6	3.0	3.2	4.0	2.1	2.9
Hysterectomy	2.4	2.3	2.7	2.5	3.0	2.7	2.8	2.0	2.5

(a) Cataract extraction and Lens insertion are usually undertaken during the same hospital episode, such that there were 188 439 separations common to both categories, nationally (over 99 per cent of each category). Therefore, the number of separations and the separation rates for these categories should not be summed.

(b) Coronary artery bypass graft and coronary angioplasty are not performed in NT hospitals. Residents of the NT requiring these procedures receive treatment interstate.

(c) Rates are standardised to the Australian population as at 30 June 2001 and are calculated for the total population for all procedures except prostatectomy (rates calculated for the male population only) and hysterectomy (rates calculated for females aged 15–69 years).

.. Not applicable.

Source: AIHW (unpublished) National Hospital Morbidity database (Admitted Patient Care National Minimum Data Set); ABS (unpublished) Estimated Residential Population, 30 June 2007.

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
					Cataract extraction (c)				
Hospital sector									
Private	5.8	5.0	8.1	5.3	4.8	np	np	np	5.9
Public	2.5	3.0	1.7	3.6	2.7	np	np	np	2.6
Indigenous status (d)									
Indigenous	2.5	2.1	4.3	3.5	4.7	np	np	4.0	3.3
Non-Indigenous	3.3	3.3	4.0	3.6	3.0	np	np	1.9	3.3
Remoteness of residence (e)									
Major cities	8.2	8.0	9.1	9.3	7.1	..	6.1	..	8.3
Inner regional	8.9	7.6	11.2	8.7	7.4	7.5	np	..	8.9
Outer regional	7.8	8.4	10.0	7.2	8.9	8.0	..	10.9	8.7
Remote	6.9	9.6	8.3	7.1	8.7	6.4	..	4.6	7.6
Very remote	7.0	..	9.4	5.7	11.2	2.9	..	7.4	8.2
SEIFA of residence (f)									
Quintile 1	8.3	7.9	10.0	8.0	7.8	7.1	np	8.2	8.5
Quintile 2	7.9	7.9	10.7	9.3	7.3	10.9	24.8	8.0	8.4
Quintile 3	8.7	7.8	9.7	8.2	7.4	8.5	11.0	9.9	8.5
Quintile 4	8.0	7.8	9.3	9.1	7.2	7.0	8.9	8.8	8.3
Quintile 5	8.7	8.4	8.9	9.6	7.1	..	5.5	15.2	8.5
					Cholecystectomy				
Hospital sector									
Private	0.8	0.9	1.2	1.0	0.9	np	np	np	1.0
Public	1.3	1.3	1.1	1.2	1.3	np	np	np	1.2
Indigenous status (d)									
Indigenous	1.9	2.3	2.0	2.3	2.1	np	np	2.1	2.0
Non-Indigenous	1.7	1.8	1.9	1.8	1.8	np	np	0.7	1.7

Table NHA.48.2 Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
Remoteness of residence (e)									
Major cities	2.1	2.1	2.3	2.1	2.2	..	1.9	..	2.1
Inner regional	2.3	2.5	2.5	2.4	2.2	2.1	np	..	2.4
Outer regional	2.2	2.7	2.2	2.1	2.4	2.3	..	1.9	2.2
Remote	3.1	3.3	1.9	1.7	2.4	2.7	..	1.6	2.1
Very remote	1.5	..	1.7	1.9	1.6	np	..	1.9	1.7
SEIFA of residence (f)									
Quintile 1	2.4	2.3	2.5	2.4	2.6	2.2	np	1.8	2.4
Quintile 2	2.1	2.5	2.4	2.3	2.3	2.7	9.4	2.1	2.3
Quintile 3	2.4	2.3	2.3	2.1	2.1	2.4	2.3	2.5	2.3
Quintile 4	2.2	2.2	2.3	2.4	2.1	1.6	2.3	1.4	2.2
Quintile 5	1.7	1.8	2.2	1.7	1.8	..	1.8	1.9	1.8
				Coronary artery bypass graft					
Hospital sector									
Private	0.3	0.3	0.4	0.2	0.3	np	np	..	0.3
Public	0.3	0.4	0.4	0.2	0.4	np	np	..	0.4
Indigenous status (d)									
Indigenous	0.6	0.6	0.9	0.8	3.0	np	np	..	0.7
Non-Indigenous	0.3	0.3	0.4	0.2	0.4	np	np	..	0.3
Remoteness of residence (e)									
Major cities	0.6	0.6	0.7	0.4	0.6	..	0.4	..	0.6
Inner regional	0.5	0.7	0.8	0.4	0.7	0.5	np	..	0.6
Outer regional	0.5	0.6	0.7	0.4	1.0	0.5	..	..	0.6
Remote	0.9	–	0.6	0.3	1.2	0.5	..	..	0.6
Very remote	1.1	..	0.7	0.3	1.5	..	..	..	0.6
SEIFA of residence (f)									

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
Quintile 1	0.6	0.7	0.7	0.5	0.8	0.5	np	..	0.7
Quintile 2	0.6	0.6	0.8	0.5	0.6	0.6	12.0	..	0.6
Quintile 3	0.7	0.6	0.7	0.4	0.7	0.5	2.4	..	0.6
Quintile 4	0.6	0.6	0.7	0.4	0.7	0.5	0.6	..	0.6
Quintile 5	0.5	0.6	0.7	0.3	0.6	..	0.4	..	0.5
Coronary angioplasty									
Hospital sector									
Private	0.6	0.8	0.7	0.7	0.6	np	np	..	0.7
Public	0.9	0.9	0.7	0.8	1.0	np	np	..	0.9
Indigenous status (d)									
Indigenous	1.1	1.3	1.3	1.5	4.3	np	np	..	1.2
Non-Indigenous	0.9	1.0	0.9	0.9	0.9	np	np	..	0.9
Remoteness of residence (e)									
Major cities	1.7	1.6	1.5	1.5	1.4	..	1.7	..	1.6
Inner regional	1.1	1.8	1.6	1.5	1.2	1.4	np	..	1.5
Outer regional	1.0	1.6	1.1	1.4	1.8	1.4	..	..	1.3
Remote	1.0	1.2	1.2	1.1	2.2	1.7	..	..	1.2
Very remote	1.5	..	1.2	0.8	3.3	np	..	..	1.1
SEIFA of residence (f)									
Quintile 1	1.4	1.6	1.5	1.7	1.6	1.4	np	..	1.5
Quintile 2	1.4	1.7	1.6	1.5	1.6	2.4	40.9	..	1.5
Quintile 3	1.6	1.8	1.4	1.5	1.5	1.3	4.5	..	1.6
Quintile 4	0.6	0.6	0.7	0.4	0.7	0.5	0.6	..	0.6
Quintile 5	1.7	1.6	1.3	1.3	1.2	..	1.7	..	1.5

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
					Cystoscopy				
Hospital sector									
Private	2.4	2.3	3.3	3.2	2.8	np	np	np	2.7
Public	1.6	2.4	1.6	2.8	2.7	np	np	np	2.0
Indigenous status (d)									
Indigenous	1.2	1.7	1.4	2.0	2.5	np	np	1.9	1.5
Non-Indigenous	2.4	2.9	3.1	3.5	3.5	np	np	0.8	2.7
Remoteness of residence (e)									
Major cities	4.1	4.9	5.0	6.3	5.8	..	4.5	..	4.8
Inner regional	3.5	4.5	4.8	5.8	4.5	5.8	np	..	4.5
Outer regional	3.2	3.6	4.7	5.0	4.8	5.0	..	3.6	4.2
Remote	3.2	4.6	3.9	4.2	5.6	3.8	..	3.7	4.1
Very remote	3.0	..	2.6	3.2	3.9	3.4	..	1.7	2.8
SEIFA of residence (f)									
Quintile 1	3.3	4.3	4.6	4.9	5.5	4.9	np	2.8	4.2
Quintile 2	3.7	4.6	5.0	5.9	5.6	6.8	30.5	2.4	4.5
Quintile 3	4.8	4.7	4.7	5.4	5.6	7.0	7.8	6.1	5.0
Quintile 4	3.7	4.7	5.2	6.5	5.2	5.3	6.6	2.6	4.8
Quintile 5	4.4	5.1	5.2	6.8	5.6	..	4.3	3.1	5.0
					Haemorrhoidectomy				
Hospital sector									
Private	1.5	0.7	1.0	0.5	0.7	np	np	np	1.0
Public	0.8	0.6	0.3	0.5	0.6	np	np	np	0.6
Indigenous status (d)									
Indigenous	0.9	1.3	0.4	0.4	0.7	np	np	0.5	0.6
Non-Indigenous	2.0	1.2	1.1	0.9	1.1	np	np	0.5	1.3

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
Remoteness of residence (e)									
Major cities	2.3	1.2	1.2	0.8	1.3	..	0.8	..	1.6
Inner regional	2.5	2.0	1.6	1.8	1.3	1.4	np	..	2.0
Outer regional	2.2	1.4	1.0	1.5	1.2	1.9	..	2.6	1.6
Remote	1.9	1.5	0.8	1.0	0.8	0.9	..	0.5	1.0
Very remote	1.6	..	0.4	0.7	0.4	1.8	..	0.4	0.6
SEIFA of residence (f)									
Quintile 1	2.4	1.5	1.3	1.2	1.5	1.6	np	1.3	1.8
Quintile 2	2.2	1.7	1.2	1.2	1.1	2.6	1.7	1.5	1.7
Quintile 3	2.7	1.4	1.2	0.9	1.2	1.6	0.9	2.0	1.6
Quintile 4	2.5	1.3	1.4	1.2	1.2	1.0	1.0	1.8	1.6
Quintile 5	2.2	1.1	1.2	0.8	1.3	..	0.8	3.7	1.4
Hip replacement									
Hospital sector									
Private	0.6	0.8	0.7	0.8	0.8	np	np	np	0.7
Public	0.6	0.6	0.5	0.7	0.6	np	np	np	0.6
Indigenous status (d)									
Indigenous	0.3	0.3	0.3	0.2	0.8	np	np	0.2	0.3
Non-Indigenous	0.6	0.7	0.6	0.8	0.7	np	np	0.2	0.6
Remoteness of residence (e)									
Major cities	1.2	1.3	1.2	1.5	1.4	..	1.6	..	1.3
Inner regional	1.3	1.7	1.4	1.6	1.6	1.6	np	..	1.5
Outer regional	1.3	1.6	1.1	2.0	1.8	1.6	..	0.7	1.5
Remote	1.3	1.4	1.0	1.4	1.6	0.8	..	0.5	1.2
Very remote	np	..	0.9	0.8	1.8	1.5	..	0.8	1.0
SEIFA of residence (f)									

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
Quintile 1	1.1	1.2	1.2	2.0	1.5	1.4	np	0.6	1.2
Quintile 2	1.2	1.6	1.3	1.5	1.4	2.3	28.1	0.4	1.4
Quintile 3	1.4	1.4	1.1	1.4	1.5	1.8	5.0	0.9	1.4
Quintile 4	1.2	1.4	1.2	1.6	1.4	1.7	2.2	0.7	1.4
Quintile 5	1.4	1.5	1.1	1.6	1.5	..	1.6	0.6	1.4
				Inguinal herniorrhaphy					
Hospital sector									
Private	1.2	1.1	1.5	1.2	1.0	np	np	np	1.2
Public	1.0	1.1	0.9	1.1	1.1	np	np	np	1.0
Indigenous status (d)									
Indigenous	0.9	0.9	0.9	0.7	1.2	np	np	0.4	0.8
Non-Indigenous	1.7	1.7	1.8	1.8	1.7	np	np	1.0	1.6
Remoteness of residence (e)									
Major cities	2.2	2.1	2.3	2.4	2.1	..	2.0	..	2.2
Inner regional	2.2	2.4	2.4	2.4	2.1	2.1	np	..	2.3
Outer regional	1.9	2.6	2.3	2.2	2.3	2.5	..	2.3	2.3
Remote	2.3	1.8	2.0	1.8	2.4	2.2	..	2.1	2.0
Very remote	2.4	..	1.7	1.4	1.9	np	..	1.0	1.5
SEIFA of residence (f)									
Quintile 1	2.1	2.3	2.2	2.2	2.1	2.1	np	1.4	2.2
Quintile 2	2.0	2.3	2.3	2.3	2.1	3.0	9.4	2.9	2.2
Quintile 3	2.4	2.1	2.3	2.2	2.3	2.4	3.3	2.9	2.3
Quintile 4	2.3	2.3	2.5	2.4	2.1	2.2	2.6	1.8	2.3
Quintile 5	2.2	2.2	2.4	2.4	2.3	..	2.0	2.4	2.3

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
					Knee replacement				
Hospital sector									
Private	1.0	0.9	1.2	1.1	1.3	np	np	np	1.1
Public	0.6	0.5	0.5	0.6	0.5	np	np	np	0.6
Indigenous status (d)									
Indigenous	0.6	0.5	0.3	0.3	0.3	np	np	np	0.3
Non-Indigenous	0.9	0.7	0.8	0.9	1.0	np	np	0.1	0.8
Remoteness of residence (e)									
Major cities	1.6	1.2	1.6	1.7	1.7	..	1.9	..	1.5
Inner regional	1.8	1.6	1.9	2.0	1.7	1.5	np	..	1.8
Outer regional	1.7	1.7	1.7	2.2	2.5	1.5	..	0.7	1.8
Remote	1.5	1.8	1.5	1.7	2.2	0.9	..	0.1	1.5
Very remote	1.6	..	1.4	1.0	0.9	np	..	0.1	1.0
SEIFA of residence (f)									
Quintile 1	1.7	1.2	1.8	2.2	1.8	1.2	np	0.4	1.6
Quintile 2	1.7	1.6	1.8	1.8	1.8	2.4	25.4	0.3	1.7
Quintile 3	1.8	1.4	1.5	1.7	1.8	1.8	4.3	0.6	1.6
Quintile 4	1.6	1.4	1.7	1.9	1.9	1.5	3.2	0.7	1.6
Quintile 5	1.7	1.2	1.4	1.5	1.7	..	1.6	0.6	1.5
					Lens insertion (c)				
Hospital sector									
Private	5.8	5.0	8.1	5.4	4.8	np	np	np	6.0
Public	2.5	3.0	1.7	3.6	2.7	np	np	np	2.6
Indigenous status (d)									
Indigenous	2.5	2.1	4.3	3.5	4.7	np	np	4.0	3.3
Non-Indigenous	3.3	3.3	4.0	3.6	3.0	np	np	1.9	3.3

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
Remoteness of residence (e)									
Major cities	8.2	8.1	9.1	9.4	7.2	..	6.1	..	8.3
Inner regional	8.9	7.7	11.3	8.8	7.5	7.5	np	..	8.9
Outer regional	7.8	8.4	10.0	7.3	8.9	8.0	..	10.8	8.7
Remote	6.9	9.6	8.3	7.2	8.7	6.3	..	4.6	7.6
Very remote	7.0	..	9.4	5.7	11.4	2.9	..	7.3	8.2
SEIFA of residence (f)									
Quintile 1	8.3	8.0	10.1	8.1	7.9	7.1	np	8.2	8.5
Quintile 2	7.9	7.9	10.7	9.4	7.3	10.9	24.8	8.0	8.4
Quintile 3	8.7	7.9	9.7	8.3	7.4	8.5	10.9	10.0	8.6
Quintile 4	8.0	7.8	9.4	9.2	7.2	6.9	8.9	8.7	8.3
Quintile 5	8.7	8.5	9.0	9.8	7.2	..	5.5	15.2	8.6
Myringotomy									
Hospital sector									
Private	0.9	0.9	1.0	1.3	1.7	np	np	np	1.0
Public	0.5	0.9	0.6	0.7	1.2	np	np	np	0.7
Indigenous status (d)									
Indigenous	1.1	1.4	1.0	1.4	1.4	np	np	0.6	1.0
Non-Indigenous	1.4	1.7	1.5	2.0	2.9	np	np	0.4	1.6
Remoteness of residence (e)									
Major cities	1.5	1.6	1.5	2.2	3.0	..	2.0	..	1.7
Inner regional	1.3	1.9	1.8	1.9	2.8	1.4	np	..	1.7
Outer regional	1.1	2.0	1.2	1.5	2.3	1.2	..	0.9	1.4
Remote	1.3	4.0	1.3	1.2	2.3	0.7	..	0.6	1.3
Very remote	1.4	..	1.2	1.3	1.6	np	..	0.4	1.0
SEIFA of residence (f)									

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
Quintile 1	1.0	1.3	1.4	1.7	2.5	1.2	np	0.4	1.4
Quintile 2	1.2	1.8	1.5	2.0	2.7	1.7	9.0	1.1	1.6
Quintile 3	1.5	1.6	1.5	1.8	2.8	1.4	4.5	0.9	1.6
Quintile 4	1.4	1.8	1.6	2.1	3.4	1.3	2.9	0.9	1.8
Quintile 5	2.0	2.0	1.6	2.5	3.4	..	1.9	0.7	2.1
					Tonsillectomy				
Hospital sector									
Private	1.2	0.8	1.3	1.3	1.3	np	np	np	1.2
Public	0.7	1.1	0.7	0.9	1.4	np	np	np	0.9
Indigenous status (d)									
Indigenous	1.0	1.3	0.9	0.7	1.3	np	np	0.3	0.8
Non-Indigenous	2.0	1.9	2.1	2.3	2.8	np	np	0.8	2.0
Remoteness of residence (e)									
Major cities	1.9	1.7	1.9	2.3	2.7	..	2.4	..	2.0
Inner regional	2.1	2.7	2.7	2.3	2.7	1.2	np	..	2.4
Outer regional	2.1	2.7	1.8	1.8	2.7	1.3	..	1.3	2.0
Remote	1.8	4.3	1.7	1.4	3.2	1.8	..	1.3	1.8
Very remote	1.9	..	1.4	1.3	2.2	np	..	0.3	1.1
SEIFA of residence (f)									
Quintile 1	1.8	1.8	1.9	1.7	2.9	1.3	np	0.5	1.9
Quintile 2	1.8	2.4	2.3	2.4	2.4	1.5	9.0	1.3	2.1
Quintile 3	2.2	2.0	2.1	2.1	2.8	1.1	4.0	2.0	2.1
Quintile 4	1.8	1.8	2.1	2.3	2.8	1.0	3.8	0.9	2.0
Quintile 5	2.4	1.6	1.9	2.3	2.6	..	2.3	1.3	2.1

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
Varicose veins stripping and ligation									
Hospital sector									
Private	0.3	0.5	0.4	0.5	0.4	np	np	np	0.4
Public	0.2	0.4	0.2	0.1	0.3	np	np	np	0.2
Indigenous status (d)									
Indigenous	0.1	0.4	0.2	np	0.6	np	np	0.1	0.2
Non-Indigenous	0.5	0.7	0.5	0.5	0.6	np	np	0.3	0.5
Remoteness of residence (e)									
Major cities	0.6	0.8	0.7	0.6	0.6	..	0.9	..	0.7
Inner regional	0.6	0.9	0.6	0.5	0.8	0.8	np	..	0.7
Outer regional	0.5	0.8	0.5	0.5	0.8	0.6	..	0.7	0.6
Remote	0.4	np	0.3	0.3	0.7	0.7	..	0.4	0.4
Very remote	0.4	..	0.3	0.3	1.0		..	0.1	0.4
SEIFA of residence (f)									
Quintile 1	0.5	0.8	0.5	0.5	0.7	0.6	np	0.3	0.6
Quintile 2	0.5	0.9	0.5	0.6	0.6	0.7	6.8	0.5	0.6
Quintile 3	0.5	0.8	0.5	0.4	0.7	0.9	1.5	0.8	0.6
Quintile 4	0.6	0.9	0.7	0.5	0.7	1.1	1.2	0.5	0.7
Quintile 5	0.7	0.8	0.7	0.8	0.7	..	0.9	0.9	0.8
Septoplasty									
Hospital sector									
Private	0.7	0.8	0.7	0.6	1.0	np	np	np	0.7
Public	0.2	0.5	0.2	0.2	0.5	np	np	np	0.3
Indigenous status (d)									
Indigenous	0.3	0.8	0.1	0.1	0.5	np	np	0.1	0.2
Non-Indigenous	0.9	1.3	0.8	0.8	1.4	np	np	0.1	1.0

Table NHA.48.2 Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
Remoteness of residence (e)									
Major cities	1.0	1.3	0.8	0.9	1.6	..	1.5	..	1.1
Inner regional	0.8	1.3	0.9	0.7	1.3	0.4	np	..	1.0
Outer regional	0.6	1.5	1.2	0.8	1.1	0.4	..	0.8	1.0
Remote	0.5	1.7	0.8	0.5	0.9	np	..	0.4	0.6
Very remote	np	..	0.4	0.3	1.1	np	..	0.2	0.4
SEIFA of residence (f)									
Quintile 1	0.8	1.3	0.8	0.9	1.2	0.4	np	0.4	0.9
Quintile 2	0.8	1.4	0.8	0.7	1.6	0.6	7.0	0.4	1.0
Quintile 3	1.0	1.3	0.8	0.8	1.5	0.4	2.1	0.9	1.0
Quintile 4	1.0	1.3	0.9	0.9	1.5	0.3	1.9	0.5	1.1
Quintile 5	1.3	1.5	0.8	1.1	1.7	..	1.5	1.0	1.3
				Prostatectomy					
Hospital sector									
Private	1.8	2.1	1.9	1.7	1.7	np	np	np	1.9
Public	1.0	1.2	0.8	1.0	1.3	np	np	np	1.0
Indigenous status (d)									
Indigenous	0.7	np	1.0	0.7	0.8	np	np	0.6	0.7
Non-Indigenous	1.4	1.5	1.3	1.3	1.4	np	np	0.3	1.3
Remoteness of residence (e)									
Major cities	2.8	3.4	2.6	2.7	2.9	..	2.8	..	3.0
Inner regional	2.8	3.0	2.9	3.0	2.8	3.3	np	..	2.9
Outer regional	2.7	2.9	2.5	2.2	3.7	3.1	..	2.4	2.8
Remote	2.3	2.6	2.1	1.7	2.9	1.9	..	1.8	2.2
Very remote	np	..	1.4	0.8	2.7	2.5	..	0.9	1.4

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*
SEIFA of residence (f)									
Quintile 1	2.6	2.8	2.7	2.3	3.0	2.7	np	1.5	2.7
Quintile 2	2.6	3.3	2.9	2.4	3.0	4.8	49.4	1.2	2.8
Quintile 3	2.7	3.0	2.4	2.5	2.9	4.1	7.2	3.8	2.7
Quintile 4	2.8	3.5	2.6	2.8	3.0	3.2	3.9	1.6	3.0
Quintile 5	3.5	3.8	2.7	2.9	3.2	..	2.7	3.7	3.4
					Hysterectomy				
Hospital sector									
Private	1.2	1.0	1.6	1.5	1.5	np	np	np	1.3
Public	1.2	1.3	1.1	1.0	1.5	np	np	np	1.2
Indigenous status (d)									
Indigenous	2.0	2.1	1.9	1.4	2.8	np	np	1.4	1.8
Non-Indigenous	2.3	2.2	2.6	2.5	2.9	np	np	0.9	2.3
Remoteness of residence (e)									
Major cities	2.3	2.1	2.5	2.5	2.8	..	2.4	..	2.3
Inner regional	2.8	3.0	3.2	2.4	3.3	2.6	np	..	3.0
Outer regional	2.7	3.3	2.8	3.0	4.1	3.0	..	2.5	3.0
Remote	2.7	np	2.5	2.3	2.9	1.8	..	1.1	2.3
Very remote	np	..	2.5	2.3	3.6	np	..	1.8	2.3
SEIFA of residence (f)									
Quintile 1	2.3	2.4	3.0	3.3	3.4	2.7	np	1.8	2.7
Quintile 2	2.8	2.9	3.2	2.4	2.9	2.9	11.1	1.6	2.8
Quintile 3	2.7	2.5	2.4	2.5	2.8	2.6	5.3	2.3	2.6
Quintile 4	2.2	2.2	2.7	2.4	2.9	2.8	3.3	2.1	2.4
Quintile 5	2.0	1.8	2.3	2.6	2.8	..	2.3	2.9	2.1

Table NHA.48.2 **Selected hospital procedures, by hospital sector, Indigenous status, remoteness and SEIFA, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*

(a) Rates are standardised to the Australian population as at 30 June 2001 and are calculated for the total population for all procedures except prostatectomy (rates calculated for the male population only) and hysterectomy (rates calculated for females aged 15–69 years).

(b) The estimated resident population in quintile 2 of the ACT is very low. The high rate for the ACT in this area reflects the relatively large number of interstate resident patients hospitalised in the ACT.

(c) Cataract extraction and Lens insertion are usually undertaken during the same hospital episode, such that there were 188 439 separations common to both categories, nationally (over 99 per cent of each category). Therefore, the number of separations and the separation rates for these categories should not be summed.

(d) The Australian totals for Indigenous/Other Australians do not include data for the ACT or Tasmania.

(e) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each remoteness population group (regardless of where they reside) divided by the number of people in that remoteness population group in the jurisdiction of hospitalisation.

(f) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the ABS Index of Relative Socio-economic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory. Disaggregation by SEIFA is based on the patient's usual residence, not the location of the hospital. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each SEIFA population group (regardless of where they reside) divided by the number of people in that SEIFA population group in the jurisdiction of hospital.

(f) Coronary artery bypass graft and coronary angioplasty are not performed in NT hospitals. Residents of the NT requiring these procedures receive treatment interstate.

.. Not applicable. **np** Not published.

Source : AIHW (unpublished) National Hospital Morbidity database; ABS (unpublished) Estimated Residential Population, 30 June 2007; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2007, Series B, Cat. no. 3238.0.

NHA Indicator 49:

Residential and community aged care services per 1000 population aged 70+ years

Table NHA.49.1 **Residential and community aged care services, 2008-09 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Residential aged care places (b)									
Number	61 224	46 216	31 755	15 056	17 028	4 623	1 768	620	178 290
Rate per 1000 population	85.2	87.3	81.4	78.1	92.3	82.9	71.7	47.9	84.5
Community aged care places (c)									
Number	16 556	12 405	8 524	5 017	4 245	1 351	707	796	49 601
Rate per 1000 population	23.0	23.4	21.8	26.0	23.0	24.2	28.7	61.5	23.5

(a) Population is people aged 70 years or over plus Indigenous people aged 50–69 years at 30 June 2008.

(b) Count is of operational residential places allocated to a State or Territory which were delivered in Australian Government subsidised residential aged care facilities at 30 June 2009, and includes Multi-Purpose Services and places delivered under the National Aboriginal and Torres Strait Islander Flexible Aged Care Program provided in a residential aged care facility.

(c) Count is of operational community care places including: CACP, EACH and EACHD, Transition Care Program, and Multi-Purpose Services and places delivered under the National Aboriginal and Torres Strait Islander Flexible Aged Care Program provided in the community.

Source: Department of Health and Ageing (DoHA) (unpublished) stocktake from the Australian Government DoHA aged care data warehouse; ABS (unpublished) Estimated Residential Population, 30 June 2008; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021*, 30 June 2008, Series B, Cat. no. 3238.0.

Table NHA.49.2 Residential and community aged care services per 1000 population, by planning region, 2008-09 (a)

	Residential aged care places per 1000 population (b)	*Community aged care places per 1000 population* (c)
NSW		
Central Coast	80.6	23.3
Central West	84.7	20.9
Far North Coast	80.7	21.3
Hunter	83.3	21.7
Illawarra	77.2	22.2
Inner West	109.1	21.8
Mid North Coast	75.5	21.3
Nepean	87.0	21.4
New England	78.8	21.6
Northern Sydney	96.5	21.9
Orana Far West	81.7	22.7
Riverina/Murray	81.3	20.7
South East Sydney	77.8	22.5
South West Sydney	84.9	22.0
Southern Highlands	89.3	22.4
Western Sydney	89.1	22.4
Victoria		
Barwon-South Western	92.2	22.6
Eastern Metro	84.8	21.9
Gippsland	81.3	22.6
Grampians	84.0	23.2
Hume	88.9	21.8
Loddon-Mallee	87.4	23.0
Northern Metro	84.2	24.5
Southern Metro	91.4	20.5
Western Metro	87.7	23.8
Queensland		
Brisbane North	95.5	21.9
Brisbane South	91.1	21.0
Cabool	81.7	19.6
Central West	108.2	61.2
Darling Downs	83.2	16.8
Far North	62.0	22.4
Fitzroy	86.6	22.3
Logan River Valley	79.4	18.4
Mackay	76.4	21.8
North West	52.0	46.4
Northern	84.5	18.5
South Coast	76.9	19.9
South West	89.0	40.3
Sunshine Coast	77.3	21.2

Table NHA.49.2 **Residential and community aged care services per 1000 population, by planning region, 2008-09 (a)**

	Residential aged care places per 1000 population (b)	*Community aged care places per 1000 population* (c)
West Moreton	77.2	20.4
Wide Bay	69.9	20.9
Western Australia		
Goldfields	79.1	22.6
Great Southern	79.9	25.8
Indian Ocean Territories	N/A	N/A
Kimberley	62.6	32.1
Metropolitan East	85.7	24.9
Metropolitan North	78.3	24.8
Metropolitan South East	96.6	23.6
Metropolitan South West	68.1	25.9
Mid West	56.7	30.0
Pilbara	41.9	32.3
South West	74.4	22.7
Wheatbelt	65.6	26.5
South Australia		
Eyre Peninsula	88.4	26.6
Hills, Mallee & Southern	81.8	24.9
Metropolitan East	118.0	20.4
Metropolitan North	89.8	17.5
Metropolitan South	92.6	23.7
Metropolitan West	84.8	21.2
Mid North	80.9	25.7
Riverland	78.3	21.5
South East	83.8	24.0
Whyalla, Flinders & Far North	76.2	31.3
Yorke, Lower North & Barossa	90.1	23.9
Tasmania		
North Western	77.0	20.3
Northern	88.1	24.3
Southern	82.8	23.7
Australian Capital Territory		
Australian Capital Territory (d)	71.7	27.2
Northern Territory		
Alice Springs	55.2	68.8
Barkly	31.5	69.7
Darwin	49.2	54.0
East Arnhem	12.6	62.0
Katherine	63.1	62.3

(a) Population is people aged 70 years or over plus Indigenous people aged 50–69 years at 30 June 2009.

Table NHA.49.2 **Residential and community aged care services per 1000 population, by planning region, 2008-09 (a)**

	Residential aged care places per 1000 population (b)	*Community aged care places per 1000 population* (c)

(b) Count is of residential places allocated to an Aged Care Planning Region which were delivered in an Australian Government subsidised residential aged care facility and were operational at 30 June 2009, and includes Multi-Purpose Services and places delivered under the National Aboriginal and Torres Strait Islander Flexible Aged Care Program provided in a residential aged care facility.

(c) Count is community care places allocated to an Aged Care Planning Region which were operational at 30 June 2009 and includes: CACP, EACH and EACHD, and Multi-Purpose Services and places delivered under the National Aboriginal and Torres Strait Islander Flexible Aged Care Program provided in the community. Note that it does not include places allocated under the Transtion Care Program as it is not possible to disaggregate these places by Aged Care Planning Region.

(d) The number of commuity care places table 49.1 includes places allocated under the Transtion Care Program (TCP). Places allocated under the TCP are not included in table 49.2. The number of places per 1000 population in the ACT Aged Care Plannig Region then is less that that reported in table 49.1.

Source : Department of Health and Ageing (DoHA) (unpublished) stocktake from the Australian Government DoHA aged care data warehouse; ABS (unpublished) Estimated Residential Population, 30 June 2008; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2008, Series B, Cat. no. 3238.0.

Table NHA.49.3 **Residential and community aged care services per 1000 population, by remoteness, 2008-09 (a)**

	Residential aged care places per 1000 population (b)	*Community aged care places per 1000 population* (c)
Remoteness of residence		
Major cities	87.7	23.1
Inner regional	83.0	21.1
Outer regional	73.1	19.0
Remote	62.8	30.0
Very remote	47.3	43.5

(a) Population people aged 70 years and over plus Indigenous people aged 50–69 years at 30 June 2009.

(b) Count is of operational residential places delivered Australian Government subsidised residential aged care facilities at 30 June 2009 and includes Multi-Purpose Services and places delivered under the National Aboriginal and Torres Strait Islander Flexible Aged Care Program delivered in a residential aged care facility.

(c) Count is of operational community care places at 30 June 2009 and includes: CACP, EACH and EACHD, Transition Care Program, and Multi-Purpose Services and places delivered under the National Aboriginal and Torres Strait Islander Flexible Aged Care Program provided in the community.

Source: Department of Health and Ageing (DoHA) (unpublished) stocktake from the Australian Government DoHA aged care data warehouse; ABS (unpublished) Estimated Residential Population, 30 June 2008; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021*, 30 June 2008, Series B, Cat. no. 3238.0.

NHA Indicator 50:

There is currently no agreed measure, nor data available, to inform this indicator

Staphylococcus aureus (including MRSA) bacteraemia in residential aged care

NHA Indicator 51:

There is currently no agreed measure, nor data available, to inform this indicator

Pressure ulcers in residential aged care

NHA Indicator 52:

Falls resulting in patient harm in residential aged care

Table NHA.52.1 Falls resulting in patient harm in residential aged care, 2007-08 (number)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Indigenous status (a)									
Indigenous	9	np	25	11	np	np	np	10	68
Other Australians	6 367	np	3 007	1 205	np	np	np	29	17 401
Remoteness of residence (b)									
Major cities	4 320	4 642	1 890	919	990	–	267	–	13 028
Inner regional	1 474	899	712	166	150	211	26	–	3 638
Outer regional	520	194	371	112	174	69	12	19	1 471
Remote and very remote	39	5	59	19	52	–	–	20	194
SEIFA of residence (c)									
Quintile 1	1 239	877	829	89	458	159	np	np	3 657
Quintile 2	1 841	941	535	191	258	16	np	np	3 811
Quintile 3	982	1 049	684	312	253	55	43	15	3 393
Quintile 4	785	1 412	590	219	194	50	95	12	3 357
Quintile 5	1 510	1 461	394	405	203	–	144	–	4 117
Total (d)	**6 376**	**5 740**	**3 032**	**1 216**	**1 367**	**280**	**305**	**39**	**18 355**

(a) The Australian totals for Indigenous/Other Australians do not include data for the ACT or Tasmania.

(b) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Separations are reported by jurisdiction of hospital, regardless of the jurisdiction of usual residence.

(c) SEIFA quintiles are based on the ABS Index of Relative Socio–economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each State or Territory. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence.

(d) Total includes separations for which place of residence was not known or not stated.

– Nil or rounded to zero. **np** Not published.

Source: AIHW (unpublished) National Hospital Morbidity Database (Admitted Patient Care National Minimum Data Set).

NHA Indicator 53:

Older people receiving aged care services

Table NHA.53.1 **Older people receiving aged care services, 2008-09 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)
					Number				
Aged care service									
Home and Community Care	170 120	174 126	115 895	48 398	63 315	18 319	7 130	2 292	599 595
Community aged care packages	17 710	12 437	8 520	4 610	4 539	1 290	750	658	50 477
Extended aged care at home	2 064	1 359	839	523	493	147	143	108	5 672
EACH dementia	994	773	517	263	277	94	77	35	3 028
Residential aged care	67 687	51 049	35 356	16 535	19 492	5 368	2 089	484	197 681
Residential respite	16 216	9 382	5 071	2 559	3 874	1 103	599	239	38 921
Transition care	3 903	3 492	1 853	739	1 101	312	209	65	11 668
					Rate per 1000 population				
Aged care service									
Home and Community Care	236.7	329.0	297.0	262.3	328.4	328.7	289.3	177.0	284.3
Community aged care packages	24.6	23.5	21.8	23.9	24.6	23.1	30.4	50.8	23.9
Extended aged care at home	2.9	2.6	2.2	2.7	2.7	2.6	5.8	8.3	2.7
EACH dementia	1.4	1.5	1.3	1.4	1.5	1.7	3.1	2.7	1.4
Residential aged care	94.2	96.5	90.6	85.8	105.6	96.3	84.8	37.4	93.7
Residential respite	22.6	17.7	13.0	13.3	21.0	19.8	24.3	18.5	18.5
Transition care	5.4	6.6	4.7	3.8	6.0	5.6	8.5	5.0	5.5

(a) Population is people aged 70 years and over plus Indigenous people aged 50–69 years at 30 June.

(b) Data is presented at the program level only. Since an individual may receive services under more than one aged care program throughout the year, the number of unique individuals assessing aged care cannot be determined.

(c) State or territory is based on the location of the service provider outlet. For all programs excluding Home and Community Care, where a person moved from one state to another they are counted uniquely in each state. Thus, a person who moved between states within the year will be double counted, making the total number of people greater than the number of unique individuals receiving services under the program.

Source: Department of Health and Ageing (unpublished) Aged care data warehouse and HACC Minimum Data Set (MDS); ABS (unpublished) Estimated Residential Population, 30 June 2008; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2008, Series B, Cat. no. 3238.0.

Table NHA.53.2 **Older people receiving aged care services, by age, Indigenous status and remoteness, 2008-09 (a) (number)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Home and Community Care									
Age group									
50–69 years (b)	3 070	927	1 541	1 137	888	134	43	747	8 487
70–74 years	25 569	31 785	18 353	7 323	10 793	3 020	1 183	466	98 492
75–79 years	37 649	42 666	26 840	11 217	14 701	4 604	1 829	461	139 967
80–84 years	46 899	47 418	31 996	13 445	17 644	5 022	1 911	346	164 681
85–89 years	36 792	34 220	25 079	10 179	12 954	3 564	1 480	183	124 451
90+ years	20 141	17 110	12 086	5 097	6 335	1 975	684	89	63 517
Indigenous status									
Indigenous	5 302	1 368	2 981	1 795	1 398	335	56	1 178	14 413
Non-Indigenous	154 291	156 954	96 414	44 486	57 559	16 461	6 034	1 046	533 245
Not Stated	10 527	15 804	16 500	2 117	4 358	1 523	1 040	68	51 937
Remoteness of residence (c)									
Metropolitan	105 383	116 440	67 413	33 103	43 942	..	7 094	..	373 375
Inner regional	42 755	43 704	28 989	7 494	8 394	12 214	24	..	143 574
Outer regional	17 622	13 467	15 557	5 254	8 142	5 684	..	1 048	66 774
Remote	1 454	371	2 279	1 521	2 186	286	..	519	8 616
Very remote	193	..	1 464	890	582	115	..	722	3 966
Not Stated	2 713	145	192	136	69	20	12	4	3 291
Community Aged Care Packages									
Age group									
70–74 years	1 434	1 249	712	367	318	100	51	132	4 356
75–79 years	2 694	2 078	1 281	764	635	201	96	120	7 867
80–84 years	4 682	3 411	2 150	1 168	1 209	333	200	114	13 259
85–89 years	5 061	3 393	2 444	1 247	1 375	361	226	60	14 160

Table NHA.53.2 Older people receiving aged care services, by age, Indigenous status and remoteness, 2008-09 (a) (number)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
90+ years	3 633	2 203	1 834	959	952	292	156	39	10 056
Indigenous status									
Indigenous	378	157	249	248	87	19	29	403	1 569
Non-Indigenous	17 316	12 257	8 267	4 361	4 450	1 271	721	255	48 862
Not Stated	16	23	4	1	2	–	–	–	46
Remoteness of residence (c)									
Metropolitan	12 351	9 655	5 131	3 521	3 255	..	750	..	34 646
Inner regional	4 555	2 308	1 931	517	803	962	–	..	11 072
Outer regional	803	523	1 214	327	390	286	..	236	3 779
Remote (d)	33	7	139	225	76	42	..	145	667
Very remote	10	..	134	25	20	np	..	278	467
					Extended Aged Care at Home				
Age group									
70–74 years	254	221	112	71	38	14	13	20	741
75–79 years	367	271	142	101	76	29	25	26	1 037
80–84 years	482	351	206	116	140	37	30	20	1 382
85–89 years	461	276	199	114	114	29	41	18	1 250
90+ years	478	237	179	117	125	36	32	11	1 215
Indigenous status									
Indigenous	37	np	9	11	np	np	np	20	77
Non-Indigenous (e)	2 027	1 359	830	512	493	147	143	88	5 595
Not Stated	–	–	–	–	–	–	–	–	–
Remoteness of residence (c)									
Metropolitan	1 348	968	475	421	355	..	143	..	3 708
Inner regional	554	315	262	72	72	138	–	..	1 413

Table NHA.53.2 Older people receiving aged care services, by age, Indigenous status and remoteness, 2008-09 (a) (number)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Outer regional (f)	169	76	99	23	56	9	..	90	522
Remote	–	–	–	9	11	–	..	18	38
Very remote	–	..	5	–	–	–	..	–	5
					EACH Dementia				
Age group									
70–74 years	75	97	56	20	21	6	9	5	289
75–79 years	169	172	100	50	62	16	11	7	587
80–84 years	287	215	145	63	75	30	23	10	846
85–89 years	260	181	127	73	84	29	23	5	782
90+ years	203	108	88	57	35	13	11	5	520
Indigenous status									
Indigenous	np	np	np	np	np	np	np	np	np
Non-Indigenous (g)	994	783	517	263	277	94	77	35	3 028
Not Stated	–	–	–	–	–	–	–	–	–
Remoteness of residence (c)									
Metropolitan	654	580	343	196	219	..	77	..	2 068
Inner regional	267	167	112	40	15	69	–	..	669
Outer regional	73	27	62	27	37	25	..	26	277
Remote	–	–	–	–	6	–	..	9	15
Very remote	–	..	–	–	–	–	..	–	–
					Residential aged care				
Age group									
70–74 years	3 842	2 712	2 065	997	912	302	107	58	10 974
75–79 years	7 566	5 578	3 993	1 801	2 045	601	210	82	21 813

Table NHA.53.2 Older people receiving aged care services, by age, Indigenous status and remoteness, 2008-09 (a) (number)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
80–84 years	14 757	11 055	7 693	3 541	4 217	1 124	464	107	42 866
85–89 years	20 221	15 445	10 486	4 749	6 000	1 614	630	96	59 136
90+ years	21 236	16 238	11 007	5 337	6 305	1 721	676	75	62 497
Indigenous status									
Indigenous	252	81	302	311	57	35	np	173	1 209
Non-Indigenous (h)	66 216	50 592	34 059	16 091	19 056	5 313	2 076	302	193 331
Not Stated	1 219	376	995	133	379	20	13	9	3 141
Remoteness of residence (c)									
Metropolitan	47 101	36 246	22 379	12 861	15 192	..	2 089	..	135 679
Inner regional	16 761	12 117	8 586	2 295	2 239	3 974	–	..	45 944
Outer regional	4 142	2 837	4 206	1 165	1 913	1 322	..	276	15 854
Remote	111	46	282	213	232	71	..	164	1 119
Very remote	–	..	126	111	–	28	..	45	310
					Residential respite				
Age group									
70–74 years	1 121	663	406	205	231	73	44	43	2 777
75–79 years	2 242	1 296	718	425	504	137	57	43	5 399
80–84 years	4 132	2 468	1 268	635	984	258	171	40	9 933
85–89 years	4 939	2 823	1 502	672	1 291	347	198	35	11 766
90+ years	3 759	2 122	1 160	603	861	286	127	27	8 919
Indigenous status									
Indigenous	84	33	63	67	12	11	np	113	383
Non-Indigenous (h)	16 131	9 349	5 008	2 492	3 862	1 092	595	126	38 537
Not Stated	1	–	–	–	–	–	–	–	1
Remoteness of residence (c)									

Table NHA.53.2 Older people receiving aged care services, by age, Indigenous status and remoteness, 2008-09 (a) (number)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Metropolitan	10 817	5 803	2 831	1 695	2 733	..	599	..	24 423
Inner regional	4 284	2 996	1 496	513	606	810	–	..	10 684
Outer regional	1 338	703	745	322	477	297	..	125	4 004
Remote	20	13	64	45	111	38	..	76	367
Very remote	–	..	29	29	–	7	..	43	108
					Transition Care				
Age group									
70–74 years	397	272	248	67	96	35	10	19	1 144
75–79 years	776	549	409	121	181	56	37	13	2 140
80–84 years (i)	1 118	979	520	201	313	77	59	15	3 281
85–89 years	1 037	980	418	221	311	74	62	np	3 102
90+ years	570	709	249	127	199	70	40	np	1 962
Indigenous status									
Indigenous	19	8	20	6	5	np	np	33	91
Non-Indigenous (j)	3 884	3 484	1 833	733	1 096	312	209	32	11 583
Not Stated	–	–	–	–	–	–	–	–	–
Remoteness of residence (c)									
Major cities	2 772	3 067	1 137	535	1 101	..	209	..	8 818
Inner regional	991	427	413	84	–	312	–	..	2 227
Outer regional	146	–	307	120	–	–	..	21	594
Remote	–	–	–	–	–	–	..	44	44
Very remote	–	..	–	–	–	–	..	–	–

(a) The total of people appearing in the age group tables will not equal the total of table 53.1 as Indigenous Australians 50–69 years are not included in table 53.2 in programs other than HACC.

Table NHA.53.2 Older people receiving aged care services, by age, Indigenous status and remoteness, 2008-09 (a) (number)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(b) Client age is calculated as at 30 June 2009. Only includes HACC clients aged 50–69 years who reported as Indigenous. That is, it excludes HACC clients aged 50–69 years with an unknown Indigenous status or who reported as non-Indigenous.

(c) Remoteness category is based on location of service provider, except for the HACC program where State or Territory is based on the location of the HACC Agency and the Remoteness Category is based on the postcode of the care recipient. Where a person moved from one state to another they are counted uniquely in each state against remoteness indicators. A person who has moved between state within the year will be double counted, making the total number of people in the 'remoteness' count greater than the number of unique individuals receiving services under the program.

(d) In Tasmania, includes very remote as numbers are too small to appear separately.

(e) In Victoria, SA, Tasmania and the ACT, includes Indigenous and non-Indigenous as numbers are too small to appear separately.

(f) In Tasmania, includes Indigenous and non-Indigenous as numbers are too small to appear separately.

(g) Includes Indigenous and non-Indigenous as numbers are too small to appear separately.

(h) In the ACT, includes Indigenous and non-Indigenous as numbers are too small to appear separately.

(i) In the NT, includes people aged 85+ as the numbers are too small to appear separately.

(j) In Tasmania and the ACT, includes Indigenous and non-Indigenous as numbers are too small to appear separately.

np Not published. .. Not applicable. – Nil or rounded to zero.

Source: AIHW (unpublished) sourced from the Department of Health and Ageing aged care data warehouse and HACC Minimum Data Set (MDS) and Department of Veterans’ Affairs (DVA) dataset; ABS (unpublished) Estimated Residential Population, 30 June 2008; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2008, Series B, Cat. no. 3238.0.

NHA Indicator 54:

Aged care assessments completed

Table NHA.54.1 Aged care assessments completed under the ACAP, 2007-08

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Number				
Age									
<50 years	570	294	178	86	62	21	49	37	1 297
50–64 years	1 138	754	565	308	204	78	29	102	3 178
65–69 years	4 513	3 368	2 274	1 393	906	406	135	259	13 254
70–74 years	6 001	4 428	2 651	1 665	1 198	436	166	180	16 725
75–79 years	11 926	8 613	5 043	3 367	2 455	877	299	161	32 741
80–84 years	18 336	13 850	8 159	4 751	4 404	1 394	600	165	51 659
85+ years	28 392	21 720	12 846	7 605	6 987	2 413	791	177	80 931
Indigenous status									
Indigenous	687	299	446	488	122	41	16	452	2 551
Non-Indigenous	68 075	52 493	30 805	18 686	15 791	5 580	2 023	618	194 071
Not Stated	2 114	235	465	1	303	4	30	11	3 163
Remoteness of residence									
Major cities	47 823	37 289	18 442	14 506	11 256	..	2 021	..	131 337
Inner regional	16 904	12 114	8 085	2 282	2 343	3 929	28	..	45 685
Outer regional	5 521	3 417	4 349	1 564	2 011	1 606	6	475	18 949
Remote	330	53	416	489	454	60	..	312	2 114
Very remote	42	..	395	310	120	21	..	252	1 140
Not Stated	256	154	29	24	32	9	14	42	560
SEIFA of residence (a)									
Quintile 1	14 951	9 625	8 177	1 172	5 275	3 295	9	380	42 884
Quintile 2	20 251	9 970	5 271	4 475	3 653	334	58	162	44 174
Quintile 3	12 404	10 247	6 590	5 083	2 357	1 045	66	206	37 998
Quintile 4	8 553	10 757	7 304	2 975	2 824	943	546	215	34 117
Quintile 5	14 462	12 273	4 338	5 446	2 085	–	1 374	70	40 048
Not Stated	255	155	36	24	22	8	16	48	564

Table NHA.54.1 Aged care assessments completed under the ACAP, 2007-08

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Total aged care assessments completed	70 876	53 027	31 716	19 175	16 216	5 625	2 069	1 081	199 785
	Rate per 1000 population (b)								
Age									
<50 years	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
50–64 years	0.9	0.8	0.7	0.8	0.7	0.8	0.5	3.0	0.8
65–69 years	16.4	16.4	13.8	17.4	13.4	18.1	12.2	51.1	15.9
70–74 years	26.7	26.4	21.4	26.9	21.5	24.7	20.3	64.2	25.2
75–79 years	63.0	60.9	50.8	68.1	50.8	61.1	47.8	97.3	59.5
80–84 years	125.0	126.0	109.6	130.6	111.1	127.6	121.9	167.7	121.9
85+ years	225.0	233.0	200.1	246.6	202.9	258.7	195.8	267.0	223.3
Indigenous status									
Indigenous	4.3	8.5	2.9	6.6	4.2	2.1	3.6	6.8	4.7
Non-Indigenous	10.0	9.9	7.4	8.9	10.0	11.7	5.9	4.0	9.3
Remoteness of residence									
Major cities	9.4	9.4	7.2	9.4	9.7	..	5.9	..	8.9
Inner regional	11.9	11.4	8.6	8.1	12.0	12.2	56.9	..	10.8
Outer regional	12.4	13.4	6.7	7.9	11.0	9.7	..	3.9	9.4
Remote	10.1	11.2	4.9	5.1	9.9	7.7	..	6.5	6.6
Very remote	9.4	..	7.9	6.4	8.6	8.0	..	5.0	6.7
SEIFA of residence (a)									
Quintile 1	8.3	9.9	3.9	12.8	8.0	7.8	7.1	3.6	7.6
Quintile 2	8.8	9.6	11.0	6.7	10.5	26.9	2.4	11.6	9.4
Quintile 3	13.8	8.1	7.8	6.7	14.5	14.4	0.7	10.7	9.8
Quintile 4	7.7	9.6	8.8	9.2	9.6	8.2	5.8	2.6	8.7
Quintile 5	12.7	12.4	5.9	12.4	10.4	..	6.4	0.1	11.0
Total	**10.1**	**10.0**	**7.4**	**8.8**	**10.1**	**11.3**	**6.0**	**4.9**	**9.3**

Table NHA.54.1 **Aged care assessments completed under the ACAP, 2007-08**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(a) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory.

(b) Rate is expressed as number of people in the nominated age group who have had an Aged Care Assessment Team (ACAT) assessment in that state, territory or nationally, per 1000 people in that age group in that state, territory or nationally.

.. Not applicable. – Nil or rounded to zero.

Source : Department of Health and Ageing (unpublished) aged care data warehouse; ABS (unpublished) Estimated Residential Population, 30 June 2007; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2007, Series B, Cat. no. 3238.0.

NHA Indicator 55:

Younger people with disabilities using residential, CACP, EACH and EACHD aged care services

Table NHA.55.1 Number of younger people with a disability using residential, CACP, EACH and EACHD aged care services, 2008-09 (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
				Residential aged care services (b)					
Age									
<50 years	387	234	190	69	67	17	np	10	974
50–64 years (c)	2 386	1 628	1 362	575	523	179	79	49	6 781
Total	**2 773**	**1 862**	**1 552**	**644**	**590**	**196**	**79**	**59**	**7 755**
				Community aged care services (d)					
Age									
<50 years	48	43	53	6	6	np	np	14	170
50–64 years (e)	664	695	488	239	129	55	38	153	2 461
Total	**712**	**738**	**541**	**245**	**135**	**55**	**38**	**167**	**2 631**

(a) Number is younger people receiving aged care services at any time in the 12 month period to 30 June 2009.

(b) Residential aged care services includes permanent residential care only.

(c) In the ACT, includes people aged <50 years who cannot be reported separately as the numbers are too small.

(d) Community care services includes recipients of CACP, EACH and EACHD only.

(e) In Tasmania and the ACT, includes people aged <50 years who cannot be reported separately as the numbers are too small.

np Not published.

Source: Department of Health and Ageing (unpublished) aged care data warehouse.

NHA Indicator 56:

People aged 65 years or over receiving sub-acute services

Table NHA.56.1 Separations for persons aged 65 years or over, receiving sub-acute services, 2007-08 (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Number				
Age group									
65–69 years	12 211	5 282	4 781	1 161	1 567	213	278	78	25 571
70–74 years	13 743	7 189	4 940	1 516	1 611	294	407	78	29 778
75–79 years	15 908	9 390	5 806	2 230	2 069	405	465	51	36 324
80–84 years	16 023	10 882	5 850	2 633	2 547	503	657	81	39 176
85+ years	15 686	11 018	5 375	3 622	2 300	497	658	42	39 198
Indigenous status (b)									
Indigenous	171	76	111	84	15	np	np	19	476
Other Australians	73 400	43 685	26 641	11 078	10 079	np	np	311	165 194
Remoteness of residence (c)									
Major cities	62 710	35 320	21 424	8 871	8 704	np	2 100	np	139 135
Inner regional	8 429	6 856	3 761	1 317	739	1 557	np	–	22 865
Outer regional	2 177	1 514	1 344	731	493	328	np	307	7 048
Remote	104	32	140	174	122	18	np	np	604
Very remote	11	np	66	52	27	np	–	12	173
SEIFA of residence (d)									
Quintile 1	9 755	5 962	4 597	513	2 704	835	np	95	24 519
Quintile 2	13 958	6 416	3 972	2 311	2 210	96	223	55	29 241
Quintile 3	12 886	7 560	4 848	3 550	1 546	456	120	102	31 068
Quintile 4	10 420	9 545	7 016	1 840	1 893	522	715	70	32 021
Quintile 5	26 481	14 278	6 302	2 942	1 732	np	1 349	np	53 094
Total (e)	**73 571**	**43 761**	**26 752**	**11 162**	**10 094**	**1 912**	**2 465**	**330**	**170 047**

Table NHA.56.1 Separations for persons aged 65 years or over, receiving sub-acute services, 2007-08 (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
	Rate per 1000 population (e)								
Age group (f)									
65–69 years	45.5	26.3	30.2	15.0	23.9	9.8	26.2	16.3	31.7
70–74 years	62.3	43.8	41.2	25.5	29.4	17.1	51.8	30.9	46.0
75–79 years	83.4	66.1	58.4	45.4	42.1	28.1	75.0	30.9	65.7
80–84 years	111.4	101.1	80.5	74.6	65.2	46.4	135.3	np	94.4
85+ years	132.6	125.1	88.4	124.6	70.9	55.9	178.5	np	114.7
Indigenous status (b), (f)									
Indigenous	32.3	59.2	26.7	38.1	15.6	np	np	9.9	28.9
Other Australians	78.4	62.3	52.5	44.6	42.0	np	np	36.3	60.1
Remoteness of residence (c), (g)									
Major cities	96.5	68.3	70.3	47.8	47.2	..	63.5	..	74.2
Inner regional	36.3	42.1	29.3	37.0	24.4	31.0	np	..	35.8
Outer regional	29.2	33.4	20.1	31.2	16.6	14.1	..	58.8	26.2
Remote	24.1	31.7	18.5	27.9	18.4	17.9	..	np	20.7
Very remote	np	..	16.2	25.0	20.4	np	..	10.2	18.0
SEIFA of residence (d), (g)									
Quintile 1	47.8	46.5	34.4	35.9	33.5	18.9	np	36.4	40.3
Quintile 2	48.6	45.5	47.6	46.2	38.2	19.8	np	36.4	46.6
Quintile 3	81.0	54.5	42.8	42.8	40.1	33.0	91.2	61.0	56.4
Quintile 4	83.3	64.2	62.0	49.0	44.7	44.3	80.3	29.1	65.3
Quintile 5	142.6	84.7	91.6	42.5	51.4	..	60.8	np	97.5
Total (g)	**76.4**	**60.3**	**52.2**	**44.2**	**39.9**	**25.6**	**74.7**	**38.7**	**60.2**

(a) Sub-acute services includes separations where the type of care was reported as rehabilitation, palliative care, geriatric evaluation and management or psychogeriatric care.

(b) The Australian totals for Indigenous/Other Australians do not include data for the ACT or Tasmania.

Table NHA.56.1 **Separations for persons aged 65 years or over, receiving sub-acute services, 2007-08 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(c) Not all remoteness areas are represented in each State or Territory. The remoteness area 'Major city' does not exist within Tasmania or the NT, 'Inner regional' does not exist within the NT, 'Remote' does not exist in the ACT and 'Very remote' does not exist in Victoria or the ACT. However, interstate visitors residing in these remoteness areas may be treated in those states and territories.

(d) SEIFA quintiles are based on the ABS Index of Relative Socio-economic Disadvantage (IRSD), with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. Disaggregation by SEIFA area is by usual residence, not SEIFA of hospital 'site'. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each state or territory.

(e) Total includes separations for which place of residence was not known or not stated.

(f) Crude rates.

(g) Age-standardised to the Australian population as at 30 June 2001.

– Nil or rounded to zero. .. Not applicable. **np** Not published.

Source: AIHW (unpublished) National Hospital Morbidity Database; ABS (unpublished) Estimated Residential Population, 30 June 2007; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2007, Series B, Cat. no. 3238.0.

NHA Indicator 57:

Number of hospital patient days by those eligible and waiting for residential aged care

Table NHA.57.1 Public hospital separations for care type 'maintenance' for people aged 70 years and over plus Indigenous people aged 50–69 years, 2007-08 (a), (b), (c), (d), (e), (f)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Length of stay in separation with diagnosis Z75.11 or Z74.2										
35 days or more	no.	529	206	717	186	242	137	np	np	2 081
less than 35 days	no.	2 791	417	2 318	1 061	1 369	305	np	np	8 762
Total	no.	3 320	623	3 035	1 247	1 611	442	np	np	10 843
Total number of public hospital separations for people aged 70 years and over plus Indigenous people aged 50-69	no.	483 242	405 360	216 346	133 413	119 003	25 584	23 960	32 476	1 439 384
Proportion of completed hospital separations by those eligable and waiting for residential aged care	**%**	**0.1**	**0.1**	**0.3**	**0.1**	**0.2**	**0.5**	**np**	**np**	**0.1**

(a) Data includes completed hospital separations with a care type of maintenance care for persons age 70 years and over and Indigenous persons aged 50–69 years, with a principle or additional diagnosis of Z75.11 or Z74.2. Z75.11 is defined as 'person awaiting admission to residential aged care'. Z74.2 is defined as 'need for assistance at home and no other household member able to render care'.

(b) These data only account for completed unlinked separations — that is, if a change in the type of care occurs during a patient's hospital stay, these data do not combine these separations to reflect the full length of hospital stay for a patient.

(c) Diagnosis codes may not be applied consistently across jurisdictions, or over time.

(d) Although the diagnosis codes reflect a care type, they do not determine a persons appropriate requirement for residential aged care (this is determined by an ACAT assessment).

(e) The code 'need for assistance at home and no other household member able to render care' may also be used for respite care for aged care residents or those receiving community care and some jurisdictions may have a high proportion of this type of use. This is particularly relevant in some rural areas where there are few alternative options for these clients.

(f) Includes separations with a care type of Maintenance only.

np Not published.

Source : AIHW (unpublished) National Hospital Morbidity Database.

NHA Indicator 58:

There is currently no agreed measure, nor data available, to inform this indicator

Patient satisfaction/experience

NHA Indicator 59:

Age standardised mortality

Table NHA.59.1 **Age standardised mortality rates by major cause of death, 2007 (per 100 000 persons) (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)
Cause of death									
Certain infectious and parasitic diseases (A00-B99)	10.1	6.8	7.4	6.2	7.8	3.7	5.3	24.6	8.1
Neoplasms (C00-D48)	178.1	178.7	169.0	180.2	180.0	202.8	173.1	226.7	177.7
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50-D89)	2.2	2.0	2.1	1.8	2.1	1.6	2.0	2.5	2.1
Endocrine, nutritional and metabolic diseases (E00-E90)	20.0	25.4	21.0	25.7	24.2	36.4	24.7	62.3	23.1
Mental and behavioural disorders (F00-F99)	25.0	24.3	18.9	20.8	25.0	27.5	31.0	39.6	23.6
Diseases of the nervous system (G00-G99)	21.7	24.5	21.5	29.3	25.6	25.4	29.9	16.2	23.6
Diseases of the eye and adnexa (H00-H59)	–	–	–	–	–	–	–	–	–
Diseases of the ear and mastoid process (H60-H95)	–	–	–	–	–	0.2	–	0.4	–
Diseases of the circulatory system (I00-I99)	201.9	184.8	201.3	184.1	203.1	228.9	179.2	248.6	196.8
Diseases of the respiratory system (J00-J99)	48.9	46.5	57.9	45.3	45.4	58.9	38.2	67.4	49.6
Diseases of the digestive system (K00-K93)	19.8	19.8	21.3	22.6	20.0	21.8	18.1	39.0	20.5
Diseases of the skin and subcutaneous tissue (L00-L99)	1.8	1.2	1.4	1.0	1.8	1.7	2.6	4.8	1.5
Diseases of the musculoskeletal system and connective tissue (M00-M99)	4.4	4.9	3.7	5.3	4.7	7.5	4.6	12.7	4.6
Diseases of the genitourinary system (N00-N99)	13.7	13.6	14.2	13.5	14.5	17.2	9.6	35.5	14.0
Pregnancy, childbirth and the puerperium (O00-O99)	–	–	–	0.1	0.1	–	–	–	–
Certain conditions originating in the perinatal period (P00-P96)	2.8	2.7	3.2	1.3	2.8	2.8	3.8	5.0	2.8
Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	2.5	2.8	3.2	2.1	2.5	3.7	2.2	5.4	2.7
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)	6.3	3.8	23.7	3.9	4.7	3.0	1.9	6.7	8.5
External causes of morbidity and mortality (V01-Y98)	33.6	31.9	36.9	44.1	38.7	48.1	36.7	92.4	36.1
Total	**593.1**	**573.6**	**606.7**	**586.9**	**602.7**	**691.2**	**562.8**	**889.3**	**595.2**

Table NHA.59.1 **Age standardised mortality rates by major cause of death, 2007 (per 100 000 persons) (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)

(a) Age standardised death rates enable the comparison of death rates between populations with different age structures by relating them to a standard population. The ABS standard populations relate to the years ending in 1 (e.g. 2001). The current standard population is all persons in the Australian population at 30 June 2001. Age standardised rates in this table have been calculated using the direct method and are not comparable to rates calculated using the indirect method.

(b) Causes of death data for 2007 is subject to revision. All coroner certified deaths registered after 1 January 2007 will be subject to a revision process. This is a change from previous years where all ABS processing of causes of death data for a particular reference period was finalised approximately 13 months after the end of the reference period. Where insufficient information was available to code a cause of death (e.g. a coroner certified death was yet to be finalised by the Coroner), less specific ICD codes were assigned as required by the ICD coding rules. The revision process will enable the use of additional information relating to coroner certified deaths as it becomes available over time. This will result in increased specificity of the assigned ICD-10 codes. Causes of death data for 2007 coroner certified deaths will be updated as more information becomes available to the ABS.

Revised data for 2007 will be published both on a year registration basis and a year of occurrence basis in the 2008 Causes of death publication, due to be released in March 2010, and again in the publication relating to the 2009 collection due for release in 2011. Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Causes of Death, 2007, 3301.0.

(c) Includes 'Other territories'.

– Nil or rounded to zero.

Source : ABS (unpublished) *Causes of Death, Australia, 2007,* Cat. No. 3301.0.

Table NHA.59.2 Age standardised mortality rates and rate ratios by major cause of death, by Indigenous status, 2007 (a), (b), (c), (d), (e), (f)

	NSW	*Qld*	*WA*	*SA*	*NT*	*Australia* (g)
	Age standardised mortality rate: Indigenous persons (per 100 000 population)					
Cause of death						
Certain infectious and parasitic diseases (A00-B99)	25.8	23.2	23.0	np	77.7	27.6
Neoplasms (C00-D48)	248.2	253.5	377.1	259.8	360.0	268.5
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50-D89)	np	np	–	–	np	2.2
Endocrine, nutritional and metabolic diseases (E00-E90)	71.0	142.8	192.3	135.7	241.0	127.4
Mental and behavioural disorders (F00-F99)	43.4	20.7	64.9	np	61.7	39.6
Diseases of the nervous system (G00-G99)	25.5	29.1	84.1	np	45.1	35.8
Diseases of the eye and adnexa (H00-H59)	–	–	–	–	–	–
Diseases of the ear and mastoid process (H60-H95)	–	–	–	–	np	np
Diseases of the circulatory system (I00-I99)	482.1	458.5	859.5	583.6	777.1	531.7
Diseases of the respiratory system (J00-J99)	117.7	146.6	225.9	132.8	225.9	149.1
Diseases of the digestive system (K00-K93)	53.6	67.4	167.5	np	149.5	81.4
Diseases of the skin and subcutaneous tissue (L00-L99)	np	np	np	–	np	4.2
Diseases of the musculoskeletal system and connective tissue (M00-M99)	np	np	np	np	np	11.6
Diseases of the genitourinary system (N00-N99)	np	65.7	86.2	np	137.9	57.1
Pregnancy, childbirth and the puerperium (O00-O99)	–	–	–	–	–	–
Certain conditions originating in the perinatal period (P00-P96)	8.5	5.2	2.4	17.8	7.7	6.7
Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	np	np	np	–	np	3.6
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)	19.3	26.5	22.4	np	np	17.8
External causes of morbidity and mortality (V01-Y98)	52.7	82.0	143.0	85.1	173.8	90.4
	Age standardised mortality rate: Non-Indigenous persons (per 100 000 persons)					
Cause of death						

Table NHA.59.2 **Age standardised mortality rates and rate ratios by major cause of death, by Indigenous status, 2007 (a), (b), (c), (d), (e), (f)**

	NSW	*Qld*	*WA*	*SA*	*NT*	*Australia* (g)
Certain infectious and parasitic diseases (A00-B99)	10.3	7.5	6.1	8.1	10.8	8.2
Neoplasms (C00-D48)	179.8	169.4	178.5	181.9	190.2	178.9
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50-D89)	2.2	2.1	1.8	2.3	np	2.1
Endocrine, nutritional and metabolic diseases (E00-E90)	20.3	20.3	24.5	25.0	33.3	23.1
Mental and behavioural disorders (F00-F99)	26.9	20.1	21.6	28.3	24.5	25.3
Diseases of the nervous system (G00-G99)	22.4	22.0	29.5	26.8	15.1	24.3
Diseases of the eye and adnexa (H00-H59)	–	–	–	–	–	–
Diseases of the ear and mastoid process (H60-H95)	–	–	–	–	–	–
Diseases of the circulatory system (I00-I99)	210.6	207.8	186.6	215.0	196.5	204.8
Diseases of the respiratory system (J00-J99)	50.4	59.0	45.2	47.3	53.2	50.9
Diseases of the digestive system (K00-K93)	20.2	21.4	21.7	20.9	28.0	20.7
Diseases of the skin and subcutaneous tissue (L00-L99)	1.9	1.5	1.0	2.0	np	1.6
Diseases of the musculoskeletal system and connective tissue (M00-M99)	4.6	3.9	5.5	4.9	np	4.8
Diseases of the genitourinary system (N00-N99)	14.3	14.5	13.6	15.2	23.2	14.5
Pregnancy, childbirth and the puerperium (O00-O99)	–	–	np	np	–	–
Certain conditions originating in the perinatal period (P00-P96)	2.7	3.1	1.3	2.3	np	2.7
Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	2.6	3.2	1.9	2.6	np	2.7
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)	6.3	24.1	3.5	4.9	6.1	8.6
External causes of morbidity and mortality (V01-Y98)	34.1	36.2	42.1	39.0	65.6	35.8
			Rate ratio (b)			
Cause of death:						
Certain infectious and parasitic diseases (A00-B99)	2.5	3.1	3.8	np	7.2	3.4
Neoplasms (C00-D48)	1.4	1.5	2.1	1.4	1.9	1.5

Table NHA.59.2 Age standardised mortality rates and rate ratios by major cause of death, by Indigenous status, 2007 (a), (b), (c), (d), (e), (f)

	NSW	*Qld*	*WA*	*SA*	*NT*	*Australia* (g)
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50-D89)	np	np	–	–	np	1.0
Endocrine, nutritional and metabolic diseases (E00-E90)	3.5	7.1	7.9	5.4	7.2	5.5
Mental and behavioural disorders (F00-F99)	1.6	1.0	3.0	np	2.5	1.6
Diseases of the nervous system (G00-G99)	1.1	1.3	2.8	np	3.0	1.5
Diseases of the eye and adnexa (H00-H59)	–	–	–	–	–	–
Diseases of the ear and mastoid process (H60-H95)	–	–	–	–	–	–
Diseases of the circulatory system (I00-I99)	2.3	2.2	4.6	2.7	4.0	2.6
Diseases of the respiratory system (J00-J99)	2.3	2.5	5.0	2.8	4.2	2.9
Diseases of the digestive system (K00-K93)	2.7	3.2	7.7	np	5.3	3.9
Diseases of the skin and subcutaneous tissue (L00-L99)	np	np	np	–	np	2.6
Diseases of the musculoskeletal system and connective tissue (M00-M99)	np	np	np	np	np	2.4
Diseases of the genitourinary system (N00-N99)	np	4.5	6.3	np	5.9	3.9
Pregnancy, childbirth and the puerperium (O00-O99)	–	–	–	–	–	–
Certain conditions originating in the perinatal period (P00-P96)	3.2	1.6	1.8	7.6	np	2.5
Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	np	np	np	–	np	1.3
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)	3.1	1.1	6.4	np	np	2.1
External causes of morbidity and mortality (V01-Y98)	1.5	2.3	3.4	2.2	2.6	2.5

(a) Age standardised death rates enable the comparison of death rates between populations with different age structures by relating them to a standard population. The ABS standard populations relate to the years ending in 1 (e.g. 2001). The current standard population is all persons in the Australian population at 30 June 2001. Age standardised rates in this table have been calculated using the indirect method and are not comparable to rates calculated

(b) Rate ratio calculated by dividing Indigenous rates by Non-Indigenous rates.

Table NHA.59.2 Age standardised mortality rates and rate ratios by major cause of death, by Indigenous status, 2007 (a), (b), (c), (d), (e), (f)

	NSW	*Qld*	*WA*	*SA*	*NT*	*Australia* (g)

(c) Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

(d) Data based on reference year. See data quality statements for a more detailed explanation.

(e) Causes of death data for 2007 is subject to revision. All coroner certified deaths registered after 1 January 2007 will be subject to a revision process. This is a change from previous years where all ABS processing of causes of death data for a particular reference period was finalised approximately 13 months after the end of the reference period. Where insufficient information was available to code a cause of death (e.g. a coroner certified death was yet to be finalised by the Coroner), less specific ICD codes were assigned as required by the ICD coding rules. The revision process will enable the use of additional information relating to coroner certified deaths as it becomes available over time. This will result in increased specificity of the assigned ICD-10 codes.Causes of death data for 2007 coroner certified deaths will be updated as more information becomes available to the ABS.
Revised data for 2007 will be published both on a year registration basis and a year of occurrence basis in the 2008 Causes of death publication, due to be released in March 2010, and again in the publication relating to the 2009 collection due for release in 2011. Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Causes of Death, 2007, 3301.0.

(f) Data are reported by jurisdication of residence for NSW, Queensland, WA, SA and the NT only. These five states and territories are considered to have adequate levels of Indigenous identification in mortality data.

(g) All states and territories including other territories.

(h) ‘Non-Indigenous’ includes mortality of non-Indigenous people and those for whom Indigenous status was not stated.

– Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *Causes of Death, Australia, 2007,* Cat. No. 3301.0.

NHA Indicator 60:

Access to services by type of service compared to need

Table NHA.60.1 Proportion of people who accessed health services by health status, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Health status (excellent/very good/good)										
Admitted to hospital	%	14.2	13.5	13.5	15.8	13.5	13.5	13.4	13.7	14
Casualty/outpatients/day clinic	%	3.4	5.5	3.7	4.8	4.5	4.7	np	np	4.2
Doctor consultation (GP and/or specialist)	%	21.1	21.5	20.5	22.4	21.8	21.6	19.9	21.5	21.3
Dental consultation	%	5.5	5.9	5.2	6.3	6.4	5.6	5.8	4.4	5.7
Consultation with other health professional	%	11.8	14.3	14.0	13.5	14.2	11.9	12.5	12.6	13.2
Total accessing health care (d)	%	**41.8**	**41.7**	**41.1**	**43.4**	**42.9**	**40.5**	**37.7**	**38.8**	**41.8**
Health status (fair/poor)										
Admitted to hospital	%	27.6	24.6	25.8	28.1	26.5	27.0	23.8	37.2	26.5
Casualty/outpatients/day clinic	%	7.9	10.0	10.3	12.5	11.4	11.9	5.5	13.0	9.7
Doctor consultation (GP and/or specialist)	%	41.8	44.1	42.3	39.7	41.1	44.1	30.4	38.7	42.0
Dental consultation	%	5.8	6.8	5.8	5.6	9.0	3.5	np	np	6.3
Consultation with other health professional	%	19.7	22.1	24.2	23.9	23.8	19.4	27.4	30.3	22.0
Total accessing health care (d)	**%**	**60.6**	**65.2**	**63.3**	**63**	**64.2**	**58.6**	**58.5**	**66.5**	**62.6**

(a) Rates are age standardised by State/Territory to the 2001 estimated resident population (5 year ranges from 15+).

(b) Persons who accessed at least one of the health services noted in the table in the last two weeks or were admitted to hospital in the last 12 months.

(c) Limited to people aged 15 years or over.

(d) Total persons accessing any of the selected health services above. Components may not add to total because persons may have accessed more than one type of health service.

np Not published.

Source : ABS (unpublished) *National Health Survey* , 2004-05.

Table NHA.60.2 RSEs and confidence intervals for the proportion of people who accessed health services by health status, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
				RSE for Health status (excellent/very good/good)						
Admitted to hospital	%	4.3	5.7	5	4.5	4.3	7	8.1	39.8	2.4
Casualty/outpatients/day clinic	%	9.7	9.4	10.4	12.4	9.1	10.9	np	np	5.1
Doctor consultation (GP and/or specialist)	%	3.2	3.9	4.1	4.7	4.3	5.1	7.7	35.6	1.9
Dental consultation	%	7.3	9.1	7.2	9.8	7.6	10	12.7	47.9	4
Consultation with other health professional	%	5.7	5.7	5.3	6.1	4.8	7.2	7.1	55.3	2.7
Total accessing health care (d)	%	2.3	2.8	2.5	2.6	2.6	3.4	22.6	4.3	1.3
				RSE for Health status (fair/poor)						
Admitted to hospital	%	8.7	8.3	7.3	10.7	8.5	11.4	15.7	46.8	4.2
Casualty/outpatients/day clinic	%	17.9	14.3	17	16.8	16.3	18.9	23.9	66.1	6.9
Doctor consultation (GP and/or specialist)	%	6.6	5.9	6.5	7.9	7.3	8.6	11.9	35.1	3.3
Dental consultation	%	25.0	23.8	19.9	27.4	22	35.9	np	np	10.8
Consultation with other health professional	%	9.9	10.6	8.9	12.9	9.1	14.3	14.7	33.8	4.9
Total accessing health care (d)	%	4.8	4.3	4.4	5.6	4	6.6	7.2	24.6	2.5
				95 per cent confidence interval for Health status (excellent/very good/good)						
Admitted to hospital	%	1.2	1.5	1.3	1.4	1.1	1.9	2.1	10.7	0.6
Casualty/outpatients/day clinic	%	0.7	1.0	0.7	1.2	0.8	1.0	np	np	0.4
Doctor consultation (GP and/or specialist)	%	1.3	1.6	1.6	2.1	1.8	2.2	3.0	15.0	0.8
Dental consultation	%	0.8	1.0	0.7	1.2	1.0	1.1	1.4	4.1	0.5
Consultation with other health professional	%	1.3	1.6	1.5	1.6	1.3	1.7	1.7	13.6	0.7
Total accessing health care (d)	%	1.9	2.3	2.0	2.2	2.2	2.7	16.7	3.3	1.1

Table NHA.60.2 RSEs and confidence intervals for the proportion of people who accessed health services by health status, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
95 per cent confidence interval for Health status (fair/poor)										
Admitted to hospital	%	4.7	4.0	3.7	5.9	4.4	6.0	7.3	34.1	2.2
Casualty/outpatients/day clinic	%	2.8	2.8	3.5	4.1	3.6	4.4	2.6	16.9	1.3
Doctor consultation (GP and/or specialist)	%	5.4	5.1	5.4	6.1	5.9	7.5	7.1	26.6	2.7
Dental consultation	%	2.9	3.2	2.3	3.0	3.9	2.5	np	np	1.3
Consultation with other health professional	%	3.8	4.6	4.2	6.0	4.3	5.4	7.9	20.1	2.1
Total accessing health care (d)	%	5.7	5.5	5.5	6.9	5.0	7.6	8.2	32.1	3.0

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Rates are age standardised by State/Territory to the 2001 estimated resident population (5 year ranges from 15+).

(b) Persons who accessed at least one of the health services noted in the table in the last two weeks or were admitted to hospital in the last 12 months.

(c) Limited to people aged 15 years or over.

(d) Total persons accessing any of the selected health services above. Components may not add to total because persons may have accessed more than one type of health service.

np Not published.

Source : ABS (unpublished) *National Health Survey* , 2004-05.

Table NHA.60.3 Proportion of people who accessed health services by health status, by Indigenous status, 2004-05 (a), (b), (c)

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
					Health status (excellent/very good/good)					
Indigenous										
Admitted to hospital	%	14.7	17.1	16.0	19.1	19.2	10.7	9.9	23.3	17.0
Casualty/outpatients/day clinic	%	3.0	1.7	5.0	5.0	6.7	3.3	1.6	4.4	4.0
Doctor consultation (GP and/or specialist)	%	20.9	24.0	21.2	23.1	25.4	18.4	12.9	23.8	21.9
Dental consultation	%	3.3	6.4	3.4	2.7	3.8	2.8	2.5	2.6	3.3
Consultation with other health professional	%	14.5	15.6	18.7	20.7	20.5	9.0	14.1	37.2	19.7
Total accessing health care (d)	**%**	**40.4**	**47.9**	**43.4**	**47.1**	**46.1**	**34.3**	**30.0**	**55.3**	**44.3**
Non-Indigenous										
Admitted to hospital	%	14.2	13.4	13.2	15.6	13.4	13.3	13.1	10.8	13.8
Casualty/outpatients/day clinic	%	1.6	2.5	1.5	2.0	2.8	2.1	1.8	–	1.9
Doctor consultation (GP and/or specialist)	%	21.0	21.3	20.3	21.9	21.5	21.0	19.4	12.4	21.0
Dental consultation	%	5.5	5.9	5.2	6.4	6.6	5.8	5.6	8.2	5.7
Consultation with other health professional	%	11.6	14.4	14.0	13.3	14.2	12.1	12.1	12.5	13.2
Total accessing health care (d)	**%**	**41.1**	**41.2**	**40.4**	**42.0**	**43.1**	**39.9**	**37.5**	**35.9**	**41.1**
					Health status (fair/poor)					
Indigenous										
Admitted to hospital	%	29.9	34.8	26.1	28.3	27.7	31.9	20.5	39.2	29.7
Casualty/outpatients/day clinic	%	5.0	10.9	14.6	16.3	10.7	7.2	1.2	10.9	10.8
Doctor consultation (GP and/or specialist)	%	40.6	45.4	34.6	41.1	39.4	52.2	27.4	43.0	39.8
Dental consultation	%	3.0	2.7	7.0	1.0	4.8	4.7	6.9	4.6	4.3

Table NHA.60.3 Proportion of people who accessed health services by health status, by Indigenous status, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Consultation with other health professional	%	24.6	33.7	28.1	21.3	24.1	24.9	30.5	47.5	27.8
Total accessing health care (d)	**%**	**61.3**	**71.7**	**65.8**	**59.1**	**61.7**	**66.6**	**48.2**	**70.6**	**64.1**
Non-Indigenous										
Admitted to hospital	%	28.6	25.1	26.3	28.6	26.1	26.5	23.1	49.4	27.1
Casualty/outpatients/day clinic	%	4.9	4.9	5.4	6.4	9.3	6.8	np	np	5.5
Doctor consultation (GP and/or specialist)	%	41.7	44.2	42.7	40.5	41.2	44.0	30.9	20.8	42.1
Dental consultation	%	5.7	6.9	5.7	5.5	8.8	3.6	6.9	–	6.1
Consultation with other health professional	%	19.2	22.2	24.2	23.7	23.7	18.9	27.8	18.0	21.7
Total accessing health care (d)	**%**	**60.7**	**64.8**	**62.5**	**62.2**	**64.3**	**58.3**	**58.5**	**58.9**	**62.3**

(a) Rates are age standardised by State/Territory to the 2001 estimated resident population (5 year ranges from 15+).

(b) Persons who accessed at least one of the health services noted in the table in the last two weeks or were admitted to hospital in the last 12 months.

(c) Limited to people aged 15 years or over.

(d) Total persons accessing any of the selected health services above. Components may not add to total because persons may have accessed more than one type of health service.

– Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2004-05; ABS (unpublished) National Aboriginal and Torres Strait Islander Health Survey, 2004-05.

Table NHA.60.4 **RSEs and confidence intervals for the proportion of people who accessed health services by health status, by Indigenous status, 2004-05 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					RSE for Health status (excellent/very good/good)					
Indigenous										
Admitted to hospital	%	13.6	18.9	15.0	13.5	18.7	16.4	29.5	11.9	6.0
Casualty/outpatients/day clinic	%	25.4	38.5	24.1	24.4	46.6	32.6	109.6	29.6	11.8
Doctor consultation (GP and/or specialist)	%	10.2	15.8	12.0	9.9	14.2	11.4	28.3	11.4	4.9
Dental consultation	%	45.3	56.8	49.4	52.5	66.2	73.7	73.9	45.2	26.5
Consultation with other health professional	%	15.8	20.8	14.0	14.3	17.0	18.2	25.5	11.3	6.3
Total accessing health care (d)	%	8.4	6.9	5.9	7.1	9.7	8.1	19.9	6.3	3.2
Non-Indigenous										
Admitted to hospital	%	4.3	5.8	5.0	4.7	4.2	6.9	7.8	44.1	2.4
Casualty/outpatients/day clinic	%	11.7	13.7	15.7	18.4	12.8	18.7	23.3	-	7.2
Doctor consultation (GP and/or specialist)	%	3.2	3.9	4.2	5.0	4.3	5.0	7.7	30.3	1.9
Dental consultation	%	7.8	9.0	7.3	10.0	7.6	10.1	12.8	45.2	4.1
Consultation with other health professional	%	5.8	5.7	5.5	6.2	4.8	7.2	7.2	56.0	2.7
Total accessing health care (d)	%	2.3	2.8	2.5	2.8	2.6	3.3	4.4	18.7	1.3
					RSE for Health status (fair/poor)					
Indigenous										
Admitted to hospital	%	13.6	18.8	14.9	13.3	18.1	16.6	29.8	11.5	6.0
Casualty/outpatients/day clinic	%	25.6	38.3	23.9	24.0	45.1	33.1	110.6	28.6	11.8
Doctor consultation (GP and/or specialist)	%	10.2	15.7	11.9	9.8	13.7	11.6	28.6	11.0	4.8
Dental consultation	%	45.6	56.5	49.0	51.8	64.2	74.8	74.6	43.7	26.4

Table NHA.60.4 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by Indigenous status, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Consultation with other health professional	%	15.9	20.7	13.9	14.1	16.5	18.4	25.7	11.0	6.2
Total accessing health care (d)	%	8.4	6.9	5.9	7.0	9.4	8.3	20.1	6.1	3.2
Non-Indigenous										
Admitted to hospital	%	8.8	8.0	7.2	11.0	8.2	10.8	15.4	41.0	3.9
Casualty/outpatients/day clinic	%	22.0	19.7	21.7	23.6	22.4	21.8	np	np	9.5
Doctor consultation (GP and/or specialist)	%	6.3	5.9	6.2	7.9	7.6	8.8	12.0	73.5	3.1
Dental consultation	%	23.2	22.8	20.8	26.5	25.4	35.8	27.6	–	10.4
Consultation with other health professional	%	10.0	10.4	9.5	12.8	9.5	14.1	14.5	42.4	5.0
Total accessing health care (d)	%	4.8	4.8	4.5	5.7	4.1	6.9	7.1	35.6	2.4
		95 per cent confidence interval for Health status (excellent/very good/good)								
Indigenous										
Admitted to hospital	%	4.6	6.2	4.4	4.6	6.2	5.7	6.8	6.8	2.2
Casualty/outpatients/day clinic	%	1.5	1.9	2.9	3.5	4.4	2.5	3.4	2.9	1.1
Doctor consultation (GP and/or specialist)	%	5.2	9.2	5.9	7.3	7.4	5.9	8.2	8.5	2.8
Dental consultation	%	2.1	4.6	2.1	2.5	3.4	3.3	2.8	1.7	0.9
Consultation with other health professional	%	5.8	6.5	6.1	8.5	7.4	5.3	6.3	7.5	2.9
Total accessing health care (d)	%	6.9	11.2	6.6	8.5	8.5	6.7	12.4	7.7	3.3
Non-Indigenous										
Admitted to hospital	%	1.2	1.5	1.3	1.4	1.1	1.8	2.0	9.4	0.7
Casualty/outpatients/day clinic	%	0.4	0.7	0.5	0.7	0.7	0.8	0.8	–	0.3
Doctor consultation (GP and/or specialist)	%	1.3	1.6	1.7	2.1	1.8	2.1	2.9	7.4	0.8

Table NHA.60.4 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by Indigenous status, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Dental consultation	%	0.8	1.0	0.8	1.2	1.0	1.2	1.4	7.2	0.5
Consultation with other health professional	%	1.3	1.6	1.5	1.6	1.3	1.7	1.7	13.8	0.7
Total accessing health care (d)	%	1.8	2.3	2.0	2.3	2.2	2.6	3.2	13.1	1.1
				95 per cent confidence interval for Health status (fair/poor)						
Indigenous										
Admitted to hospital	%	7.9	12.9	7.7	7.5	10.1	10.2	11.9	9.1	3.5
Casualty/outpatients/day clinic	%	2.5	8.2	6.9	7.8	9.8	4.6	2.5	6.3	2.5
Doctor consultation (GP and/or specialist)	%	8.1	14.0	8.2	8.0	11.0	11.7	15.2	9.6	3.8
Dental consultation	%	2.6	3.0	6.8	1.1	6.3	6.8	9.9	4.1	2.2
Consultation with other health professional	%	7.6	13.7	7.7	6.0	8.0	8.9	15.3	10.6	3.4
Total accessing health care (d)	%	10.1	9.8	7.6	8.2	11.7	10.6	18.8	8.7	4.1
Non-Indigenous										
Admitted to hospital	%	4.9	4.0	3.7	6.2	4.2	5.6	7.0	39.7	2.1
Casualty/outpatients/day clinic	%	2.1	1.9	2.3	2.9	4.1	2.9	np	np	1.0
Doctor consultation (GP and/or specialist)	%	5.1	5.1	5.2	6.3	6.1	7.6	7.3	30.0	2.5
Dental consultation	%	2.6	3.1	2.3	2.9	4.4	2.5	3.7	–	1.2
Consultation with other health professional	%	3.8	4.5	4.5	6.0	4.4	5.2	7.9	14.9	2.1
Total accessing health care (d)	%	5.7	6.1	5.5	6.9	5.2	7.9	8.2	41.1	2.9

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Rates are age standardised by State/Territory to the 2001 estimated resident population (5 year ranges from 15+).

(b) Persons who accessed at least one of the health services noted in the table in the last two weeks or were admitted to hospital in the last 12 months.

Table NHA.60.4 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by Indigenous status, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(c) Limited to people aged 15 years or over.

(d) Total persons accessing any of the selected health services above. Components may not add to total because persons may have accessed more than one type of health service.

– Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2004-05; ABS (unpublished) National Aboriginal and Torres Strait Islander Health Survey, 2004-05.

Table NHA.60.5 Proportion of people who accessed health services by health status, by remoteness of residence, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Health status (excellent/very good/good)					
Major cities										
Admitted to hospital	%	13.7	13.2	14.3	14.3	12.8	..	13.4	..	13.6
Casualty/outpatients/day clinic	%	3.4	5.5	3.7	4.9	4.3	..	3.8	..	4.3
Doctor consultation (GP and/or specialist)	%	22.3	22.9	21.0	24.1	22.1	..	19.9	..	22.4
Dental consultation	%	5.7	5.7	5.3	6.8	6.5	..	5.8	..	5.8
Consultation with other health professional	%	12.1	13.6	13.8	13.2	14.4	..	12.5	..	13.1
Total accessing health care (d)	**%**	**42.8**	**42.5**	**42.0**	**42.8**	**44.0**	**..**	**38.8**	**..**	**42.6**
Inner regional										
Admitted to hospital	%	16.6	15.0	11.5	19.2	14.9	14.5	..	..	14.8
Casualty/outpatients/day clinic	%	3.1	4.9	3.2	3.4	3.3	4.7	..	..	3.8
Doctor consultation (GP and/or specialist)	%	18.4	16.1	20.9	18.3	18.4	21.3	..	..	18.6
Dental consultation	%	5.2	6.5	6.2	5.9	7.8	5.7	..	..	6.0
Consultation with other health professional	%	11.1	14.4	15.1	15.0	14.4	12.1	..	..	13.4
Total accessing health care (d)	**%**	**39.3**	**38.2**	**40.5**	**44.0**	**42.1**	**41.4**	**..**	**..**	**39.9**
Outer regional										
Admitted to hospital	%	13.9	10.9	14.4	18.7	16.1	12.1	..	13.8	14.2
Casualty/outpatients/day clinic	%	4.3	8.8	4.1	3.8	7.3	np	..	np	4.8
Doctor consultation (GP and/or specialist)	%	15.4	22.7	18.3	18.0	22.3	21.9	..	26.2	19.1
Dental consultation	%	5.1	4.9	3.9	3.1	4.6	5.9	..	2.1	4.4
Consultation with other health professional	%	10.9	25.5	13.2	14.5	11.9	12.2	..	13.2	14.1

Table NHA.60.5 Proportion of people who accessed health services by health status, by remoteness of residence, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Total accessing health care (d)	**%**	**37.5**	**45.4**	**39.4**	**44.1**	**40.8**	**39.7**	**..**	**39.4**	**40.3**
Remote										
Admitted to hospital	%	np	..	8.0	26.3	16.9	5.7	..	np	16.2
Casualty/outpatients/day clinic	%	np	..	6.5	9.6	3.8	np	..	np	5.9
Doctor consultation (GP and/or specialist)	%	36.3	..	22.6	15.5	24.9	np	..	np	20.0
Dental consultation	%	–	..	np	5.4	4.7	np	..	12.3	4.5
Consultation with other health professional	%	–	..	12.4	11.5	17.3	4.9	..	10.3	11.4
Total accessing health care (d)	**%**	**47.3**	**..**	**37.4**	**40.2**	**45.8**	**28.8**	**..**	**32.0**	**39.4**
					Health status (fair/poor)					
Major cities										
Admitted to hospital	%	27.3	22.2	25.8	30.6	28.4	..	23.8	..	26.2
Casualty/outpatients/day clinic	%	7.9	9.6	10.7	13.9	10.9	..	5.5	..	9.6
Doctor consultation (GP and/or specialist)	%	42.2	43.8	42.6	40.9	45.9	..	30.4	..	42.6
Dental consultation	%	7.1	8.2	7.2	6.0	9.7	..	7.0	..	7.5
Consultation with other health professional	%	17.0	19.0	24.5	25.1	24.1	..	27.4	..	20.3
Total accessing health care (d)	**%**	**61.2**	**63.4**	**64.0**	**63.8**	**67.4**	**..**	**58.5**	**..**	**62.9**
Inner regional										
Admitted to hospital	%	27.8	28.0	23.4	20.0	20.8	32.1	..	..	26.2
Casualty/outpatients/day clinic	%	10.4	10.5	12.4	9.6	17.5	15.2	..	..	11.7
Doctor consultation (GP and/or specialist)	%	42.3	44.9	43.7	35.7	25.8	53.1	..	..	43.0
Dental consultation	%	2.3	4.2	5.4	np	np	4.6	..	..	4.1

Table NHA.60.5 Proportion of people who accessed health services by health status, by remoteness of residence, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Consultation with other health professional	%	30.5	29.1	20.8	24.4	13.9	22.9	..	..	25.7
Total accessing health care (d)	**%**	**61.5**	**71.4**	**63.8**	**65.1**	**53.6**	**67.9**	**..**	**..**	**64.9**
Outer regional										
Admitted to hospital	%	30.0	36.3	30.3	30.0	20.1	21.5	..	53.9	30.2
Casualty/outpatients/day clinic	%	4.0	12.4	6.0	np	10.3	8.2	..	np	6.8
Doctor consultation (GP and/or specialist)	%	38.3	44.1	40.0	36.2	34.5	32.8	..	34.1	38.4
Dental consultation	%	3.7	np	2.5	4.1	8.8	2.4	..	np	3.7
Consultation with other health professional	%	19.0	27.8	30.1	np	26.1	14.0	..	np	23.4
Total accessing health care (d)	**%**	**56.0**	**59.9**	**60.2**	**55.9**	**56.0**	**45.4**	**..**	**53.9**	**56.7**
Remote								..		
Admitted to hospital	%	np	..	20.6	np	np	10.9	..	np	16.1
Casualty/outpatients/day clinic	%	np	..	np	np	np	np	..	np	10.5
Doctor consultation (GP and/or specialist)	%	np	..	29.6	38.1	12.8	25.9	..	44.3	32.8
Dental consultation	%	–	..	np	np	np	–	..	np	6.6
Consultation with other health professional	%	np	..	np	–	52.2	19.4	..	57.7	27.3
Total accessing health care (d)	**%**	**43.7**	**..**	**71.8**	**61.1**	**65.0**	**49.5**	**..**	**82.3**	**66.4**

(a) Rates are age standardised by State/Territory to the 2001 estimated resident population (5 year ranges from 15+).

(b) Persons who accessed at least one of the health services noted in the table in the last two weeks or were admitted to hospital in the last 12 months.

(c) Limited to people aged 15 years or over.

(d) Total persons accessing any of the selected health services above. Components may not add to total because persons may have accessed more than one type of health service.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Table NHA.60.5 **Proportion of people who accessed health services by health status, by remoteness of residence, 2004-05 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

Source : ABS (unpublished) *National Health Survey* , 2004-05.

Table NHA.60.6 RSEs and 95 per cent confidence intervals for the proportion of people who accessed health services by health status, by remoteness of residence, 2004-05 (a), (b), (c)

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
					RSE for Health status (excellent/very good/good)					
Major cities										
Admitted to hospital	%	5.1	6.8	6.6	6.5	5.2	..	8.1	..	3.0
Casualty/outpatients/day clinic	%	11.3	10.2	15.1	13.2	11.7	..	16.9	..	5.8
Doctor consultation (GP and/or specialist)	%	4.0	4.0	6.8	5.5	5.0	..	7.7	..	2.3
Dental consultation	%	8.4	10.5	10.3	10.7	8.7	..	12.7	..	4.6
Consultation with other health professional	%	5.8	5.7	8.3	7.6	5.6	..	7.1	..	3.1
Total accessing health care (d)	%	2.5	2.7	3.6	3.3	3.1	..	4.3	..	1.5
Inner regional										
Admitted to hospital	%	10.1	10.6	11.9	15.5	11.7	7.9	..	..	4.8
Casualty/outpatients/day clinic	%	28.3	17.7	22.2	28.3	35.7	12.1	..	..	10.5
Doctor consultation (GP and/or specialist)	%	8.7	10.7	7.3	15.9	14.4	5.7	..	..	3.9
Dental consultation	%	18.1	19.0	18.1	30.5	20.7	11.2	..	..	8.8
Consultation with other health professional	%	12.0	11.8	9.4	14.7	16.5	8.5	..	..	5.7
Total accessing health care (d)	%	5.9	7.3	5.0	9.8	7.9	3.9	..	..	2.9
Outer regional										
Admitted to hospital	%	16.9	23.1	12.1	16.5	15.6	14.3	..	44.1	7.1
Casualty/outpatients/day clinic	%	32.4	30.2	20.8	27.7	21.6	np	..	np	12.6
Doctor consultation (GP and/or specialist)	%	17.8	17.1	8.8	18.7	12.6	9.0	..	35.7	6.3
Dental consultation	%	28.7	34.9	21.3	33.9	27.4	20.6	..	82.8	13.2
Consultation with other health professional	%	18.1	21.9	13.2	14.9	16.7	14.9	..	66.8	8.9

Table NHA.60.6 RSEs and 95 per cent confidence intervals for the proportion of people who accessed health services by health status, by remoteness of residence, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Total accessing health care (d)	%	9.3	11.6	5.4	8.9	9.0	6.9	..	25.4	4.4
Remote										
Admitted to hospital	%	np	..	40.6	22.1	25.5	75.1	..	np	13.8
Casualty/outpatients/day clinic	%	np	..	56.3	56.1	54.8	np	..	np	32.1
Doctor consultation (GP and/or specialist)	%	77.2	..	26.4	32.4	17.3	np	..	np	16.5
Dental consultation	%	–	..	np	67.5	47.3	np	..	36.6	29.0
Consultation with other health professional	%	–	..	39.5	36.6	14.3	52.3	..	60.2	16.5
Total accessing health care (d)	%	42.7	..	16.2	17.2	12.6	41.9	..	54.6	9.5
RSE for Health status (fair/poor)										
Major cities										
Admitted to hospital	%	11.6	9.8	11.9	13.2	10.4	..	15.7	..	5.5
Casualty/outpatients/day clinic	%	22.0	17.3	25.4	19.1	16.0	..	23.9	..	8.7
Doctor consultation (GP and/or specialist)	%	7.6	7.2	10.2	9.1	8.3	..	11.9	..	3.6
Dental consultation	%	28.6	25.9	24.2	33.9	28.6	..	27.4	..	13.7
Consultation with other health professional	%	11.6	13.9	15.3	15.0	11.1	..	14.7	..	5.7
Total accessing health care (d)	%	6.0	5.6	6.8	7.0	4.8	..	7.2	..	2.9
Inner regional										
Admitted to hospital	%	14.7	21.1	14.4	31.9	27.7	10.6	..	..	7.8
Casualty/outpatients/day clinic	%	32.6	34.4	27.9	46.5	49.6	20.8	..	..	13.3
Doctor consultation (GP and/or specialist)	%	12.9	14.8	10.9	22.8	23.3	9.4	..	..	5.6
Dental consultation	%	68.0	59.5	41.5	np	np	40.3	..	..	23.7

Table NHA.60.6 RSEs and 95 per cent confidence intervals for the proportion of people who accessed health services by health status, by remoteness of residence, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Consultation with other health professional	%	22.7	25.7	16.1	44.5	40.6	15.6	..	..	12.1
Total accessing health care (d)	%	8.8	7.1	7.3	13.1	12.1	6.1	..	..	3.8
Outer regional										
Admitted to hospital	%	20.8	23.2	15.7	29.7	25.6	23.8	..	56.0	10.5
Casualty/outpatients/day clinic	%	44.7	23.9	43.0	np	36.0	43.9	..	np	18.9
Doctor consultation (GP and/or specialist)	%	16.7	17.4	14.8	32.6	23.6	19.4	..	66.7	8.1
Dental consultation	%	42.5	np	64.5	65.3	55.4	52.0	..	np	24.7
Consultation with other health professional	%	28.1	29.5	18.6	np	27.7	30.5	..	np	14.9
Total accessing health care (d)	%	11.5	14.5	9.4	19.3	15.7	17.0	..	56.0	5.9
Remote										
Admitted to hospital	%	np	..	57.8	np	np	57.6	..	np	38.2
Casualty/outpatients/day clinic	%	np	..	np	np	np	np	..	np	47.1
Doctor consultation (GP and/or specialist)	%	np	..	65.5	28.9	52.0	35.9	..	57.2	25.3
Dental consultation	%	–	..	np	np	np	–	..	np	62.3
Consultation with other health professional	%	np	..	np	–	55.4	71.0	..	26.0	31.4
Total accessing health care (d)	%	138.3	..	21.5	46.4	36.0	23.1	..	15.6	12.9
95 per cent confidence interval for Health status (excellent/very good/good)										
Major cities										
Admitted to hospital	%	1.4	1.8	1.8	1.8	1.3	..	2.1	..	0.8
Casualty/outpatients/day clinic	%	0.8	1.1	1.1	1.3	1.0	..	1.3	..	0.5
Doctor consultation (GP and/or specialist)	%	1.7	1.8	2.8	2.6	2.2	..	3.0	..	1.0

Table NHA.60.6 RSEs and 95 per cent confidence intervals for the proportion of people who accessed health services by health status, by remoteness of residence, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Dental consultation	%	0.9	1.2	1.1	1.4	1.1	..	1.4	..	0.5
Consultation with other health professional	%	1.4	1.5	2.3	2.0	1.6	..	1.7	..	0.8
Total accessing health care (d)	%	2.1	2.3	3.0	2.8	2.7	..	3.3	..	1.2
Inner regional										
Admitted to hospital	%	3.3	3.1	2.7	5.8	3.4	2.2	..	..	1.4
Casualty/outpatients/day clinic	%	1.7	1.7	1.4	1.9	2.3	1.1	..	..	0.8
Doctor consultation (GP and/or specialist)	%	3.1	3.4	3.0	5.7	5.2	2.4	..	..	1.4
Dental consultation	%	1.9	2.4	2.2	3.5	3.2	1.3	..	..	1.0
Consultation with other health professional	%	2.6	3.3	2.8	4.3	4.6	2.0	..	..	1.5
Total accessing health care (d)	%	4.6	5.5	4.0	8.4	6.5	3.1	..	..	2.2
Outer regional										
Admitted to hospital	%	4.6	4.9	3.4	6.0	4.9	3.4	..	12.0	2.0
Casualty/outpatients/day clinic	%	2.7	5.2	1.7	2.0	3.1	np	..	np	1.2
Doctor consultation (GP and/or specialist)	%	5.4	7.6	3.1	6.6	5.5	3.9	..	18.3	2.4
Dental consultation	%	2.9	3.4	1.6	2.0	2.5	2.4	..	3.4	1.1
Consultation with other health professional	%	3.9	11.0	3.4	4.3	3.9	3.6	..	17.3	2.4
Total accessing health care (d)	%	6.8	10.3	4.2	7.7	7.2	5.3	..	19.6	3.4
Remote										
Admitted to hospital	%	np	..	6.4	11.4	8.5	8.4	..	np	4.4
Casualty/outpatients/day clinic	%	np	..	7.1	10.6	4.0	np	..	np	3.7
Doctor consultation (GP and/or specialist)	%	54.9	..	11.7	9.9	8.4	np	..	np	6.5

Table NHA.60.6 **RSEs and 95 per cent confidence intervals for the proportion of people who accessed health services by health status, by remoteness of residence, 2004-05 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Dental consultation	%	–	..	np	7.2	4.4	np	..	8.8	2.6
Consultation with other health professional	%	–	..	9.6	8.2	4.9	5.0	..	12.2	3.7
Total accessing health care (d)	%	39.6	..	11.9	13.6	11.3	23.6	..	34.2	7.4
				95 per cent confidence interval for Health status (fair/poor)						
Major cities										
Admitted to hospital	%	6.2	4.3	6.0	7.9	5.8	..	7.3	..	2.8
Casualty/outpatients/day clinic	%	3.4	3.3	5.4	5.2	3.4	..	2.6	..	1.6
Doctor consultation (GP and/or specialist)	%	6.3	6.1	8.6	7.3	7.5	..	7.1	..	3.0
Dental consultation	%	4.0	4.2	3.4	4.0	5.4	..	3.7	..	2.0
Consultation with other health professional	%	3.9	5.2	7.3	7.4	5.3	..	7.9	..	2.3
Total accessing health care (d)	%	7.2	7.0	8.5	8.7	6.3	..	8.2	..	3.6
Inner regional										
Admitted to hospital	%	8.0	11.6	6.6	12.5	11.3	6.7	..	..	4.0
Casualty/outpatients/day clinic	%	6.7	7.1	6.8	8.7	17.0	6.2	..	..	3.0
Doctor consultation (GP and/or specialist)	%	10.7	13.0	9.3	16.0	11.8	9.7	..	..	4.7
Dental consultation	%	3.1	4.9	4.4	np	np	3.6	..	..	1.9
Consultation with other health professional	%	13.6	14.6	6.6	21.3	11.1	7.0	..	..	6.1
Total accessing health care (d)	%	10.6	9.9	9.2	16.7	12.7	8.1	..	..	4.8
Outer regional										
Admitted to hospital	%	12.3	16.5	9.3	17.5	10.1	10.0	..	59.1	6.2
Casualty/outpatients/day clinic	%	3.5	5.8	5.1	np	7.3	7.0	..	np	2.5

Table NHA.60.6 RSEs and 95 per cent confidence intervals for the proportion of people who accessed health services by health status, by remoteness of residence, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Doctor consultation (GP and/or specialist)	%	12.5	15.1	11.6	23.1	16.0	12.4	..	44.7	6.1
Dental consultation	%	3.1	np	3.1	5.2	9.6	2.7	..	np	1.8
Consultation with other health professional	%	10.5	16.1	11.0	np	14.2	8.3	..	np	6.8
Total accessing health care (d)	%	12.7	17.0	11.1	21.2	17.2	15.1	..	59.1	6.6
Remote										
Admitted to hospital	%	np	..	23.3	np	np	12.3	..	np	12.0
Casualty/outpatients/day clinic	%	np	..	np	np	np	np	..	np	9.7
Doctor consultation (GP and/or specialist)	%	np	..	38.0	21.5	13.0	18.2	..	49.7	16.3
Dental consultation	%	–	..	np	np	np	–	..	np	8.1
Consultation with other health professional	%	np	..	np	–	56.7	26.9	..	29.4	16.8
Total accessing health care (d)	%	118.5	..	30.2	55.6	45.8	22.4	..	25.2	16.8

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Rates are age standardised by State/Territory to the 2001 estimated resident population (5 year ranges from 15+).

(b) Persons who accessed at least one of the health services noted in the table in the last two weeks or were admitted to hospital in the last 12 months.

(c) Limited to people aged 15 years or over.

(d) Total persons accessing any of the selected health services above. Components may not add to total because persons may have accessed more than one type of health service.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2004-05.

Table NHA.60.7 **Proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
					Health status (excellent/very good/good)					
Quintile 1										
Admitted to hospital	%	14.5	12.5	14.5	15.7	13.7	13.7	np	np	14.0
Casualty/outpatients/day clinic	%	3.6	5.6	3.2	4.1	4.6	4.3	–	–	4.1
Doctor consultation (GP and/or specialist)	%	25.2	25.2	21.6	15.6	23.7	21.8	np	np	23.5
Dental consultation	%	4.4	2.6	3.7	7.8	3.4	4.5	–	–	4.0
Consultation with other health professional	%	9.6	8.3	10.5	12.0	11.2	9.2	–	–	9.7
Total accessing health care (d)	**%**	**42.5**	**39.1**	**39.1**	**34.9**	**42.3**	**38.3**	**np**	**np**	**40.3**
Quintile 2										
Admitted to hospital	%	15.0	15.5	12.3	16.1	13.6	8.6	np	np	14.3
Casualty/outpatients/day clinic	%	4.0	7.9	3.1	6.5	6.0	np	6.8	np	4.8
Doctor consultation (GP and/or specialist)	%	20.7	20.2	21.5	23.4	23.4	20.3	np	np	21.4
Dental consultation	%	4.2	4.2	4.1	4.4	6.4	8.4	np	np	4.4
Consultation with other health professional	%	11.7	14.9	12.8	13.7	14.1	12.8	10.5	–	12.9
Total accessing health care (d)	**%**	**41.5**	**39.5**	**38.4**	**42.7**	**44.7**	**37.8**	**np**	**np**	**40.7**
Quintile 3										
Admitted to hospital	%	13.1	12.4	12.4	17.4	16.5	12.7	np	np	13.5
Casualty/outpatients/day clinic	%	3.0	5.4	3.7	3.3	5.2	np	np	np	3.9
Doctor consultation (GP and/or specialist)	%	19.8	18.7	20.1	20.4	27.3	22.8	12.6	51.8	20.4
Dental consultation	%	6.4	6.0	5.6	6.4	7.0	3.2	np	np	6.1
Consultation with other health professional	%	12.3	14.2	15.6	13.7	14.1	12.9	9.6	32.6	13.9
Total accessing health care (d)	**%**	**41.0**	**39.8**	**43.3**	**44.0**	**48.3**	**41.1**	**16.5**	**66.2**	**42.0**

Table NHA.60.7 **Proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Quintile 4										
Admitted to hospital	%	13.2	12.9	14.0	11.1	13.1	14.5	15.0	8.1	13.1
Casualty/outpatients/day clinic	%	3.1	5.7	4.4	3.5	3.6	6.0	2.1	–	4.3
Doctor consultation (GP and/or specialist)	%	21.8	22.2	18.6	22.0	19.8	23.8	np	np	20.8
Dental consultation	%	5.7	6.3	6.1	5.8	7.6	9.2	5.7	5.5	6.2
Consultation with other health professional	%	11.0	14.6	13.0	12.5	15.8	13.2	np	np	13.3
Total accessing health care (d)	**%**	**42.5**	**41.3**	**40.6**	**39.7**	**43.8**	**44.8**	**37.8**	**19.9**	**41.3**
Quintile 5										
Admitted to hospital	%	15.0	14.9	14.8	17.7	11.9	14.7	12.9	28.1	14.9
Casualty/outpatients/day clinic	%	3.3	4.5	3.9	5.9	3.6	5.1	np	np	4.1
Doctor consultation (GP and/or specialist)	%	18.8	21.4	20.9	27.4	17.4	17.1	20.3	30.4	20.6
Dental consultation	%	6.8	7.8	7.3	8.2	7.0	8.4	np	np	7.3
Consultation with other health professional	%	13.7	17.4	20.2	14.4	14.7	20.4	np	np	15.8
Total accessing health care (d)	**%**	**41.7**	**46.2**	**46.2**	**49.2**	**39.1**	**45.6**	**39.8**	**64.3**	**44.1**
Health status (fair/poor)										
Quintile 1										
Admitted to hospital	%	25.7	25.0	26.0	30.5	20.5	26.0	–	–	25.4
Casualty/outpatients/day clinic	%	11.2	9.6	12.1	6.4	13.7	10.6	np	np	11.0
Doctor consultation (GP and/or specialist)	%	45.9	49.2	51.1	28.9	38.1	45.0	np	np	46.0
Dental consultation	%	4.5	5.3	np	np	7.6	3.1	–	–	4.4
Consultation with other health professional	%	15.0	15.5	25.3	10.4	13.4	16.4	–	–	17.0
Total accessing health care (d)	**%**	**64.7**	**66.5**	**73.7**	**60.6**	**61.4**	**58.2**	**np**	**np**	**66.0**

Table NHA.60.7 **Proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Quintile 2										
Admitted to hospital	%	33.6	30.4	30.0	27.0	27.2	18.2	np	np	30.8
Casualty/outpatients/day clinic	%	3.1	11.6	11.8	13.1	5.8	4.5	np	np	7.5
Doctor consultation (GP and/or specialist)	%	36.0	48.0	47.5	56.1	36.8	46.1	44.7	–	42.3
Dental consultation	%	6.9	5.7	4.2	np	10.3	np	–	–	6.3
Consultation with other health professional	%	18.7	25.3	30.2	34.2	23.5	18.3	np	np	24.3
Total accessing health care (d)	**%**	**62.1**	**71.2**	**70.9**	**70.4**	**64.6**	**54.9**	**np**	**np**	**66.0**
Quintile 3										
Admitted to hospital	%	23.1	24.6	28.6	28.4	20.8	34.9	–	34.6	25.4
Casualty/outpatients/day clinic	%	11.5	13.8	8.6	9.8	12.2	12.6	np	np	11.6
Doctor consultation (GP and/or specialist)	%	47.4	49.0	36.3	29.7	52.4	42.7	np	np	44.2
Dental consultation	%	3.2	2.6	9.0	4.8	9.4	np	–	np	4.7
Consultation with other health professional	%	29.0	22.1	23.8	14.4	35.3	30.5	np	np	24.6
Total accessing health care (d)	**%**	**59.1**	**65.1**	**54.6**	**52.5**	**68.1**	**60.8**	**np**	**np**	**59.7**
Quintile 4										
Admitted to hospital	%	22.0	25.7	19.6	29.1	34.0	29.8	26.2	34.1	24.6
Casualty/outpatients/day clinic	%	8.2	8.8	8.1	25.1	13.4	19.2	3.9	–	10.0
Doctor consultation (GP and/or specialist)	%	37.0	40.1	30.8	38.3	45.7	36.9	27.5	35.6	37.2
Dental consultation	%	11.3	4.3	np	np	9.9	np	3.8	np	7.3
Consultation with other health professional	%	18.0	22.0	18.0	33.9	29.8	22.3	np	np	22.0
Total accessing health care (d)	**%**	**52.5**	**61.8**	**52.0**	**70.2**	**63.1**	**59.3**	**61.0**	**80.6**	**57.9**
Quintile 5										

Table NHA.60.7 Proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Admitted to hospital	%	32.1	18.8	22.1	26.6	26.4	26.2	np	np	25.7
Casualty/outpatients/day clinic	%	6.5	5.7	10.2	9.2	14.0	15.2	np	np	7.8
Doctor consultation (GP and/or specialist)	%	43.4	34.0	43.0	32.2	37.6	48.3	np	np	38.3
Dental consultation	%	3.7	18.9	14.0	8.7	6.7	14.1	10.1	–	10.8
Consultation with other health professional	%	18.5	27.9	19.3	21.4	22.8	20.1	np	np	23.1
Total accessing health care (d)	**%**	**60.6**	**64.9**	**57.3**	**60.8**	**67.5**	**60.1**	**59.1**	**100.0**	**62.4**

(a) Rates are age standardised by State/Territory to the 2001 estimated resident population (5 year ranges from 15+).

(b) Persons who accessed at least one of the health services noted in the table in the last two weeks or were admitted to hospital in the last 12 months.

(c) Limited to people aged 15 years or over.

(d) Total persons accessing any of the selected health services above. Components may not add to total because persons may have accessed more than one type of health service.

– Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished), *National Health Survey* , 2004-05.

Table NHA.60.8 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
				RSE for Health status (excellent/very good/good)						
Quintile 1										
Admitted to hospital	%	9.4	13.8	11.3	20.3	12.1	10.0	np	np	6.1
Casualty/outpatients/day clinic	%	20.8	23.6	24.4	32.0	20.2	16.8	–	–	11.3
Doctor consultation (GP and/or specialist)	%	8.1	9.6	7.4	19.3	9.9	7.8	np	np	4.7
Dental consultation	%	20.7	30.1	23.5	23.3	23.6	17.4	–	–	10.9
Consultation with other health professional	%	14.7	18.2	17.2	22.7	14.4	11.8	–	–	7.5
Total accessing health care (d)	%	5.2	6.3	5.1	9.9	5.6	5.2	np	np	3.0
Quintile 2										
Admitted to hospital	%	11.5	15.1	10.4	10.0	13.1	36.9	np	np	5.9
Casualty/outpatients/day clinic	%	21.3	25.3	19.3	19.4	15.7	np	42.9	np	10.2
Doctor consultation (GP and/or specialist)	%	7.6	16.4	6.9	7.9	9.1	19.7	np	np	4.1
Dental consultation	%	17.3	26.4	18.6	19.8	15.8	33.7	np	np	8.4
Consultation with other health professional	%	9.1	15.7	11.3	11.8	11.4	21.7	95.1	–	5.7
Total accessing health care (d)	%	5.7	9.2	4.3	5.3	5.4	11.8	np	np	2.9
Quintile 3										
Admitted to hospital	%	9.3	10.3	15.8	11.5	10.5	15.8	np	np	5.1
Casualty/outpatients/day clinic	%	21.8	20.4	29.2	27.8	25.7	np	np	np	9.7
Doctor consultation (GP and/or specialist)	%	9.7	8.9	10.4	12.8	9.3	15.8	139.8	41.4	4.6
Dental consultation	%	14.9	17.7	18.7	18.4	17.3	40.3	np	np	8.2
Consultation with other health professional	%	11.0	10.3	10.8	15.5	13.0	21.5	69.0	72.2	5.1

Table NHA.60.8 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Total accessing health care (d)	%	5.7	5.6	6.5	6.9	6.4	9.4	81.5	24.7	2.7
Quintile 4										
Admitted to hospital	%	14.8	11.1	9.8	17.6	10.6	21.2	14.7	37.4	5.8
Casualty/outpatients/day clinic	%	31.0	14.4	21.9	26.7	18.6	38.1	36.0	–	9.6
Doctor consultation (GP and/or specialist)	%	10.8	6.2	7.2	12.8	6.0	10.4	np	np	3.8
Dental consultation	%	15.3	17.0	16.1	26.6	13.5	25.4	29.8	82.7	7.7
Consultation with other health professional	%	13.7	9.9	10.8	18.2	8.3	24.3	np	np	5.9
Total accessing health care (d)	%	7.0	4.3	4.5	9.3	4.4	8.9	8.3	47.0	2.9
Quintile 5										
Admitted to hospital	%	9.1	11.2	14.0	13.7	12.5	20.9	9.9	79.6	5.1
Casualty/outpatients/day clinic	%	22.7	17.3	24.8	22.8	30.9	31.6	np	np	10.9
Doctor consultation (GP and/or specialist)	%	6.0	6.2	9.1	8.7	8.9	15.3	9.8	61.5	3.3
Dental consultation	%	13.4	15.6	15.2	18.7	18.6	23.5	np	np	8.0
Consultation with other health professional	%	9.7	10.3	12.8	13.0	10.0	17.1	np	np	5.9
Total accessing health care (d)	%	4.3	4.0	6.3	5.7	6.0	7.8	5.1	24.3	2.3
					RSE for Health status (fair/poor)					
Quintile 1										
Admitted to hospital	%	18.1	19.5	14.7	28.0	28.7	18.1	–	–	9.7
Casualty/outpatients/day clinic	%	36.0	26.4	30.4	67.2	34.5	28.1	np	np	15.1
Doctor consultation (GP and/or specialist)	%	9.1	12.5	12.1	24.3	16.5	11.5	np	np	5.6
Dental consultation	%	46.9	52.1	np	np	51.1	60.7	–	–	25.6

Table NHA.60.8 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Consultation with other health professional	%	22.5	26.7	17.7	52.2	29.8	19.5	–	–	11.6
Total accessing health care (d)	%	7.0	8.7	6.2	15.8	9.9	10.7	np	np	3.5
Quintile 2										
Admitted to hospital	%	15.7	21.1	13.3	21.9	15.6	46.8	np	np	9.5
Casualty/outpatients/day clinic	%	32.6	29.3	31.3	33.7	31.7	78.0	np	np	14.8
Doctor consultation (GP and/or specialist)	%	12.8	14.3	11.7	9.9	15.3	17.6	66.0	–	5.5
Dental consultation	%	61.3	65.4	34.1	np	51.8	np	–	–	32.5
Consultation with other health professional	%	20.8	24.4	14.0	17.4	19.5	51.9	np	np	10.0
Total accessing health care (d)	%	9.3	12.0	5.3	8.8	9.3	16.4	np	np	4.5
Quintile 3										
Admitted to hospital	%	21.3	20.3	16.0	22.7	20.1	24.4	–	115.8	10.1
Casualty/outpatients/day clinic	%	27.2	28.6	36.1	41.6	34.6	49.9	np	np	15.6
Doctor consultation (GP and/or specialist)	%	12.2	16.3	19.2	18.4	16.3	19.9	np	np	7.7
Dental consultation	%	42.4	63.1	33.8	54.9	49.6	np	–	np	21.3
Consultation with other health professional	%	22.4	22.6	21.8	34.4	23.3	26.6	np	np	12.2
Total accessing health care (d)	%	11.0	10.5	12.1	13.5	13.0	13.9	np	np	5.5
Quintile 4										
Admitted to hospital	%	20.2	18.6	19.8	25.9	14.1	28.3	30.2	51.4	9.0
Casualty/outpatients/day clinic	%	54.0	31.5	30.8	30.4	26.8	53.8	55.7	–	16.2
Doctor consultation (GP and/or specialist)	%	17.3	12.0	17.8	22.6	10.5	39.8	24.5	43.9	7.3
Dental consultation	%	37.8	44.1	np	np	49.2	np	62.0	np	22.8

Table NHA.60.8 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Consultation with other health professional	%	26.4	25.5	19.7	27.7	13.1	45.4	np	np	9.8
Total accessing health care (d)	%	13.4	9.5	10.0	11.0	7.3	21.9	14.1	26.0	5.3
Quintile 5										
Admitted to hospital	%	19.2	27.1	38.4	33.5	20.6	25.6	np	np	10.3
Casualty/outpatients/day clinic	%	37.2	41.2	68.0	36.8	45.3	56.3	np	np	19.4
Doctor consultation (GP and/or specialist)	%	13.9	20.4	22.6	24.2	21.8	19.8	np	np	8.0
Dental consultation	%	51.6	36.1	39.4	70.4	45.7	46.3	31.3	–	21.2
Consultation with other health professional	%	24.5	23.1	35.9	35.4	29.3	45.4	np	np	11.1
Total accessing health care (d)	%	9.9	11.1	21.0	20.8	10.0	17.0	8.4	0.0	5.6
			95 per cent confidence interval for Health status (excellent/very good/good)							
Quintile 1										
Admitted to hospital	%	2.7	3.4	3.2	6.2	3.2	2.7	np	np	1.7
Casualty/outpatients/day clinic	%	1.5	2.6	1.5	2.5	1.8	1.4	–	–	0.9
Doctor consultation (GP and/or specialist)	%	4.0	4.7	3.1	5.9	4.6	3.3	np	np	2.2
Dental consultation	%	1.8	1.5	1.7	3.6	1.6	1.5	–	–	0.9
Consultation with other health professional	%	2.8	3.0	3.6	5.4	3.2	2.1	–	–	1.4
Total accessing health care (d)	%	4.3	4.8	3.9	6.8	4.7	3.9	np	np	2.4
Quintile 2										
Admitted to hospital	%	3.4	4.6	2.5	3.2	3.5	6.2	np	np	1.7
Casualty/outpatients/day clinic	%	1.7	3.9	1.2	2.5	1.8	np	5.7	np	1.0
Doctor consultation (GP and/or specialist)	%	3.1	6.5	2.9	3.6	4.2	7.8	np	np	1.7

Table NHA.60.8 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Dental consultation	%	1.4	2.2	1.5	1.7	2.0	5.5	np	np	0.7
Consultation with other health professional	%	2.1	4.6	2.8	3.2	3.2	5.5	19.6	–	1.4
Total accessing health care (d)	%	4.6	7.2	3.2	4.4	4.8	8.7	np	np	2.3
Quintile 3										
Admitted to hospital	%	2.4	2.5	3.8	3.9	3.4	3.9	np	np	1.3
Casualty/outpatients/day clinic	%	1.3	2.2	2.1	1.8	2.6	np	np	np	0.7
Doctor consultation (GP and/or specialist)	%	3.8	3.3	4.1	5.1	5.0	7.1	34.5	42.1	1.8
Dental consultation	%	1.9	2.1	2.0	2.3	2.4	2.5	np	np	1.0
Consultation with other health professional	%	2.7	2.9	3.3	4.2	3.6	5.4	13.0	46.2	1.4
Total accessing health care (d)	%	4.5	4.4	5.5	5.9	6.0	7.5	26.3	32.1	2.2
Quintile 4										
Admitted to hospital	%	3.8	2.8	2.7	3.8	2.7	6.0	4.3	5.9	1.5
Casualty/outpatients/day clinic	%	1.9	1.6	1.9	1.8	1.3	4.5	1.5	–	0.8
Doctor consultation (GP and/or specialist)	%	4.6	2.7	2.6	5.5	2.3	4.8	np	np	1.6
Dental consultation	%	1.7	2.1	1.9	3.0	2.0	4.6	3.3	8.9	0.9
Consultation with other health professional	%	2.9	2.8	2.7	4.5	2.6	6.3	np	np	1.5
Total accessing health care (d)	%	5.8	3.4	3.6	7.2	3.8	7.8	6.1	18.3	2.4
Quintile 5										
Admitted to hospital	%	2.7	3.3	4.1	4.8	2.9	6.0	2.5	43.9	1.5
Casualty/outpatients/day clinic	%	1.5	1.5	1.9	2.6	2.2	3.1	np	np	0.9
Doctor consultation (GP and/or specialist)	%	2.2	2.6	3.7	4.7	3.0	5.1	3.9	36.7	1.3

Table NHA.60.8 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Dental consultation	%	1.8	2.4	2.2	3.0	2.6	3.9	np	np	1.1
Consultation with other health professional	%	2.6	3.5	5.1	3.7	2.9	6.8	np	np	1.8
Total accessing health care (d)	%	3.5	3.6	5.7	5.4	4.6	6.9	4.0	30.6	2.0
				95 per cent confidence interval for Health status (fair/poor)						
Quintile 1										
Admitted to hospital	%	9.1	9.5	7.5	16.7	11.5	9.2	–	–	4.8
Casualty/outpatients/day clinic	%	7.9	5.0	7.2	8.4	9.3	5.9	np	np	3.3
Doctor consultation (GP and/or specialist)	%	8.2	12.1	12.1	13.7	12.4	10.1	np	np	5.1
Dental consultation	%	4.1	5.5	np	np	7.6	3.7	–	–	2.2
Consultation with other health professional	%	6.6	8.1	8.8	10.6	7.8	6.3	–	–	3.9
Total accessing health care (d)	%	8.9	11.4	9.0	18.7	12.0	12.3	np	np	4.6
Quintile 2										
Admitted to hospital	%	10.4	12.6	7.8	11.6	8.3	16.7	np	np	5.8
Casualty/outpatients/day clinic	%	2.0	6.6	7.2	8.7	3.6	6.9	np	np	2.2
Doctor consultation (GP and/or specialist)	%	9.0	13.5	10.9	10.9	11.0	15.9	57.8	–	4.6
Dental consultation	%	8.3	7.4	2.8	np	10.4	np	–	–	4.0
Consultation with other health professional	%	7.6	12.1	8.3	11.7	9.0	18.6	np	np	4.8
Total accessing health care (d)	%	11.4	16.8	7.4	12.1	11.8	17.7	np	np	5.8
Quintile 3										
Admitted to hospital	%	9.6	9.8	9.0	12.6	8.2	16.7	–	78.5	5.0
Casualty/outpatients/day clinic	%	6.1	7.7	6.1	8.0	8.3	12.3	np	np	3.5

Table NHA.60.8 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Doctor consultation (GP and/or specialist)	%	11.3	15.7	13.6	10.7	16.7	16.6	np	np	6.7
Dental consultation	%	2.7	3.2	6.0	5.1	9.1	np	–	np	1.9
Consultation with other health professional	%	12.7	9.8	10.2	9.7	16.2	15.9	np	np	5.9
Total accessing health care (d)	%	12.7	13.4	13.0	13.9	17.3	16.5	np	np	6.4
Quintile 4										
Admitted to hospital	%	8.7	9.4	7.6	14.8	9.4	16.5	15.5	34.4	4.3
Casualty/outpatients/day clinic	%	8.7	5.4	4.9	15.0	7.0	20.2	4.2	–	3.2
Doctor consultation (GP and/or specialist)	%	12.6	9.4	10.8	17.0	9.4	28.8	13.2	30.6	5.3
Dental consultation	%	8.4	3.8	np	np	9.6	np	4.6	np	3.3
Consultation with other health professional	%	9.3	11.0	7.0	18.4	7.6	19.9	np	np	4.2
Total accessing health care (d)	%	13.8	11.5	10.2	15.1	9.0	25.4	16.8	41.1	6.1
Quintile 5										
Admitted to hospital	%	12.1	10.0	16.6	17.4	10.7	13.2	np	np	5.2
Casualty/outpatients/day clinic	%	4.7	4.6	13.6	6.6	12.5	16.8	np	np	3.0
Doctor consultation (GP and/or specialist)	%	11.8	13.6	19.0	15.3	16.1	18.7	np	np	6.0
Dental consultation	%	3.7	13.4	10.8	12.0	6.0	12.8	6.2	–	4.5
Consultation with other health professional	%	8.9	12.7	13.6	14.8	13.1	17.9	np	np	5.0
Total accessing health care (d)	%	11.8	14.1	23.6	24.8	13.3	20.0	9.8	–	6.9

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Rates are age standardised by State/Territory to the 2001 estimated resident population (5 year ranges from 15+).

Table NHA.60.8 RSEs and confidence intervals for the proportion of people who accessed health services by health status, by SEIFA, 2004-05 (a), (b), (c)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(b) Persons who accessed at least one of the health services noted in the table in the last two weeks or were admitted to hospital in the last 12 months.

(c) Limited to people aged 15 years or over.

(d) Total persons accessing any of the selected health services above. Components may not add to total because persons may have accessed more than one type of health service.

– Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2004-05.

NHA Indicator 61:

Teenage birth rate

Table NHA.61.1 **Births to mothers aged less than 20 years, by Indigenous status, remoteness and SEIFA, 2007 (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Unit	Rate per 1000 female residents									no.
Indigenous status										
Indigenous	68.2	46.5	74.8	102.5	67.7	31.6	62.8	102.6	75.7	2 122
Non-Indigenous	13.1	9.9	19.8	16.6	15.8	24.9	9.2	20.7	14.5	9 751
Remoteness of residence										
Major cities	11.5	8.1	17.3	15.9	14.5	..	10.2	..	12.3	5 912
Inner regional	22.3	16.2	26.3	23.8	18.9	24.1	np	..	21.7	3 168
Outer regional	28.8	18.6	33.2	32.2	32.9	27.4	..	30.7	29.6	1 878
Remote	56.1	np	55.8	54.2	23.0	41.5	..	43.2	47.6	426
Very remote	125.9	..	74.7	90.6	49.5	np	..	111.0	91.4	508
SEIFA of residence (d)										
Quintile 1	25.2	18.1	42.7	71.7	34.9	30.4	np	98.1	32.0	4 499
Quintile 2	19.3	15.6	30.5	28.7	15.8	27.8	np	44.9	21.0	2 952
Quintile 3	13.2	12.2	19.4	23.9	13.9	23.0	13.4	19.3	16.3	2 254
Quintile 4	9.2	6.5	15.2	15.7	6.2	10.5	13.7	23.6	10.7	1 478
Quintile 5	2.0	2.7	7.2	4.5	3.2	..	8.4	20.2	4.0	571
Total	**15.2**	**10.3**	**22.9**	**21.0**	**17.4**	**25.4**	**10.2**	**55.9**	**16.9**	
Total number (c)	3 444	1 783	3 277	1 521	900	421	122	427	11 895	

(a) Rate is per 1000 female residents aged 15–19 years. The numerator includes births to mothers aged less than 15 years.

(b) Data are by place of usual residence of the mother. Table excludes Australian non-residents, residents of external territories and not stated state/territory of residence.

(c) Number of mothers aged less than 20 years (includes mothers aged less than 15 years).

(d) The Socio-Economic Indexes for Areas (SEIFA) Index for Relative Socio-economic Disadvantage (IRSD) quintiles assign those resident in the most disadvantaged areas to Quintile 1 and those in the least disadvantaged areas to Quintile 5.

.. Not applicable. **np** Not published.

Source : AIHW (unpublished) National Perinatal Data Collection; ABS (unpublished) Estimated Residential Population, 30 June 2007; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* , 30 June 2007, Series B, Cat. no. 3238.0.

NHA Indicator 62:

Hospitalisation for injury and poisoning

Table NHA.62.1 **Hospital separations for injury or poisoning, by sex, Indigenous status, remoteness and SEIFA, 2007-08 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*	
Unit	Age standardised rate per 1000 population									no.
Sex										
Males	26.3	27.2	31.0	26.9	28.3	25.5	29.7	42.4	28.7	296 124
Females	18.9	21.4	21.1	19.9	21.1	18.4	22.1	33.3	19.3	222 354
Indigenous status (c)										
Indigenous	28.4	25.8	35.6	56.3	48.4	np	np	60.0	38.0	19 919
Other Australians	17.9	19.4	21.1	18.1	20.1	np	np	20.4	18.4	478 593
Remoteness of residence (d)										
Major cities	20.3	24.0	21.6	21.0	21.8	..	20.8	..	21.8	320 634
Inner regional	26.8	25.0	30.4	24.0	27.9	21.2	np	..	26.8	114 367
Outer regional	30.8	24.6	30.9	27.5	35.7	21.5	..	26.1	29.3	58 276
Remote	47.6	31.5	47.5	35.2	33.7	23.9	..	44.7	40.8	12 447
Very remote	46.4	..	53.6	48.8	48.4	37.7	..	50.7	51.1	8 284
SEIFA of residence (e)										
Quintile 1	24.5	24.4	31.4	43.7	28.3	21.6	np	43.4	27.2	117 005
Quintile 2	23.7	26.7	30.1	24.5	23.9	22.8	148.2	41.2	25.7	111 356
Quintile 3	23.2	24.6	27.6	22.2	26.8	23.3	51.5	51.6	24.9	106 563
Quintile 4	21.2	24.7	21.7	22.1	20.2	19.6	29.3	25.6	22.5	92 854
Quintile 5	19.6	22.0	19.4	20.3	21.0	..	19.2	27.3	20.4	88 807
Total (f)	**22.6**	**24.3**	**26.0**	**23.4**	**24.7**	**21.9**	**25.8**	**37.9**	**24.1**	**..**
	no.	no.	no.	no	no.	no.	no.	no.	no.	
Total no.	**160 727**	**130 682**	**109 373**	**49 378**	**41 075**	**11 031**	**8 495**	**7 725**	**518 486**	

(a) Rates are age standardised to the Australian population as at 30 June 2001.

(b) The estimated resident population in quintile 2 of the ACT is very low. The high rate for the ACT in this area reflects the relatively large number of interstate resident patients hospitalised in the ACT.

(c) The Australian totals for Indigneous/Other Australians do not include data for the ACT and Tasmania.

Table NHA.62.1 Hospital separations for injury or poisoning, by sex, Indigenous status, remoteness and SEIFA, 2007-08 (a)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT* (b)	*NT*	*Aust*

(d) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each remoteness population group (regardless of where they reside) divided by the number of people in that remoteness population group in the jurisdiction of hospitalisation.

(e) Socio-Economic Indexes for Areas (SEIFA) quintiles are based on the ABS Index of Relative Socio-economic Disadvantage, with quintile 1 being the most disadvantaged and quintile 5 being the least disadvantaged. The SEIFA quintiles represent approximately 20 per cent of the national population, but do not necessarily represent 20 per cent of the population in each State or Territory. Disaggregation by SEIFA is based on the patient's usual residence, not the location of the hospital. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each SEIFA population group (regardless of where they reside) divided by the number of people in that SEIFA population group in the jurisdiction of hospital.

(f) Total includes separations where place of residence was not stated.

.. Not applicable. **np** Not published.

Source: AIHW (unpublished) National Hospital Morbidity database; ABS (unpublished) Estimated Residential Population, 30 June 2007; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021*, 30 June 2007, Series B, Cat. no. 3238.0.

Table NHA.62.2 **Age-specific separation rates for injury or poisoning, 2007-08 (per 1000 population) (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Age									
0–14 years	15.7	15.4	20.1	15.7	16.3	13.5	15.7	21.3	16.6
15–24 years	24.2	25.8	29.7	26.9	28.7	27.9	29.1	42.0	26.7
25–34 years	18.9	20.6	23.1	22.8	23.1	21.9	20.3	45.2	21.2
35–44 years	17.6	19.7	21.1	19.7	20.6	19.8	18.9	44.8	19.6
45–54 years	17.4	19.1	20.1	18.4	20.2	17.8	18.8	32.4	18.9
55–64 years	20.0	22.7	23.7	21.0	22.8	19.8	23.7	29.3	21.9
65 years and over	52.2	56.1	50.1	45.4	49.9	38.6	62.4	50.4	51.8
Total (b)	**22.6**	**24.3**	**26.0**	**23.4**	**24.7**	**21.9**	**25.8**	**37.9**	**24.1**

(a) Rates for age groups are age-specific crude rates, based on the June 2007 estimated resident population.

(b) The total rate is age-standardised to the Australian population as at 30 June 2001. It includes separations where age was not stated.

Source: AIHW (unpublished) National Hospital Morbidity Database; ABS (unpublished) Estimated Residential Population, 30 June 2007; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021*, 30 June 2007, Series B, Cat. no. 3238.0.

NHA Indicator 63:

Children's hearing loss

Table NHA.63.1 Rate of children with hearing loss, by age, remoteness and SEIFA, 2007-08 (per 1000 population) (a), (b), (c)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Age group									
Complete and partial deafness									
0–5 years	np	np	np	np	19.9	np	np	–	6.4
6–9 years	np	np	62.7	–	np	np	np	–	22.1
10–14 years	27.7	17.8	np	np	np	56.5	21.3	–	17.4
Total children	**14.6**	**9.2**	**20.8**	**3.7**	**18.1**	**39.3**	**12.1**	**–**	**14.1**
Complete and partial deafness and otitis media									
0–5 years	6.4	6.9	20.6	17.1	92.0	20.5	16.8	–	17.0
6–9 years	21.6	27.8	99.6	np	32.0	79.4	np	–	43.8
10–14 years	27.7	23.2	33.3	np	25.1	62.6	np	–	26.2
Total children	**17.5**	**17.8**	**45.3**	**20.2**	**54.0**	**52.0**	**19.1**	**–**	**26.9**
All diseases of the ear and mastoid									
0–5 years	6.4	6.9	28.2	30.6	93.6	20.5	16.8	–	20.0
6–9 years	24.6	37.1	99.6	42.6	57.0	79.4	39.4	–	49.1
10–14 years	38.2	33.8	37.1	10.7	25.1	62.6	26.6	–	33.3
Total children	**21.8**	**23.8**	**49.6**	**26.7**	**60.8**	**52.0**	**25.6**	**–**	**31.9**
Remoteness of residence									
Complete and partial deafness									
Major cities	15.0	np	10.2	5.4	np	..	12.5	..	12.3
Inner regional	np	np	35.3	–	–	np	–	..	18.5
Outer regional	np	–	30.6	–	np	np	..	–	18.7
Remote	–	–	–	–	–	–	..	–	–
Very remote (d)	..	..	..	..	..	..	..	..	..
Total	**14.7**	**9.0**	**21.2**	**3.6**	**18.2**	**39.3**	**12.5**	**–**	**14.2**
Complete and partial deafness and otitis media									
Major cities	19.1	19.5	22.5	21.7	68.3	..	19.3	..	23.8

Table NHA.63.1 Rate of children with hearing loss, by age, remoteness and SEIFA, 2007-08 (per 1000 population) (a), (b), (c)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Inner regional	np	16.3	64.1	np	np	71.1	–	..	30.8
Outer regional	np	–	82.1	–	np	24.3	..	–	np
Remote	–	–	–	np	–	–	..	–	np
Very remote (d)	..	..	..	..	..	..	..	..	..
Total	**17.6**	**17.9**	**45.8**	**20.6**	**54.3**	**52.2**	**19.3**	**–**	**27.1**
All diseases of the ear and mastoid									
Major cities	25.1	28.0	26.7	31.4	73.9	..	26.3	..	30.6
Inner regional	np	16.3	64.1	np	np	71.1	–	..	31.4
Outer regional	np	–	93.0	–	np	24.3	..	–	np
Remote	–	–	–	np	–	–	..	–	np
Very remote (d)	..	..	..	..	..	..	..	..	..
Total	**21.9**	**24.0**	**50.1**	**27.1**	**61.2**	**52.2**	**26.3**	**–**	**32.1**
SEIFA of residence									
Complete and partial deafness									
Quintile 1	26.7	np	–	np	17.9	87.5	np	–	18.0
Quintile 2	np	20.1	np	–	–	–	–	–	15.0
Quintile 3	np	np	34.1	np	np	47.6	–	–	16.6
Quintile 4	np	np	24.3	–	49.1	–	20.5	–	17.3
Quintile 5	np	–	–	np	–	–	np	–	3.8
Total (e)	**14.7**	**9.0**	**21.2**	**3.6**	**18.2**	**39.3**	**12.5**	**–**	**14.2**
Complete and partial deafness and otitis media									
Quintile 1	31.3	np	50.5	60.4	50.8	105.5	np	–	35.9
Quintile 2	np	20.1	71.0	np	np	np	–	–	28.9
Quintile 3	np	26.3	34.1	np	51.3	56.0	np	–	24.4
Quintile 4	np	np	40.5	np	98.9	–	35.4	–	28.1
Quintile 5	11.2	np	np	16.3	40.4	–	8.6	–	18.7

Table NHA.63.1 Rate of children with hearing loss, by age, remoteness and SEIFA, 2007-08 (per 1000 population) (a), (b), (c)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Total (e)	**17.6**	**17.9**	**45.8**	**20.6**	**54.3**	**52.2**	**19.3**	**–**	**27.1**
All diseases of the ear and mastoid									
Quintile 1	40.1	np	50.5	60.4	50.8	105.5	np	–	39.6
Quintile 2	22.0	20.1	80.8	68.9	np	np	–	–	38.2
Quintile 3	np	38.8	42.8	np	54.9	56.0	np	–	30.0
Quintile 4	np	np	40.5	np	106.9	–	35.4	–	28.8
Quintile 5	11.2	41.8	np	16.3	62.3	–	25.0	–	24.3
Total (e)	**21.9**	**24.0**	**50.1**	**27.1**	**61.2**	**52.2**	**26.3**	**–**	**32.1**

(a) Conditions are current and long-term.

(b) Children includes those aged 0–14 years.

(c) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 year ranges from 0). Rates for tables with an age variable in them are not age-standardised.

(d) Very remote data not collected in the 2007-08 National Health Survey.

(e) Includes persons for whom index of disadvantage was not able to be determined.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2007-08.

Table NHA.63.2 **RSEs and 95 per cent confidence intervals for rate of children with hearing loss, 2007-08 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
						RSE				
Age group										
Complete and partial deafness										
0–5 years	%	np	np	np	np	50.9	np	np	–	30.9
6–9 years	%	np	np	37.3	–	np	np	np	–	26.7
10–14 years	%	43.4	52.1	np	np	np	61.7	61.2	–	32.1
Total children	%	38.1	42.2	34.7	60.4	38.1	53.0	42.9	–	18.8
Complete and partial deafness and otitis media										
0–5 years	%	63.0	61.7	56.7	48.7	29.8	64.1	49.4	–	20.6
6–9 years	%	50.4	56.4	31.6	np	68.6	63.5	np	–	19.3
10–14 years	%	43.4	46.2	61.3	np	54.3	56.4	np	–	27.4
Total children	%	32.7	31.6	27.8	32.2	23.8	40.3	31.4	–	13.9
All diseases of the ear and mastoid										
0–5 years	%	63.0	61.7	44.8	44.6	29.3	64.1	49.4	–	20.0
6–9 years	%	44.8	47.9	31.6	52.0	46.2	63.5	51.9	–	17.4
10–14 years	%	35.1	38.9	55.5	57.1	54.3	56.4	52.9	–	22.2
Total children	%	27.4	29.0	26.1	30.9	21.4	40.3	28.8	–	12.2
Remoteness of residence										
Complete and partial deafness										
Major cities	%	39.3	np	63.0	60.3	np	..	42.8	..	22.0
Inner regional	%	np	np	53.1	–	–	np	–	..	36.7
Outer regional	%	np	–	78.3	–	np	np	..	–	52.6
Remote	%	–	..	–	–	–	–	..	–	–
Very remote (d)	%	..	..	..	..	..	..	..	..	..
Total	%	38.3	42.2	34.7	60.3	38.3	53.1	42.8	–	18.9
Complete and partial deafness and otitis media										
Major cities	%	33.1	34.4	41.4	35.3	25.0	..	31.4	..	14.8

Table NHA.63.2 **RSEs and 95 per cent confidence intervals for rate of children with hearing loss, 2007-08 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Inner regional	%	np	70.1	45.8	np	np	46.4	–	..	32.5
Outer regional	%	np	–	44.2	–	np	61.3	..	–	np
Remote	%	–	–	–	np	–	–	..	–	np
Very remote (d)	%	..	..	..	..	..	..	..	..	..
Total	%	32.8	31.7	27.8	32.4	23.7	40.4	31.4	–	13.9
All diseases of the ear and mastoid										
Major cities	%	26.8	31.6	35.5	33.9	23.3	..	28.9	..	12.7
Inner regional	%	np	70.1	45.8	np	np	46.4	–	..	31.9
Outer regional	%	np	–	40.4	–	np	61.3	..	–	34.1
Remote	%	–	–	–	np	–	–	..	–	112.3
Very remote (d)	%	..	..	..	..	..	..	..	..	..
Total	%	27.5	29.0	26.1	30.9	21.4	40.4	28.9	–	12.1
SEIFA of residence										
Complete and partial deafness										
Quintile 1	%	54.9	np	–	np	67.2	68.1	np	–	37.7
Quintile 2	%	np	65.5	np	–	–	–	–	–	40.6
Quintile 3	%	np	np	56.7	np	np	61.9	–	–	35.2
Quintile 4	%	np	np	62.5	–	52.5	–	63.5	–	31.8
Quintile 5	%	np	–	–	np	–	–	np	–	65.8
Total (e)	%	38.3	42.2	34.7	60.3	38.3	53.1	42.8	–	18.9
Complete and partial deafness and otitis media										
Quintile 1	%	48.3	np	80.0	88.5	45.6	57.7	np	–	27.7
Quintile 2	%	np	65.5	55.4	np	np	np	–	–	33.2
Quintile 3	%	np	54.5	56.7	np	58.4	54.4	np	–	30.6
Quintile 4	%	np	np	52.2	np	44.5	–	40.0	–	25.9
Quintile 5	%	65.4	np	np	56.8	66.8	–	71.3	–	32.1
Total (e)	%	32.8	31.7	27.8	32.4	23.7	40.4	31.4	–	13.9

Table NHA.63.2 **RSEs and 95 per cent confidence intervals for rate of children with hearing loss, 2007-08 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
All diseases of the ear and mastoid										
Quintile 1	%	38.1	np	80.0	88.5	45.6	57.7	np	–	25.2
Quintile 2	%	62.9	65.5	48.0	55.2	np	np	–	–	25.7
Quintile 3	%	np	49.1	49.3	np	54.4	54.4	np	–	26.6
Quintile 4	%	np	np	52.2	np	41.5	–	40.0	–	25.4
Quintile 5	%	65.4	53.7	np	56.8	53.3	–	51.7	–	28.3
Total (e)	%	27.5	29.0	26.1	30.9	21.4	40.4	28.9	–	12.1
					95 per cent confidence interval					
Age group										
Complete and partial deafness										
0–5 years	per 1000 population	np	np	np	np	19.8	np	np	–	3.9
6–9 years	per 1000 population	np	np	45.8	–	np	np	np	–	11.6
10–14 years	per 1000 population	23.6	18.1	np	np	np	68.4	25.5	–	10.9
Total children	per 1000 population	10.9	7.6	14.1	4.3	13.5	40.8	10.2	–	5.2
Complete and partial deafness and otitis media										
0–5 years	per 1000 population	7.9	8.3	22.9	16.3	53.7	25.7	16.2	–	6.9
6–9 years	per 1000 population	21.4	30.8	61.7	np	43.0	98.9	np	–	16.5
10–14 years	per 1000 population	23.6	21.0	39.9	np	26.7	69.2	np	–	14.1
Total children	per 1000 population	11.2	11.0	24.6	12.7	25.2	41.0	11.7	–	7.3
All diseases of the ear and mastoid										
0–5 years	per 1000 population	7.9	8.3	24.8	26.8	53.7	25.7	16.2	–	7.8
6–9 years	per 1000 population	21.6	34.9	61.7	43.5	51.7	98.9	40.0	–	16.7
10–14 years	per 1000 population	26.3	25.8	40.4	11.9	26.7	69.2	27.6	–	14.5
Total children	per 1000 population	11.7	13.5	25.4	16.2	25.5	41.0	14.5	–	7.6
Remoteness of residence										
Complete and partial deafness										

Table NHA.63.2 **RSEs and 95 per cent confidence intervals for rate of children with hearing loss, 2007-08 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Major cities	per 1000 population	11.5	np	12.5	6.3	np	..	10.5	..	5.3
Inner regional	per 1000 population	np	np	36.7	–	–	np	–	..	13.2
Outer regional	per 1000 population	np	–	47.1	–	np	np	..	–	19.3
Remote	per 1000 population	–	–	–	–	–	–	..	–	–
Very remote (d)	per 1000 population	..	..	..	..	..	..	..	..	..
Total	per 1000 population	11.0	7.4	14.4	4.3	13.7	41.3	10.4	–	5.2
Complete and partial deafness and otitis media										
Major cities	per 1000 population	12.4	13.5	18.2	15.0	33.6	..	11.9	..	6.9
Inner regional	per 1000 population	np	21.8	57.4	np	np	65.3	–	..	19.6
Outer regional	per 1000 population	np	–	71.1	–	np	29.3	..	–	np
Remote	per 1000 population	–	–	–	np	–	–	..	–	np
Very remote (d)	per 1000 population	..	..	..	..	..	..	..	..	..
Total	per 1000 population	11.3	11.2	24.9	13.1	25.3	41.6	11.9	–	7.4
All diseases of the ear and mastoid										
Major cities	per 1000 population	13.2	17.5	18.6	20.9	33.9	..	15.0	..	7.6
Inner regional	per 1000 population	np	21.8	57.4	np	np	65.3	–	..	19.5
Outer regional	per 1000 population	np	–	73.6	–	np	29.3	..	–	np
Remote	per 1000 population	–	–	–	np	–	–	..	–	np
Very remote (d)	per 1000 population	..	..	..	..	..	..	..	..	..
Total	per 1000 population	11.8	13.7	25.6	16.4	25.7	41.6	14.9	–	7.6
SEIFA of residence										
Complete and partial deafness										
Quintile 1	per 1000 population	28.8	np	–	np	23.7	117.6	np	–	13.3
Quintile 2	per 1000 population	np	25.8	np	–	–	–	–	–	11.9
Quintile 3	per 1000 population	np	np	37.8	np	np	57.5	–	–	11.5
Quintile 4	per 1000 population	np	np	29.8	–	50.9	–	25.5	–	10.9
Quintile 5	per 1000 population	np	–	–	np	–	–	np	–	4.9

Table NHA.63.2 **RSEs and 95 per cent confidence intervals for rate of children with hearing loss, 2007-08 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Total (e)	per 1000 population	11.0	7.4	14.4	4.3	13.7	41.3	10.4	–	5.2
Complete and partial deafness and otitis media										
Quintile 1	per 1000 population	29.7	np	79.0	104.8	45.1	119.7	np	–	19.4
Quintile 2	per 1000 population	np	25.8	77.0	np	np	np	–	–	18.9
Quintile 3	per 1000 population	np	28.2	37.8	np	58.7	59.2	np	–	14.6
Quintile 4	per 1000 population	np	np	41.4	np	86.9	–	27.8	–	14.4
Quintile 5	per 1000 population	14.3	np	np	18.2	52.8	–	12.0	–	12.0
Total (e)	per 1000 population	11.3	11.2	24.9	13.1	25.3	41.6	11.9	–	7.4
All diseases of the ear and mastoid										
Quintile 1	per 1000 population	29.9	np	79.0	104.8	45.1	119.7	np	–	19.5
Quintile 2	per 1000 population	27.2	25.8	76.1	74.6	np	np	–	–	19.3
Quintile 3	per 1000 population	np	37.8	41.3	np	58.5	59.2	np	–	15.7
Quintile 4	per 1000 population	np	np	41.4	np	87.7	–	27.8	–	14.4
Quintile 5	per 1000 population	14.3	44.9	np	18.2	64.8	–	25.4	–	13.6
Total (e)	per 1000 population	11.8	13.7	25.6	16.4	25.7	41.6	14.9	–	7.6

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Conditions are current and long-term.

(b) Children includes those aged 0–14 years.

(c) Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (5 yr ranges from 0).

(d) Very remote data not collected in the 2007-08 National Health Survey.

(e) Includes persons for whom index of disadvantage was not able to be determined.

.. Not applicable. – Nil or rounded to zero. **np** Not published.

Source : ABS (unpublished) *National Health Survey* , 2007-08.

Table NHA.63.3 **Rate of children with hearing loss, by Indigenous status, 2004-05 (a), (b), (c)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
						Rate				
Complete or partial deafness										
Indigenous	per 1000 population	47.8	49.3	51.2	44.4	36.3	37.7	44.6	31.0	45.5
Non-Indigenous	per 1000 population	14.6	9.2	20.8	3.7	18.1	39.3	np	np	14.1
Complete or partial deafness and otitis media										
Indigenous	per 1000 population	86.0	72.7	80.4	86.8	55.4	52.1	90.4	118.8	84.5
Non-Indigenous	per 1000 population	17.5	17.8	45.3	20.2	54.0	52.0	np	np	26.9
All diseases of the ear and mastoid										
Indigenous	per 1000 population	97.2	81.6	93.6	95.7	66.2	60.3	94.6	126.3	95.2
Non-Indigenous	per 1000 population	21.8	23.8	49.6	26.7	60.8	52.0	np	np	31.9
						Number of children with hearing loss				
Complete or partial deafness										
Indigenous	'000	2.6	0.5	2.6	1.1	0.4	0.3	0.1	0.6	8.2
Non-Indigenous	'000	6.0	14.1	10.3	8.5	3.1	1.1	np	np	45.5
Complete or partial deafness and otitis media										
Indigenous	'000	4.7	0.8	4.1	2.2	0.5	0.4	0.1	2.4	15.3
Non-Indigenous	'000	21.7	26.6	23.4	16.2	7.8	2.4	np	np	101.3
All diseases of the ear and mastoid										
Indigenous	'000	5.3	0.9	4.8	2.4	0.7	0.4	0.1	2.6	17.2
Non-Indigenous	'000	23.6	30.9	26.9	17.8	9.0	3.0	np	np	114.3

(a) Conditions are current and long-term.

(b) Children includes those aged 0–14 years.

(c) Rates are not age standardised for comparisions with Indigenous populations.

np Not published.

Source : ABS (unpublished) *National Health Survey, 2004-05; ABS* (unpublished) *National Aboriginal and Torres Strait Islander Health Survey, 2004-05.*

Table NHA.63.4 RSEs and 95 per cent confidence intervals for rate of children with hearing loss, by Indigenous status, 2004-05 (a), (b)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
						RSE				
Complete or partial deafness										
Indigenous	%	21.7	62.1	20.3	21.0	28.0	42.8	42.6	27.7	10.8
Non-Indigenous	%	43.1	32.6	28.5	39.4	30.8	45.8	np	np	15.1
Complete or partial deafness and otitis media										
Indigenous	%	19.9	43.8	16.5	13.2	20.2	33.2	30.0	16.5	8.5
Non-Indigenous	%	26.6	21.9	25.2	27.2	21.4	29.8	np	np	11.3
All diseases of the ear and mastoid										
Indigenous	%	45.3	48.9	72.9	38.6	54.6	64.8	103.5	44.4	28.2
Non-Indigenous	%	24.4	19.5	22.3	25.7	18.8	31.1	np	np	10.5
						95 per cent confidence interval				
Complete or partial deafness										
Indigenous	rate	2.0	5.5	2.1	1.9	2.0	3.2	3.8	1.7	1.9
Non-Indigenous	rate	0.4	1.0	0.8	1.8	0.7	1.1	np	np	0.4
Complete or partial deafness and otitis media										
Indigenous	rate	3.4	6.3	2.6	2.3	2.2	0.1	5.4	3.9	1.5
Non-Indigenous	rate	0.9	1.2	1.6	2.4	1.2	1.5	np	np	0.6
All diseases of the ear and mastoid										
Indigenous	rate	3.4	6.4	3.3	2.2	2.8	3.4	5.9	3.9	1.5
Non-Indigenous	rate	0.9	1.3	1.6	2.5	1.2	2.0	np	np	0.6

RSE = Relative standard error. Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are considered too unreliable for general use.

(a) Conditions are current and long-term.

(b) Children includes those aged 0–14 years.

np Not published.

Source : ABS (unpublished) *National Health Survey, 2004-05; ABS* (unpublished) *National Aboriginal and Torres Strait Islander Health Survey, 2004-05.*

NHA Indicator 64:

Indigenous Australians in the health workforce

Table NHA.64.1 **Proportion of the health workforce that is Indigenous, by occupation groupings, 2006 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (b)	
	%	%	%	%	%	%	%	%	%	no.
Occupation groupings (c)										
Medical practitioners	0.2	0.1	0.2	0.1	0.2	0.5	0.3	0.6	0.2	103
Medical imaging workers	0.2	0.1	0.3	–	0.4	–	–	–	0.2	19
Dental workers	0.8	0.2	1.2	0.4	0.4	0.9	0.8	1.9	0.7	203
Nursing workers	0.9	0.3	0.9	0.5	0.4	1.3	0.4	1.9	0.7	1 446
Pharmacists	–	0.1	0.2	0.2	–	–	–	–	0.1	13
Allied health workers	0.8	0.2	0.9	0.7	0.8	1.1	0.6	4.2	0.7	454
Complementary therapists	0.5	0.3	0.8	0.8	0.3	3.1	–	–	0.5	87
Other health workers	2.3	0.7	3.4	2.8	2.0	3.7	1.3	27.2	2.4	3 145
Total Indigenous health workforce as proportion of total health workforce	**1.1**	**0.3**	**1.4**	**1.1**	**0.8**	**1.7**	**0.6**	**8.8**	**1.0**	**..**
	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.
Total Indigenous health workforce	**1 933**	**456**	**1 472**	**563**	**354**	**216**	**51**	**422**	**5 470**	**5 470**

(a) Proportions exclude persons who did not state their Indigenous status.

(b) Includes Other Territories (Christmas Island, Cocos (Keeling) Islands, and Jervis Bay Territory).

(c) Occupation groupings are based on those used in AIHW *Health and Community Services Labour Force, 2006*.

.. Not applicable. – Nil or rounded to zero.

Source: ABS (unpublished) *2006 Census of Population and Housing*, Cat. no. 2068.0.

Table NHA.64.2 **Proportion of the health workforce that is Indigenous, by selected professions, 2007 (a)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	
Unit	%	%	%	%	%	%	%	%	%	no.
Selected professions										
Medical practitioners (b), (c)	0.2	0.3	0.3	0.1	0.1	0.3	0.2	np	0.3	171
Nurses/midwives (d)	0.8	0.3	0.8	3.0	0.4	1.2	0.3	1.6	0.8	2 165
Total	**0.7**	**0.3**	**0.7**	**2.3**	**0.3**	**1.1**	**0.3**	**1.8**	**0.7**	**2 336**

(a) Excludes the response category 'Indigenous status—Not stated'.

(b) NSW data are based on responses to the *2006 Medical Labour Force Survey*. Data from the 2007 survey were not used because the estimate of employed Indigenous medical practitioners was much larger than that estimated in 2006, indicating a difference of reporting or coding is likely to have occurred.

(c) The total number of medical practitioners in NSW, Queensland and Tasmania are underestimates, as the benchmark figures did not include all registered medical practitioners.

(d) State and Territory estimates from the *2007 Nursing and Midwifery Labour Force Survey* should be treated with caution due to low response rates in some jurisdictions, particularly Victoria (39.9 per cent), Queensland (33.9 per cent), WA (36.7 per cent) and the NT (28.7 per cent). Data quality issues associated with Indigenous identification are likely to have been compounded by estimation procedures used to deal with low responses rates.

np Not published.

Source: AIHW (unpublished) *Health Labour Force Surveys, 2007*.

NHA Indicator 65:

Net growth in health workforce

Table NHA.65.1 **Net growth in health workforce, selected professions (a), (b)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (c)
Medical practitioners (d)										
FTE in workforce in 2006	no.	22 982	18 220	10 629	6 599	5 455	1 387	1 380	952	67 575
FTE in workforce in 2007	no.	22 884	18 458	13 189	8 099	5 640	1 565	1 546	969	72 420
Net growth from 2006 to 2007	**%**	**- 0.4**	**1.3**	**24.1**	**22.7**	**3.4**	**12.8**	**12.1**	**1.8**	**7.2**
FTE in workforce in 2005	no.	24 283	17 296	10 241	5 052	5 283	1 467	1 458	784	65 825
FTE in workforce in 2006	no.	22 982	18 220	10 629	6 599	5 455	1 387	1 380	952	67 575
Net growth from 2005 to 2006 (e)	**%**	**- 5.4**	**5.3**	**3.8**	**30.6**	**3.3**	**- 5.4**	**- 5.4**	**21.5**	**2.7**
Nurses/midwives (f), (g)										
FTE in workforce in 2005	no.	65 857	57 772	36 473	19 167	19 854	5 788	3 719	3 587	212 207
FTE in workforce in 2007	no.	69 534	64 008	43 317	20 563	20 389	6 189	3 773	3 078	230 761
Net growth from 2005 to 2007	**%**	**5.6**	**10.8**	**18.8**	**7.3**	**2.7**	**6.9**	**1.4**	**- 14.2**	**8.7**
Dentists (h)										
FTE in workforce in 2005	no.	3 645	2 271	1 966	1 012	810	150	249	72	10 180
FTE in workforce in 2006	no.	3 796	2 384	2 039	1 051	785	170	233	85	10 541
Net growth from 2005 to 2006	**%**	**4.1**	**5.0**	**3.7**	**3.8**	**- 3.1**	**13.0**	**- 6.7**	**18.5**	**3.5**

(a) Net growth measures the change in the full time equivalent (FTE) number in the workforce in the reference year compared to the year prior to the reference year.

(b) FTEs calculated based on a 40 hour standard working week for medical practitioners and a 38 hour week for nurses, midwives and dentists.

(c) Due to rounding of average hours worked, the total FTE for Australia may not add up to the sum of states and territories.

(d) State and Territory estimates for 2005, 2006 and 2007 should be treated with caution due to low response rates in some jurisdictions, particularly the NT (31.8 per cent, 26.8 per cent and 27.1 per cent respectively). Data based on figures which were underestimates in NSW, Queensland and Tasmania.

(e) Net growth for WA between 2005 and 2006 is over-estimated due to the 2005 registration data used for weighting not including all registered medical practitioners, unlike 2006 and 2007.

(f) Data for nurses/midwives were not available for 2006. Therefore, net growth has been calculated from 2005 to 2007.

(g) State and Territory estimates for 2005 and 2007 should be treated with caution due to low response rates in some jurisdictions, particularly Victoria (39.9 per cent in 2007), Queensland (33.9 per cent in 2007), WA (26.9 per cent and 36.7 per cent respectively) and the NT (13.7 per cent and 28.7 per cent respectively).

(h) Data for dentists were not available for 2007. Therefore, net growth has been calculated from 2005 to 2006.

Source : AIHW (unpublished) *Health Labour Force Surveys (* Medical (2005, 2006 and 2007), Nurses/Midwives (2005 and 2007), Dentists (2005 and 2006)).

Table NHA.65.2 **Net growth in health workforce, by clinical/non-clinical status (per cent) (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
				Medical practitioners (c)					
Net growth from 2006 to 2007									
Clinician status (d)									
Clinician	- 0.5	1.4	24.4	22.5	3.2	12.3	13.9	1.7	7.2
Non-clinician	1.8	- 2.8	21.8	28.3	6.4	17.9	- 0.4	2.2	5.7
Net growth from 2005 to 2006									
Clinician status (d)									
Clinician (e)	- 4.5	5.3	4.4	30.1	3.9	- 5.7	- 7.0	30.0	3.0
Non-clinician (e)	- 15.9	8.9	- 6.4	36.2	- 7.2	2.0	6.4	- 23.1	- 3.0
				Nurses/midwives (f), (g)					
Net growth from 2005 to 2007									
Clinician status (d)									
Clinician	5.4	11.2	18.4	np	0.6	6.0	3.5	- 19.3	9.0
Non-clinician	6.6	6.5	21.9	np	22.7	16.4	- 18.1	31.8	7.0
				Dentists (h)					
Net growth from 2005 to 2006									
Clinician status (d)									
Clinician	4.9	4.6	3.7	5.7	- 4.0	15.1	- 6.3	16.0	3.5
Non-clinician	- 10.8	33.0	11.8	- 36.0	5.2	np	np	np	- 1.5

(a) Net growth measures the change in the full time equivalent number in the workforce in the reference year compared to the year prior to the reference year.

(b) FTEs calculated based on a 40 hour standard working week for medical practitioners and a 38 hour week for nurses, midwives and dentists.

(c) State and Territory estimates for 2005, 2006 and 2007 should be treated with caution due to low response rates in some jurisdictions, particularly the NT (31.8 per cent, 26.8 per cent and 27.1 per cent respectively). Data based on figures which were underestimates in NSW, Queensland and Tasmania.

(d) Clinician are those mainly working in clinical work (i.e. direct patient care). Non-clinician are those mainly working in the profession as a researcher, lecturer, teacher, educator, other non-clinical work in the relevant professional field. The number of non-clinicians is very small in comparison to the number of clinicians and small changes in numbers may result in large percentage changes.

(e) Net growth rates for WA between 2005 and 2006 are over-estimated due to the 2005 registration data used for weighting not including all registered medical practitioners, unlike 2006 and 2007.

Table NHA.65.2 **Net growth in health workforce, by clinical/non-clinical status (per cent) (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(f) Data for nurses/midwives was not available for 2006. Therefore, net growth has been calculated from 2005 to 2007.

(g) State and Territory estimates for 2005 and 2007 should be treated with caution due to low response rates in some jurisdictions, particularly Victoria (39.9 per cent in 2007), Queensland (33.9 per cent in 2007), WA (26.9 per cent and 36.7 per cent respectively) and the NNT (13.7% and 28.7 per cent respectively).

(h) Data for dentists were not available for 2007. Therefore, net growth has been calculated from 2005 to 2006.

np Not published.

Source : AIHW (unpublished) *Health Labour Force Surveys (* Medical (2005, 2006 and 2007), Nurses/Midwives (2005 and 2007), Dentists (2005 and 2006)).

NHA Indicator 66:

Public health program expenditure as a proportion of total health expenditure

Table NHA.66.1 **Public health expenditure as a proportion of total health expenditure, 2007-08**

		State- or Territory-funded expenditure								*Aust Govt funded*	
	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*	*Total*
Public health expenditure (a)	$m	160	187	160	69	74	22	23	62	1 373	2 129
Total health expenditure	$m	32 033	23 765	19 058	10 013	7 718	2 294	1 837	1 300	98 017	98 017
Public health expenditure as a proportion of total health expenditure	**%**	**0.5**	**0.8**	**0.8**	**0.7**	**1.0**	**0.9**	**1.2**	**4.7**	**1.4**	**2.2**

(a) State and territory government indicators are based on State and Territory government funding of public health expenditure as a proportion of total recurrent expenditure (all sources of funding) in the state/territory in which the expenditure is incurred. The Commonwealth indicator is based on Commonwealth funding of public health expenditure as a proportion of total national recurrent health expenditure (all sources of funding).

Source: AIHW (unpublished) health expenditure database.

Table NHA.66.2 **Public health and health expenditure, by funding source, 2007-08**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
Australian Government funded	$m	444	336	263	133	99	43	27	27	1 373
State and territory government funded	$m	160	187	160	69	74	22	23	62	756
Public health expenditure (a)	**$m**	**605**	**523**	**423**	**202**	**173**	**64**	**50**	**89**	**2 129**
Australian Government funded	$m	14 939	10 888	8 478	4 085	3 495	1 093	792	513	44 283
State and territory government funded	$m	7 508	5 082	5 161	2 714	2 194	569	580	562	24 369
Non-government sector funded	$m	9 587	7 795	5 419	3 214	2 028	632	465	225	29 364
Total recurrent health expenditure, all funding sources	**$m**	**32 033**	**23 765**	**19 058**	**10 013**	**7 718**	**2 294**	**1 837**	**1 300**	**98 017**

(a) State and territory government indicators are based on state and territory government funding of public health expenditure as a proportion of total recurrent expenditure (all sources of funding) in the state/territory in which the expenditure is incurred. The Commonwealth indicator is based on Commonwealth funding of public health expenditure as a proportion of total national recurrent health expenditure (all sources of funding).

Source : AIHW (unpublished) health expenditure database.

NHA Indicator 67:

Capital expenditure on health and aged care facilities as a proportion of capital consumption expenditure on health and aged care facilities

Table NHA.67.1 Capital expenditure on health and aged care facilities to capital consumption expenditure on health and aged care facilities, 2007-08 (a), (b)

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Capital expenditure	$m	644	323	676	238	132	39	38	14	2 102
Capital consumption expenditure	$m	460	325	343	85	112	25	20	22	1 391
Ratio		**1.4**	**1.0**	**2.0**	**2.8**	**1.2**	**1.5**	**1.9**	**0.6**	**1.5**

(a) Excludes local government.

(b) Includes expenditure on publicly owned health and aged care facilities only. A very small amount of capital expenditure for the community aged care sector by State health authorities has been excluded, as it is so small it would be unreliable to report it.

Source: AIHW (unpublished) sourced from the ABS Government Finance Statistics data.

NHA Indicator 68:

Proportion of health expenditure spent on health research and development

Table NHA.68.1 **Health expenditure on health research and development, 2007-08 (a), (b)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
Australian Government funded	$m	642	695	272	181	176	32	124	10	2 133
State and territory government funded	$m	110	153	47	30	24	8	14	–	387
Non-government sector funded	$m	71	86	27	15	9	1	4	–	213
Total research and development, all funding sources	$m	**823**	**934**	**347**	**225**	**209**	**42**	**142**	**11**	**2 732**
Australian Government funded	$m	14 939	10 888	8 478	4 085	3 495	1 093	792	513	44 283
State and territory government funded	$m	7 508	5 082	5 161	2 714	2 194	569	580	562	24 369
Non-government sector funded	$m	9 587	7 795	5 419	3 214	2 028	632	465	225	29 364
Total recurrent health expenditure, all funding sources	$m	**32 033**	**23 765**	**19 058**	**10 013**	**7 718**	**2 294**	**1 837**	**1 300**	**98 017**
Indicator (c)	%	**2.6**	**3.9**	**1.8**	**2.3**	**2.7**	**1.8**	**7.7**	**0.8**	**2.8**

(a) The government of the state in which the related research was undertaken is not necessarily the only source of state government research funding. For example, research undertaken in Victoria could be partly or wholly funded by the New South Wales Government.

(b) Numerator does not include research funded by private commercial (business) organisations, as that expenditure is captured elsewhere in the health expendtiure matrix (e.g. in the price of health goods and services such as pharmaceuticals).

(c) Indicator is based on total research and development, all funding sources and total recurrent health expenditure, all funding sources. The estimates of the numerator are based on data from the ABS Research and Experimental Development Survey. Because the ABS survey is conducted biennially, and 2007–08 was a non-survey year, the estimation of expenditure on health research for 2007-08 is by extrapolation from 2004–05 and 2006–07.
Research in higher education organisations is reported on a calendar year basis, and the expenditure for calendar year 2006 is included by the ABS and AIHW in reporting for overall research expenditure for fiscal year 2006-07.

– Nil or rounded to zero.

Source : ABS (unpublished) *Survey of Research and Experimental Development;* AIHW (unpublished) health expenditure database.

NHA Indicator 69:

Cost per case-mix adjusted separation

Table NHA.69.1 **Average cost per casemix adjusted separation, 2007-08 ($) (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
Hospital peer group (d)									
Principal referral and specialist women's and children's hospitals	4 302	4 161	4 180	4 320	3 885	4 431	np	4 516	4 215
Large hospitals	4 072	3 963	3 934	4 262	4 113	np	np	..	4 125
Medium hospitals	4 336	4 050	3 504	4 632	3 660	..	..	..	4 129
Total hospitals (e)	**4 284**	**4 153**	**4 146**	**4 386**	**3 887**	**4 581**	**4 510**	**4 619**	**4 215**

(a) Average cost weight from the National Hospital Morbidity Database, using the 2007–08 AR-DRG version 5.1 cost weights (DoHA 2009) for separations for which the care type was reported as *Acute, Newborn* with at least one qualified day or was *Not reported.*

(b) Data represent the average cost per casemix adjusted separation excluding depreciation.

(c) Limited to public hospitals.

(d) Hospital peer groups as defined in Appendix 2 of *Australian hospital statistics 2007-08* .

(e) 'Total hospitals' includes *Small acute hospitals* as well as *Principal referral and specialist women's and children's hospitals* , *Large hospitals* and *Medium hospitals* . The data are based on public hospital establishments for which expenditure data were provided, including networks of hospitals in some jurisdictions.

.. Not applicable. **np** Not published.

Source: AIHW (unpublished) National Hospital Morbidity Database; AIHW (unpublished) National Public Hospital Establishments Database.

NHA Indicator 70:

There is currently no agreed measure, nor data available, to inform this indicator

Accredited and filled clinical training positions

Data Quality Statements

This attachment includes copies of all DQSs as provided by the data providers. The Steering Committee has not made any amendments to the content of these DQSs.

Table 5 lists each performance indicator in the NHA and the page reference for the associated DQS.

Table 5 **Data quality statements for performance indicators in the National Healthcare Agreement**

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Table 5 **(continued)**

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69.	Cost per casemix adjusted separation	668
70.	Accredited and filled clinical training positions	..

.. Not applicable.

Data Quality Statement — Indicator 1: Proportion of babies born with low birthweight

Key data quality points

- Birth weight is included in the Perinatal NMDS and data are complete for over 99.9 per cent of babies.
- This measure only includes births of at least 20 weeks gestation or 400 grams birthweight. It excludes multiple births and babies with unknown birthweight and the measure may therefore differ slightly from information presented in other publications on low birthweight.
- Since 2005, all jurisdictions provide information on Indigenous status of the mother in accordance with the NMDS.
- No formal national assessment has been undertaken to determine completeness of the coverage or identification of Indigenous mothers in the NPDC or to determine variability between states and territories. The current data have not been adjusted for under-identification of Indigenous status of the mother.
- Area of usual residence of the mother is included in the Perinatal NMDS and data are complete for over 99.9 per cent mothers.

Target/Outcome	Prevention
Indicator	This indicator presents the incidence of low birthweight among liveborn singleton babies, of Aboriginal and Torres Strait Islander mothers and other mothers as a proportion of liveborn singleton infants.
Measure (computation)	Numerator: Number of low birthweight liveborn singleton infants born in a calendar year. Low birthweight is defined as less than 2,500 grams. Denominator: Number of liveborn singleton infants born in a calendar year. Calculation: 100 × (Numerator ÷ Denominator)
Data source/s	This indicator is calculated using data from the AIHW National Perinatal Data Collection (NPDC). For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area as at 30 June 2007. Each Statistical Local Area in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the general population. For data by remoteness: ABS ERP as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. Data included in the National Perinatal Data Collection are collected as part of a National Minimum Data Set and were supplied by state and territory health authorities to the National Perinatal Statistics Unit (NPSU), a collaborating unit of the Institute. The state and territory health authorities receive these data from patient administrative and clinical records. This information is usually collected by midwives or other birth attendants. States and territories use these data for service planning, monitoring and internal and public reporting. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website. States and territories supplied these data under the terms of the National Health Information Agreement (see link). http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc Data specifications for the Perinatal NMDS are documented in the AIHW

online metadata repository —METeOR(see link).

http://meteor.aihw.gov.au/content/index.phtml/itemId/181162

Relevance

The National Perinatal Data Collection comprises data items as specified in the Perinatal National Minimum Data Set plus additional items collected by the states and territories. The purpose of the Perinatal NMDS is to collect information at birth for monitoring pregnancy, childbirth and the neonatal period for both the mother and baby(s).

The Perinatal NMDS is a specification for data collected on all births in Australia in hospitals, birth centres and the community. It includes information for all live births and stillbirths of at least 400 grams birthweight or at least 20 weeks gestation. It includes data items relating to the mother, including demographic characteristics and factors relating to the pregnancy, labour and birth; and data items relating to the baby, including birth status (live or stillbirth), sex, gestational age at birth, birth weight, Apgar score and neonatal length of stay.

The NPDC provides all relevant data elements of interest for this indicator. Birthweight is a Perinatal national minimum dataset (NMDS) item. In 2007, very few (0.03 per cent) records for live born singleton babies were missing the data for birthweight.

While each jurisdiction has a unique perinatal form for collecting data on which the format of the Indigenous status question and recording categories varies slightly, all systems include the NMDS item on Indigenous status of mother.

No formal national assessment has been undertaken to determine completeness of the coverage of Indigenous mothers in the Perinatal NMDS or to determine variability between states and territories. However, the proportion of Indigenous mothers for the period 1997-2006 has been consistent, at 3.2–3.7 per cent of women who gave birth. For maternal records (0.1 per cent) where Indigenous status was not stated, data were excluded. Comparisons between states and territories should be interpreted with this caution.

The indicator is presented by Socio-Economic Indexes for Areas (SEIFA) Index for Relative Socio-Economic Disadvantage (IRSD). The data supplied to the NPDC include a 5-digit code for SLA from all states and territories except Tasmania (which supplies postal area codes). Reporting by remoteness is in accordance with the Australian Standard Geographical Classification (ASGC).

Timeliness

The reference period for the data is 2007.

Accuracy

Inaccurate responses may occur in all data provided to the Institute. The Institute does not have direct access to perinatal records to determine the accuracy of the data provided. However, the Institute undertakes validation on receipt of data. Data received from states and territories are checked for completeness, validity and logical errors. Potential errors are queried with jurisdictions, and corrections and resubmissions are made in response to these edit queries. The AIHW does not adjust data to account for possible data errors.

Errors may occur during the processing of data by the states and territories or at the AIHW. Processing errors prior to data supply may be found through the validation checks applied by the Institute. This indicator is calculated on data that has been reported to the AIHW. Prior to publication, these data are referred back to jurisdictions for checking and review. The Institute does not adjust the data to correct for missing values. Note that because of data editing and subsequent updates of state/territory databases, and because data are being reported by place of residence rather than place of birth the numbers reported for this indicator differ from those in reports published by the states and territories. The data are not rounded.

The geographical location code for the area of usual residence of the mother is included in the Perinatal NMDS. Less than 0.08 per cent of records could not be assigned to a state or territory of residence. There is no scope in the data element Area of usual residence of mother to discriminate temporary residence of mother for the purposes of accessing birthing services from usual residence. The former may differentially impact populations from remote and very remote areas, where services are not available locally.

Birthweight is near universally reported. Less than 0.03 per cent of records are missing data. Data presented by Indigenous status are influenced by the quality and completeness of Indigenous identification of mothers which is likely to differ among jurisdictions. Approximately 0.1 per cent of mothers who gave birth in the reference period had missing Indigenous status information. No adjustments have been made for under-identification or missing Indigenous status information.

Cells have been suppressed to protect confidentiality (where the presentation could identify a person or a single service provider), where rates are highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

Data for this indicator are published annually in Australia’s mothers and babies; and biennially in reports such as the Aboriginal and Torres Strait Islander Health Performance Framework report, the Health and Welfare of Australia’s Aboriginal and Torres Strait Islander Peoples, and the Overcoming Indigenous Disadvantage report. The numbers presented in these publications may differ depending on the inclusion criteria of the data selected to compile them.

Changing levels of Indigenous identification over time and across jurisdictions may also affect the accuracy of compiling a consistent time series in future years.

Accessibility

The AIHW provides a variety of products that draw upon the NPDC. Published products available on the AIHW website are:

- Australia’s mothers and babies annual report
- Indigenous mothers and their babies, Australia 2001-2004
- METeOR – online metadata repository
- National health data dictionary.

Ad hoc data are also available on request (charges apply to recover costs)

Interpretability

Supporting information on the use and quality of the NPDC are published annually in Australia’s mothers and babies (Chapter 1), available in hard copy or on the AIHW website. Comprehensive information on the quality of Perinatal NMDS elements are published in Perinatal National Minimum Data Set compliance evaluation 2001 to 2005. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. More detailed information on the quality of Indigenous data that might affect interpretation of the indicator was published in Indigenous mothers and their babies, Australia 2001-2004 (Chapter 1 & Chapter 5). Metadata information for the Perinatal NMDS are published in the AIHW’s online metadata repository —METeOR, and the National Health Data Dictionary.

Data Quality Statement — Indicator 2: Incidence of sexually transmissible infections and blood-borne viruses

Key data quality points

- The data used to calculate this indicator are from an administrative data collection designed for real-time surveillance of communicable diseases. Data are reportable under jurisdictional public health legislation.
- A major limitation of the notifications data is that, for most diseases, they represent only a proportion of the total cases occurring in the community, that is, only those cases for which health care was sought and a diagnosis made, followed by a notification to health authorities. The degree of under-representation of all cases is unknown.
- All notified cases are included in the numerator, even though for some diseases included in this indicator transmission can occur other than through sexual contact.
- For some diseases in some jurisdictions results by Indigenous status are not reported because the level of non-reporting of Indigenous status made this disaggregation unreliable.

Target/Outcome	Prevention
Indicator	Incidence of sexually transmissible infections and blood-borne viruses
Measure (computation)	The numerator is the number of notifications of new cases of syphilis, HIV, Hepatitis B, Hepatitis C, chlamydial and gonococcal infection. The denominator is the estimated resident population. Calculation is 100,000 × (Numerator ÷ Denominator), presented as a rate per 100,000 and age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years. Indigenous population data are not available for all states and territories for 5-year age groups beyond 64 years, so Indigenous disaggregations were standardised to 64 years.
Data source/s	*Numerator:* National Notifiable Diseases Surveillance System (NNDSS) reported case data. *Denominators:* For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2008. For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2008. For data by socioeconomic status: calculated using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2008. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP as at 30 June 2008, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	Cases are reported to state governments from clinicians and laboratories under relevant public health legislation. The Department of Health and Ageing receives data for all noted diseases except for HIV on to the NNDSS and acts as the custodian of that data. The National Centre in HIV Epidemiology and Clinical Research, a research institute based at the University of NSW, are responsible for maintaining national HIV data reported by the jurisdictions. The tables for this indicator were prepared by the Department of Health and Ageing and quality-assessed by the AIHW. The Department of Health and Ageing drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data

anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.

Relevance

Syphilis

All cases reported in the 0-4 years age group were notified as being congenitally acquired cases. Congenital syphilis is transmitted transplacentally from an infected pregnant woman to her foetus, and is not considered to be sexually transmitted.

STIs are not necessarily sexually acquired

Not all notifications of chlamydial infection, gonococcal infection, and syphilis are sexually acquired. The national case definitions for these infections, do not specifically distinguish between sites of infection or modes of transmission. It is known that in children under 4 years of age an STI, even of the genital area, may have been acquired from the mother at the time of delivery or via inadvertent nonsexual spread. For example, rectal and genital infection with *Chlamydia trachomatis* in young children may be due to persistent perinatally acquired infections, which may persist for up to three years; and gonococcal conjunctivitis can be acquired at the time of delivery or transmitted from child to child. Also, congenital syphilis is transmitted transplacentally from an infected pregnant woman to her foetus, and is not sexually transmitted.

Indigenous status

Information about Indigenous status is only presented for jurisdictions with response rates of 50 per cent or more to the Indigenous status data item.

Remoteness and socioeconomic status

The analyses by State/Territory remoteness and socioeconomic status are based on postcode of residence of the client as recorded in the NNDSS. Where a postcode was not available for a client, they were not included in the remoteness and SEIFA disaggregations. These postcodes consisted of post office box numbers, special NNDSS postcode formats which indicate the state of residence but not the specific postcode location, fictitious postcodes, missing postcodes and new postcodes that have not yet been assigned a category by the ABS. Over 95 per cent of records had a postcode assigned that was able to be included in disaggregations by remoteness and socioeconomic status.

Where a postcode was allocated to more than one SEIFA or Remoteness categories, cases were allocated based on the proportion of the population allocated to the respective SEIFA or Remoteness category within a postcode.

Postcode information usually reflects the residential location of a case, however in some jurisdictions it may be based on the postcode at the time of testing.

Timeliness

Data relates to the most recent complete year being 2008.

Accuracy

All jurisdictions, except for the ACT, have cleared the provided data. Please note that the data supplied for the Northern Territory is preliminary and there may be revisions in the future.

A major limitation of the notification data is that, for most diseases, they represent only a proportion of the total cases occurring in the community, i.e. only those cases for which health care was sought and a diagnosis made, followed by a notification to health authorities. This proportion may vary between diseases and over time, with infections diagnosed by a laboratory test more likely to be notified. States and territories may have varying reporting requirements by medical practitioners, laboratories and hospitals, and differing levels of case follow-up.

Notifications were extracted using 'diagnosis date' for 2008. Please note the date of diagnosis is the onset date or where the date of onset was not supplied, the earliest of the specimen collection date, the notification date, or the notification receive date. As considerable time may have elapsed between the onset and diagnosis dates for hepatitis B and C unspecified cases, the earliest of specimen date, health professional notification date or public health unit notification receive date was used for these conditions.

The Department of Health and Ageing used tables and concordance files to construct population estimates. These tables and concordance_files were provided by the AIHW, based on ABS statistical products.

Indigenous status

The level of completeness of the Indigenous status data item is highly variable by disease and jurisdiction.

For NHA table 2.3, incomplete notifications where Indigenous status was ‘not stated’ or blank or unknown were counted as 'not Indigenous' and included as ‘Other Australians’. In each jurisdiction where more than 50 per cent of notifications had a ‘not stated’, blank or ‘unknown’ response to Indigenous status data item, the disaggregation between Indigenous and Other Australians has not been provided as the data are not considered of sufficient quality to report this disaggregation.

These data need to be interpreted cautiously as STI screening occurs disproportionately among Indigenous populations and high rates in Indigenous populations may be attributed to poorer access to primary health care services and not necessarily associated with increased levels of sexual activity among Indigenous persons.

Hepatitis B and C

All notifications of hepatitis B and C have been included regardless of whether they were notified as "newly acquired" or as "greater than 2 years or unspecified period of infection". The two categories have been combined to represent all new diagnoses of hepatitis B and C within 2008 and not just newly acquired infections. This is due to inconsistent follow-up of cases between jurisdictions (required to determine the true date of acquisition).

Sex of cases

Where the sex of the case was either unknown or not reported, these cases were included in the 'total' data for each state and Australia.

Cells have been suppressed to protect confidentiality (where the presentation could identify a person or a single service provider), where rates are highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

Changes in surveillance and testing practices over time and by jurisdiction may make comparisons both over time and across jurisdictions difficult.

Changes in the national case definitions for the requirements of what constitutes a case will also affect the coherence of the data over time. The current NNDSS case definitions, including any historical edits, can be found at www.health.gov.au/casedefinitions.

Accessibility

The NNDSS website enables the public to access the following levels of data:

- Age group
- Sex

	• Disease • State This is provided in both case count and rates outputs. See: http://www9.health.gov.au/cda/source/cda-index.cfm
Interpretability	The current NNDSS case definitions, including any historical edits, can be found at www.health.gov.au/casedefinitions .

Data Quality Statement — Indicator 3: Incidence of end-stage kidney disease

Key data quality points

- This indicator estimates the incidence of ESKD from linked mortality and ANZDATA registry data. It does not include people with ESKD who were not on the ANZDATA registry and did not die in the reference period.
- The coding list used to estimate ESKD from mortality data is conservative.
- For disaggregation by state and Indigenous status, data have been reported for four aggregated years to ensure statistical validity. Northern Territory estimates could only be reliably estimated for persons, and not by sex. Reporting one year’s data only would mean that small states could not be reported.
- The Northern Territory has higher incidence rates of ESKD than other states/territories; however there is no clear difference between other states/territories from confidence interval analysis.
- Indigenous Australians have higher incidence rates of ESKD than non-Indigenous Australians, according to confidence interval analyses.

Target/Outcome

Prevention

Indicator

Incidence of end-stage kidney disease (ESKD) (treated and untreated) is:

- the number of unique individuals who appeared as new cases on the Australian and New Zealand Dialysis and Transplant registry (ANZDATA registry) in the reference year (treated cases), plus
- the number of people who died in the reference year and ESKD was recorded as a cause of death (untreated cases).

Measure (computation)

Mortality data and the ANZDATA registry were linked to eliminate double counting.

The indicator is expressed as a rate per 100,000 age-standardised to the Australian population as at 30 June 2001. Standardisation used the age groups 0–29 years, 10 year age groups up to 79 years, and 80 or over.

ESKD in mortality data was defined as a person who died of *chronic renal failure*, *hypertensive renal failure*, or *unspecified renal failure* as an underlying cause of death, or *chronic renal failure, end-stage* as an associated cause of death in the reference period.

Data source/s

Numerator

ANZDATA registry linked to the National Death Index which was in turn linked to the AIHW National Mortality Database. The years linked were 2003–2006 inclusive.

Denominator

For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2006 (or aggregated for combined years).

For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B.

Institutional environment

The AIHW linked data from the ANZDATA registry, the National Death Index (NDI) and AIHW National Mortality Database to calculate the numerator.

Completed ANZDATA records were supplied to the AIHW by the Australia and New Zealand Dialysis and Transplant Registry.

Mortality data was provided by the ABS to the AIHW.

The NDI is a national compilation of data on all deaths occurring in Australia. Data are supplied to the AIHW by Registrars of Births Deaths and Marriages (RBDM) from each state and territory and this results in a database which contains all deaths occurring in Australia since 1980.

The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Relevance

This is an interim measure; the long-term measure requires linkage to hospital data.

ANZDATA is a register of all people in Australia receiving dialysis or kidney transplant to survive—that is, people with treated ESKD—and therefore is highly relevant to this indicator. The AIHW is confident that this dataset produces good counts of treated cases. Treated cases are grouped by state of first treatment. The AIHW is not involved in collecting and validating the data however, ANZDATA (ANZDATA 2009) report that they employ checks for validity on data received and query possible errors with the renal units who provide the data.

Mortality data are of high quality, however it is not certain that all untreated cases have been counted because cases can not be included when they die of an unrelated cause or do not have ESKD recorded on their death certificates even though it contributed to the death (Li et al. 2003). Untreated cases are grouped by state of registration of death.

Mortality data have incomplete Indigenous identification rates, therefore care should be taken when interpreting the data. Only states where identification is considered to be above 70 per cent are included in the estimate (NT, QLD, SA, WA and NSW).

ANZDATA registry Indigenous identification is based on self-identification in hospital records. However it is believed that Indigenous identification in the Registry is more complete than in general hospital data (Cass et al. 2001).

Cass A, Cunningham J, Wang Z & Hoy W 2001. Regional variation in the incidence of end-stage renal disease in Indigenous Australians. Medical Journal of Australia

175:24–7.

Li SQ, Cass A & Cunningham J 2003. Cause of death in patients with end-stage renal disease: assessing concordance of death certificates with registry reports. Australian and New Zealand Journal of Public Health 27:419–24.

Timeliness

The reference period of the total Australian population is 2006. This is the most recent year for which mortality data are available.

Four years of data (2003, 2004, 2005 and 2006) were combined to provide estimates for the state/territory and Indigenous breakdowns, due to small numbers.

Accuracy

Each data source used in the construction of this indicator has broad population coverage and local data checking and validation processes.

This is the first time that reporting of ESKD incidence has included untreated cases, greatly increasing the accuracy of the estimate.

Confidence intervals were calculated to assess differences between state/territories and between Indigenous and non-Indigenous populations:

- Confidence intervals overlapped between most states and territories excluding the Northern Territory for the person rate.
- Indigenous Australians have higher incidence rates of ESKD than non-Indigenous Australians.

The count of untreated cases is likely to have missed some cases and included other non-cases due to coding issues. On balance it appears likely that this is an undercount, as indicated by 56 per cent of ANZDATA cases who died having no mention of ESKD (as defined for this indicator)

	on their death certificate. Linkage of ANZDATA to the NDI and then the Mortality Database found some discrepancies between the data sources: • Matched records may have different dates of birth and dates of death on the ANZDATA and Mortality Database. Where there was a discrepancy the ANZDATA date was taken. Cells have been suppressed to protect confidentiality (where the presentation could identify a person or a single service provider), where rates are highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).
Coherence	Incidence of ESKD has been reported previously, using a different methodology. This is the first time that reporting of ESKD incidence has included untreated cases
Accessibility	Aggregate ANZDATA reports are available free at their website www.anzdata.org.au. The AIHW provides a variety of products for mortality data including online data cubes and reports. Linked data are subject to regulations governing research ethics and are not available publically.
Interpretability	Information on how ANZDATA are collected can be found at www.anzdata.org.au. Information on the mortality database can be found on the AIHW website and information on the ICD10 on the WHO website.

Data Quality Statement — Indicator 4: Incidence of selected cancers

Key data quality points

- The quality of Indigenous identification in cancer registry data varies between jurisdictions. National disaggregation by Indigenous status is based on jurisdictions with adequate data quality (such as WA, SA, Qld and the NT).
- Remoteness and socioeconomic status are based on postcode of residential address at the time of diagnosis.

Target/Outcome	Prevention
Indicator	Incidence of selected cancers of public health importance.
Measure (computation)	Selected cancers of public health importance are: melanoma of the skin, bowel cancer, lung cancer, cervical cancer and breast cancer occurring in females. For melanoma, bowel cancer and lung cancer the numerator is the number of new cases occurring in the Australian population in the reported year. The denominator is the total Australian population for the same year. For cervical and breast cancer the numerator is the number of new cases occurring in the Australian female population in the reported year. The denominator is the total Australi an female population for the same year. Calculation is 100,000 × (Numerator ÷ Denominator), calculated separately for each type of cancer, presented as a rate per 100,000 and age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years. Indigenous disaggregations were standardised to 74 years due to small populations at older ages in some jurisdictions.
Data source/s	*Numerator:* Australian Cancer Database (ACD) *Denominators:* For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) by sex For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous population) Series B For data by socioeconomic status: calculated using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA). Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The National Cancer Statistics Clearing House (NCSCH) housed at the AIHW is a collaborative partnership between the AIHW and the Australasian Association of Cancer Registries (AACR). Cancer incidence data are supplied to the AIHW by state and territory cancer registries. These data are compiled by AIHW to form the Australian Cancer Database (ACD). All jurisdictions have legislation requiring mandatory reporting of all cancer cases (with the exception of basal cell carcinoma and squamous cell carcinoma of the skin). This means cancer incidence ascertainment is complete for cancers reported in this indicator. For further information see the AIHW website.

Relevance

The data used to calculate this indicator are accurate and of high quality. The mandatory reporting of cancers and the use of ERP's based on Census data for denominators provides the most comprehensive data coverage possible. The data are appropriate for this indicator.

Timeliness

Data available for the 2010 COAG Reform Council baseline report are based on cancers diagnosed in 2006.

Accuracy

Analyses by remoteness and socioeconomic index for areas are based on postcode of usual residence. There may be differences in the collection of data for allocation of 'usual residence'. Census data are rigorous when applying the definition for 'usual residence'. However, people may not be so rigorous when reporting their 'usual residence' to clinicians.

Incidence rates which are calculated using small numbers (e.g. for infrequent cancers) can be highly variable. Confidence intervals have been provided to indicate the extent to which conclusions can be made about the relative risk of different population subgroups.

This indicator is calculated on data that have been supplied to the AIHW. Prior to publication, the results of state and territory analyses are referred back to jurisdictions for checking and clearance. Any errors found by jurisdictions are corrected by the AIHW once confirmed.

Cells have been suppressed to protect confidentiality (where the presentation could identify a person or a single service provider), where rates are highly volatile (i.e. the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

While this is the first year of reporting this indicator, these data are published annually. AIHW has published the national incidence of breast and bowel cancer in 2006, which matches the data presented in this indicator. Incidence of other cancers in 2006 has not yet been published.

While there are sometimes changes to coding for particular cancers, it is possible to map coding changes to make meaningful comparisons over time.

Accessibility

The NCSCH provides cancer incidence and mortality data annually, via the AIHW website where they can be downloaded free of charge. A biennial report *Cancer in Australia* is published and is also available on the AIHW website where it can be downloaded without charge.

Interpretability

While numbers of new cancers are easy to interpret, calculation of age-standardised rates is more complex and the concept may be confusing to some users. Information on how and why the age-standardised rates have been calculated and how to interpret them is available in all AIHW cancer publications presenting data in this format, for example, *Cancer in Australia: an overview, 2008.* Information on all of the AIHW-held data sets, in this case the ACD, is available on the AIHW website. Information on ABS data is available on the ABS website. Extensive literature is also available on cancer coding and interpretation of cancer data and can be located both on the internet and in hard copy.

Data Quality Statement — Indicator 5: Proportion of persons obese

Target/Outcome Prevention

Indicator Proportion of persons obese.

Measure (Benchmark) Numerator: Number of persons aged 18 years and over with a Body Mass Index (BMI) greater than 30, and number of persons aged 5-17 years exceeding age and sex specific BMI values for obesity.

Denominator: Number of persons aged 5 and over.

Data source/s The denominator and numerator for this indicator use ABS National Health Survey (NHS) data, which is weighted to benchmarks for the total NHS in-scope population derived from the Estimated Resident Population (ERP). For information on NHS scope and coverage, see the National Health Survey Users Guide (cat. no. 4363.0.55.001) on the ABS website, www.abs.gov.au.

Estimates for Indigenous persons are drawn from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which was benchmarked to the estimated Indigenous population (adjusted for the scope of the survey).

Institutional environment The NHS and NATSIHS are collected, processed, and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents.

For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

Relevance The 2007-08 NHS collected measured height and weight from persons aged 5 years and over, and self-reported height and weight from persons aged 15 years and over. For the purposes of this Indicator, Body Mass Index (BMI) values are derived from measured height and weight information using the formula: weight (kg) / height $(m)^2$. Data for Indigenous persons are based on self-reported height and weight, from the 2004-05 NHS and 2004-05 NATSIHS.

Despite some limitations, BMI is widely used internationally as a relatively straightforward way of measuring obesity.

Timeliness The NHS is conducted every three years over a 12 month period. Results from the 2007-08 NHS were released in May 2009.

The NATSIHS is conducted every six years. Results from the 2004-05 survey were released in April 2006.

Accuracy The NHS is conducted in all States and Territories, excluding very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were also not included in the survey. The exclusion of persons usually resident in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population. The 2007-08 NHS response rate was 91 per cent. NHS data are weighted to account for non-response.

The NATSIHS is conducted in all States and Territories and includes remote and non-remote areas. The 2004–05 sample was 10,000 persons/5,200 households, with a response rate of 81 per cent of households.

As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the scientific methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.

RSEs for adult obesity rates for Remote areas are all greater than 25 per cent and should be used with caution. The rate for Tasmania is greater than 50 per cent. The breakdown by SEIFA quintiles has sampling error within acceptable limits, except for the Northern Territory. For children, remoteness and SEIFA disaggregations by State/Territory are generally unreliable and national level figures should be used with caution.

Adult obesity rates by age and sex should be used with caution at the State/Territory level, but generally have acceptable levels of sampling error at the national level and for total adults. State breakdowns for children are generally greater than 25 per cent RSE with many cells above 50 per cent and should not be considered reliable. Age by sex breakdowns at the national level are within acceptable limits.

Sampling errors for BMI data for all persons by State/Territory are generally within acceptable limits, though figures for Tasmania (particularly for children) should be used with caution.

BMI data for children aged 15-17 years by Indigenous status was not able to be included as the small sample size meant that the data was of very poor quality.

Coherence

The methods used to construct the indicator are consistent and comparable with other collections and with international practise.

Most surveys, including CATI health surveys conducted by the States and Territories, collect only self-reported height and weight. There is a general tendency across the population for people to overestimate height and underestimate weight, which results in BMI scores based on self-reported height and weight to be lower than BMI scores based on measured height and weight.

The age- and sex-specific cutoff points for BMI categories for children are from the work of Cole TJ, Bellizzi MC, Flegal KM & Dietz WH 2000, “Establishing a standard definition for child overweight and obesity worldwide: international survey”, BMJ 320:1240.

The NHS and NATSIHS collect a range of other health-related information that can be analysed in conjunction with BMI.

Interpretability

Information to aid interpretation of the data is available from the National Health Survey User Guide, and the National Aboriginal and Torres Strait Islander Health Survey User Guide on the ABS website.

Many health-related issues are closely associated with age, therefore data for this indicator have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the States and Territories and the Indigenous and non-Indigenous population. Age standardised rates should be used to assess the relative differences between groups, not to infer the rates that actually exist in the population.

Accessibility

See National Health Survey, Summary of Results (cat. no. 4364.0) for an overview of results from the NHS, and National Health Survey: State tables (cat. no. 4362.0) for State and Territory specific tables. See the National Aboriginal and Torres Strait Islander Health Survey (cat. no. 4715) for an overview of results from the NATSIHS. Other information from these surveys is also available on request.

Data Quality Statement — Indicator 6: Proportion of adults who are daily smokers

Target/Outcome	Prevention
Indicator	Proportion of adults who are daily smokers.
Measure (Benchmark)	Numerator: Number of persons aged 18 years and over who reported being current daily smokers. Denominator: Number of persons aged 18 years and over. Although the original specifications excluded current smokers who had not smoked 100 cigarettes, the data provided included this group. The impact on the proportion of adults who are daily smokers is not significant (a difference of 0.2 per cent), within the confidence interval of the data provided.
Data source/s	The denominator and numerator for this indicator use ABS National Health Survey (NHS) data, which is weighted to benchmarks for the total NHS in-scope population derived from the Estimated Resident Population (ERP). For information on NHS scope and coverage, see the National Health Survey Users Guide (cat. no. 4363.0.55.001) on the ABS website, www.abs.gov.au. Estimates for Indigenous persons are drawn from the National Aboriginal and Torres Strait Islander Social Survey (NATSISS).
Institutional environment	The NHS and NATSISS are collected, processed, and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.
Relevance	The NHS 2007-08 and NATSISS 2008 collected self-reported information on smoker status from persons aged 18 years and over. This refers to the smoking of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excluding chewing tobacco and smoking of non-tobacco products. The ‘current daily smoker’ category includes respondents who reported at the time of interview that they regularly smoked one or more cigarettes, cigars or pipes per day.
Timeliness	The NHS is conducted every three years over a 12 month period. Results from the 2007-08 NHS were released in May 2009. The NATSISS is conducted every six years. The 2008 survey was conducted from August 2008 to April 2009, with results released in October 2009.
Accuracy	The NHS is conducted in all States and Territories excluding very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were also not included in the survey. The exclusion of persons usually resident in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population. The 2007-08 NHS response rate was 91 per cent. NHS data are weighted to account for non-response. The NATSISS is conducted in all States and Territories and includes remote and non-remote areas. The 2008 sample was 13,300 persons/6,900 households, with a response rate of 82 per cent of

households.

There was a relatively large level of undercoverage in the 2008 NATSISS compared with other ABS surveys, therefore the analysis undertaken to ensure that results from the survey were consistent with other data sources was more extensive than usual. Potential bias due to undercoverage was addressed by adjustments to the initial weights and an adjustment to geographical areas based on the density of the Indigenous population. As undercoverage can result in variances across population characteristics, as well as across data items, caution should be exercised when interpreting the survey results. For more information, see the 2008 NATSISS Quality Declaration.

As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the statistical methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.

This indicator has acceptable levels of sampling error for all States and Territories by index of disadvantage except for Tas, ACT and NT, which have some RSEs between 25 per cent and 50 per cent and some RSEs greater than 50 per cent. RSEs for adult smoking rates for remote areas are mostly greater than 25 per cent and should be used with caution. Sampling error for rates of smokers by Indigenous status is generally acceptable for all States and Territories.

Coherence

The methods used to construct the indicator are consistent and comparable with other collections and with international practice. The NHS and NATSISS also collect a range of other health-related information that can be analysed in conjunction with smoker status.

Other non-ABS collections, such as the National Drug Strategy Household Survey (NDSHS), report estimates of smoker status. Results from the most recent NDSHS in 2007 show slightly lower estimates for current daily smoking than in the NHS 2007-08. These differences may be due to the greater potential for non-response bias in the NDSHS and the differences in collection methodology.

Interpretability

Information to aid interpretation of the data is available from the National Health Survey User Guide, and the National Aboriginal and Torres Strait Islander Social Survey, Explanatory Notes on the ABS website.

Many health-related issues are closely associated with age; therefore data for this indicator have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the States and Territories and the Indigenous and non-Indigenous population. Age standardised rates should be used to assess the relative differences between groups, not to infer the rates that actually exist in the population.

Accessibility

See National Health Survey, Summary of Results (cat. no. 4364.0) for an overview of results from the NHS, and National Health Survey: State tables for State and Territory specific tables. See National Aboriginal and Torres Strait Islander Social Survey, 2008 (cat. no. 4714.0) for an overview of results from the NATSISS. Other information from the surveys is available on request.

Data Quality Statement — Indicator 7: Proportion of adults at risk of long-term harm fron alcohol

Target/Outcome Prevention

Indicator Proportion of adults who are at risk of long-term harm from alcohol.

Measure (Benchmark) Numerator: Number of persons aged 18 years and over who reported consuming alcohol at a risky or high risk level.

Denominator: Number of persons aged 18 years and over.

Data source/s The ABS National Health Survey (NHS) provides three-yearly estimates for the numerator. For information on NHS scope and coverage, see the National Health Survey User Guide on the ABS website, www.abs.gov.au.

The denominator is also drawn from NHS data, which are weighted to benchmarks for the total NHS in-scope population derived from the Estimated Resident Population (ERP).

Estimates for Indigenous persons are drawn from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS).

Institutional environment The NHS and NATSIHS are collected, processed, and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents.

For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

Relevance The NHS and NATSIHS collected self-reported information on alcohol consumption from persons aged 15 years and over. Respondents were asked to report the number of drinks of each type they had consumed, the size of the drinks, and, where possible, the brand name(s) of the drink(s) consumed on each of the most recent three days in the last week on which they had consumed alcohol.

Intake of alcohol refers to the quantity of alcohol contained in any drinks consumed, not the quantity of the drinks. Reported quantities of alcoholic drinks consumed were converted to millilitres (mls) of alcohol present in those drinks, using the formula:

- alcohol content of the type of drink consumed (per cent) x number of drinks (of that type) consumed x vessel size (in millilitres).

An average daily amount of alcohol consumed was calculated (i.e. an average over the 7 days of the reference week), using the formula:

- average consumption over the 3 days for which consumption details were recorded x number of days consumed alcohol / 7.

According to average daily alcohol intake over the 7 days of the reference week, respondents were grouped into three categories of relative risk level. Risk levels are based on the 2001 National Health and Medical Research Council (NHMRC) risk levels for harm in the long term, and assume the level of alcohol consumption in the week recorded was typical. The average daily consumption of alcohol associated with the 2001 NHMRC risk levels is as follows:

- Low risk (males) less than or equal to 50 ml (4 standard drinks)
- Low risk (females) less than or equal to 25 ml (2 standard drinks)

- Risky (males) more than 50 ml – to 75 ml (6 standard drinks)
- Risky (females) more than 25 ml – to 50 ml (4 standard drinks)
- High risk (males) more than 75 ml (6 standard drinks)
- High risk (females) more than 50 ml (4 standard drinks).

Timeliness

The NHS is conducted every three years over a 12 month period. Results from the 2007-08 NHS were released in May 2009. The NATSIHS is conducted every six years. Results from the 2004-05 survey were released in April 2006.

Accuracy

The NHS is conducted in all States and Territories, excluding very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were also not included in the survey. The exclusion of persons usually resident in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population. The 2007-08 NHS response rate was 91 per cent. NHS data are weighted to account for non-response.

The NATSIHS is conducted in all States and Territories and includes remote and non-remote areas. The 2004–05 NATSIHS was 10,000 persons/5,200 households, with a response rate of 81 per cent of households.

As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the scientific methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.

This indicator has acceptable levels of sampling error for State and Territory estimates. Very few RSEs for alcohol risk rates for Remote areas are less than 25 per cent and data should be used with caution. The breakdown by SEIFA quintiles has sampling error within acceptable limits, except for the highest quintile in the Northern Territory which should not be considered reliable. Alcohol risk rates by Indigenous status have acceptable levels of sampling error except again for the NT where data should be used with caution.

The collection of accurate data on quantity of alcohol consumed is difficult, particularly where recall is concerned, given the nature and possible circumstances of consumption. The use of the one week reference period (with collection of data for the most recent three days in the last week on which the person drank) is considered to be short enough to minimise recall bias but long enough to obtain a reasonable indication of drinking behaviour. While the last week exact recall method may not always reflect the usual drinking behaviour of the respondent at the individual level, at the population level this is expected to largely average out.

The collection and coding of individual brands and container size ensures that no mental calculation is required of the respondent in reporting standard drinks, and is considered to eliminate potential for the underestimation bias which is known to occur when people convert drinks into standard drinks.

Coherence

The 2004–05 NATSIHS and 2004–05 NHS had similar data content, shared common elements in the questionnaire, and were processed side by side. The NHS and NATSIHS collect a range of other health-related information that can be analysed in conjunction with alcohol risk level.

For more detailed information see the National Health Survey User Guide on the ABS website.

The National Aboriginal and Torres Strait Islander Social Survey (NATSISS) also contains questions on alcohol consumption, but not those that allow long term risk level estimates to be derived. This data is collected every 6 years, with the most recent survey being conducted between August 2008 and April 2009. Results from the survey will be published in 2010.

Aggregate levels of alcohol consumption implied by the National Health Survey are somewhat less than the estimates of *apparent* consumption of alcohol based on the availability of alcoholic beverages in Australia from taxation and customs data, see Apparent Consumption of Alcohol, 2007-08 (cat. no. 4307.0.55.001). This suggests a tendency towards under-reporting of alcohol consumption in self-report surveys.

Other collections, such as the National Drug Strategy Household Survey (NDSHS), report against the same NHMRC guidelines. Results from the NDSHS show slightly lower estimates of population risk than those from the NHS. These differences may be due to the greater potential for non-response bias in the NDSHS and the differences in collection methodology.

Interpretability

Information to aid interpretation of the data is available from the National Health Survey User Guide, and the National Aboriginal and Torres Strait Islander Health Survey User Guide on the ABS website.

Many health-related issues are closely associated with age, therefore data for this indicator have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the States and Territories and the Indigenous and non-Indigenous population. Age standardised rates should be used to assess the relative differences between groups, not to infer the rates that actually exist in the population.

Accessibility

See National Health Survey, Summary of Results (cat. no. 4364.0) for an overview of results from the NHS, and National Health Survey: State tables (cat. no. 4362.0) for State and Territory specific tables.

See the National Aboriginal and Torres Strait Islander Health Survey (cat. no. 4715) for an overview of results from the NATSIHS. Other information from these surveys is also available on request.

Data Quality Statement — Indicator 9: Immunisation rates for vaccines in the national schedule (Australian Childhood Immunisation Register data)

Key data quality points

- The data used to calculate this indicator are from an administrative data collection—the Australian Childhood Immunisation Register (ACIR)—for which there is an incentive payment for notification, and there are further incentives for parents to have their child's vaccination status up to date. The Register is linked to the Medicare enrolment register, and approximately 99 per cent of children are registered with Medicare by 12 months of age.
- Data has been reported using the ACIR definition of fully-immunised children; that is, children who have received all age appropriate immunisations. Although there are now more vaccines on the National Immunisation Program Schedule for children than are reported here, these are not in scope for those children aged 5 years at the time of reporting.

Target/Outcome	Prevention
Indicator	Proportion of children fully vaccinated
Measure (computation)	The numerator is the number of children aged 5 years who have been fully vaccinated according to the National Immunisation Program Schedule (NIPS). The denominator is the number of children aged 5 years on the Australian Childhood Immunisation Register. Calculation is 100 × (Numerator ÷ Denominator), presented as a rate per 100 children aged 5 years.
Data source/s	The Australian Childhood Immunisation Register (ACIR). For data by socioeconomic status: calculated using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA). Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The ACIR is administered and operated by Medicare Australia for the Australian Government Department of Health and Ageing (DoHA). Medicare Australia provides DoHA with quarterly coverage reports at the national and state level. Immunisations are notified to Medicare Australia by a range of immunisation providers including General Practitioners, Councils, Aboriginal Medical Services, State and Territory Health departments. For information on the institutional environment of the ACIR, including the legislative obligations of the ACIR, financing and governance arrangements, and mechanisms for scrutiny of ACIR operations, please see http://www.medicareaustralia.gov.au/public/services/acir/index.jsp. The tables for this indicator were prepared by the Department of Health and Ageing and quality-assessed by the AIHW. The Department of Health and Ageing drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.
Relevance	The ACIR records details of vaccinations given to children under seven years of age who live in Australia, however reporting for the Australian

Healthcare Agreement is only for those children aged five years, which are those children born between 1 January 2004 and 31 March 2004.

Data has been reported using the ACIR definition of fully-immunised children; that is, children who have received all age appropriate immunisations for Diphtheria, Tetanus, Pertussis, Hepatitis B, Poliomyelitis, Haemophilus influenzae type B, Measles, Mumps and Rubella.

The NIPS also includes Hepatitis A (Indigenous children only), Meningococcal C, Pneumococcal, Rotavirus and Varicella.

The Varicella vaccine was added to the NIPS for children born from 1 May 2004; the Pneumococcal vaccine was added to the NIPS for children born from 1 January 2005; and the Rotavirus vaccine was added to the NIPS for children born from 1 May 2007. Consequently, data for these vaccinations are not available for the cohort of children being reported for this indicator this year.

There are possible gaps in coverage due to unknown vaccination status of children less than 5 years migrating to Australia. The extent of this is not currently quantifiable.

The analyses by State/Territory remoteness and socioeconomic status are based on postcode of residence of the child as recorded on ACIR. As children may receive vaccinations in locations other than where they live, this data does not necessarily reflect the location in which services were received.

Timeliness

A minimum 3-month lag period is allowed for late notification of immunisations to the Register. Data have been presented for children born between 1 January 2004 and 31 March 2004.

Accuracy

Vaccination coverage rates calculated using ACIR data are believed to underestimate actual vaccination rates because of under-reporting by immunisation providers. However, the extent of any under-reporting has not been estimated.

Programs, such as the General Practice Immunisation Incentive (GPII), and provider incentive payments have helped minimise under-reporting by providing a financial incentive to report clean and accurate data.

The data contains minimal if any duplication of immunisations, as children are identified via their Medicare number. Approximately 99 per cent of children are registered with Medicare by 12 months of age.

The ACIR covers virtually all children, particularly because participation in the ACIR is via an ‘opt-out’ arrangement.

ACIR is considered to have high levels of Indigenous identification (estimated to be 95 per cent in 2005).

The Department of Health and Ageing used tables and concordance files to construct rates by remoteness and socioeconomic status. These tables and concordance files were provided by the AIHW, based on ABS statistical products.

Coherence

The numerators and denominators have been consistent since the inception of the ACIR in 1996.

Accessibility

Information contained within the indicator for disaggregations by Indigenous, SEIFA and Remoteness are not currently publicly accessible. Current total percentage and total numbers however can be viewed on Medicare Australia’s web site.

Medicare Australia publishes current immunisation coverage from the ACIR on its web site, www.medicareaustralia.gov.au. Authorised immunisation providers can access detailed reports via a secured area of the Medicare Australia web site.

Immunisation coverage data derived from the ACIR have been reported in *Communicable Disease Intelligence* since early 1998. Data for 3 key

	milestone ages (12 months, 24 months and 5 years (6 years prior to 2008)), nationally and by jurisdiction are published quarterly.
Interpretability	Further information on the ACIR can be found at: http://www.medicareaustralia.gov.au/public/services/acir/index.jsp. Information on the National Immunisation Program and vaccinations can be found at http://www.immunise.health.gov.au/.

Data Quality Statement — Indicator 9: Immunisation rates for vaccines in the national schedule (Adult Vaccination Survey data)

Key data quality points

- The Adult Vaccination Survey is a random, stratified, Computer Assisted Telephone Interview covering residential households in all parts of Australia. Only households with fixed-line telephones are included.
- Determining ‘fully vaccinated’ status is challenging because of the recommendations regarding initial and subsequent pneumococcal vaccination (which depend on an individual’s age and the age of initial vaccination (if any)). Given the recall period could be more than five years, this may affect the overall quality of the estimates.
- In some cases, disaggregation by SEIFA and remoteness within state and territory is based on a small number of respondents and these estimates should therefore be interpreted with caution.
- The survey is not able to support reporting by Indigenous status.

Target/Outcome	Prevention
Indicator	Proportion of adults aged 65 and over that were fully vaccinated against influenza and pneumococcal disease.
Measure (computation)	The numerator is the weighted number of respondents aged 65 and over that were fully vaccinated against influenza and pneumococcal disease. The denominator is the weighted number of respondents aged 65 and over. The weighted numbers are based on estimates of the population as at June 2006. The calculation is 100 × (Numerator ÷ Denominator).
Data source/s	Adult Vaccination Survey, commissioned by DoHA and conducted by The Social Research Centre (a private social research company). For data by socioeconomic status: calculated by AIHW using the ABS’ Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2006, allocated to postcodes reported by respondents. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP as at 30 June 2006, by remoteness areas, allocated to postcodes reported by respondents, as specified in the Australian Standard Geographical Classification.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) calculated this indicator. The data are estimates from the 2006 Adult Vaccination Survey, commissioned by DoHA and conducted by the Social Research Centre. The Social Research Centre has quality accreditation according to the ISO 20252—Market, Opinion and Social Research Standard. For the 2006 survey, the AIHW was subcontracted by The Social Research Centre to analyse the data and prepare a report for submission to DoHA. The draft report was reviewed by the National Immunisation Committee—Data Subcommittee. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.
Relevance	The estimates for this indicator are based on the weighted responses from the Adult Vaccination Survey, relating to residential households across Australia. The ‘fully vaccinated’ concept reported here—wherein

an individual had to be vaccinated against influenza *and* pneumococcal disease—is the first time such an analysis has been conducted.

Estimates were produced from the survey data, after weighting to adjust for probability of selection in the sample and differential non-response.

Timeliness

The reference period for the data in the indicator relates to the 2006 influenza season (survey conducted in October 2006).

Accuracy

The survey comprised a sample of approximately 5,600 older Australians (aged 65 and over) distributed across the eight jurisdictions in a way that ensured a minimum sufficient sample in the smaller jurisdictions. For each jurisdiction, this sample size yields a confidence interval of ± 4.3 per cent or better on an estimate of 75 per cent (nationally the error is ± 1.2 per cent).

A supplementary survey of Residential Aged Care Facilities was also conducted to support sensitivity analysis, but those data are not included in the calculation. Sensitivity analysis suggests that inclusion of results from the supplementary survey only shifts the coverage estimates by about half of one per cent.

Estimates of vaccination status by Indigenous status are considered too unreliable for publication.

For this indicator, data are presented as a percentage which is calculated excluding any records for which any of the key variables (vaccination status, jurisdiction and postcode, from which SEIFA and remoteness were derived) was not reported. Note that the 'total' row may not be consistent with the disaggregations because of differential missing records.

The underlying data are not revised (although they are initially edited for range validity and logical consistency with other survey responses). Some analysis in the report submitted to DoHA was revised following advice from National Immunisation Committee—Data Subcommittee.

Cells have been suppressed to protect confidentiality (where the numerator is less than 5), where rates are highly volatile (i.e. the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

The Adult Vaccination Survey has been conducted periodically over the past decade (in 2001, 2002, 2003, 2004, 2006 (and planned for 2009)). Methods and questions have been similar over this period. AIHW reports have been published for the 2002, 2003 and 2004 surveys.

There are no alternative sources of these data for recent years; the 2001 survey and the 2001 National Health Survey (conducted by the ABS) gave comparable estimates.

For this indicator, the population-weighted numerator and denominator were sourced from the survey dataset.

Accessibility

The report prepared by AIHW on the results of the 2006 Adult Vaccination Survey has been circulated to the National Immunisation Committee and their related Data Subcommittee but not published. The survey dataset is available to AIHW and DoHA for analysis.

Interpretability

Extensive explanatory information is provided in a Technical Report for the survey (prepared by The Social Research Centre) and in the analytical report prepared by AIHW and submitted to DoHA. This includes a table of indicative standard errors.

The dataset contains internal metadata (variable and value labels) to assist with analysis.

Data Quality Statement — Indicator 9: Immunisation rates for vaccines in the national schedule (National Aboriginal and Torres Strait Islander Health Survey data)

Target/Outcome

Prevention

Indicator

Immunisation rates for Indigenous and non-Indigenous persons for vaccines in the national schedule.

Measure (Proportion)

Numerator: Number of Indigenous Australians aged 50 years or over who have been vaccinated for influenza and pneumococcal disease.

Denominator: Population of Indigenous Australians aged 50 years or over.

Data Source/s

The National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) provides estimates that allow for reporting on Indigenous people against this indicator. This survey is weighted to benchmarks for the total in-scope population derived from the Experimental Indigenous Estimated Resident Population (Indigenous ERP).

For information on scope and coverage see the relevant survey user guide (see Interpretability section below).

Institutional environment

This survey is conducted under the Census and Statistics Act 1905. For information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, see ABS Institutional Environment.

Relevance

The NATSIHS is a national survey that collects information on health status, risk factors and health-related actions.

In the NATSIHS, respondents were asked if they had ever received an injection against influenza and against pneumococcus. This indicator was based on persons who had been immunised for influenza in the previous 12 months and for pneumococcal disease within the last five years.

Data on adult immunisation in the NATSIHS is as reported by respondents and may differ from results that would be obtained from medical records or health registers.

Timeliness

The NATSIHS is conducted every 6 years. The 2004–05 survey was conducted between August 2004 and July 2005 and results were released in April 2006.

Accuracy

The NATSIHS is conducted in all States and Territories and includes remote and non-remote areas. The 2004–05 sample was 10,000 persons/5,200 households, with a response rate of about 81 per cent of households. The survey is weighted to account for non-response.

Since it is derived from a sample survey, this indicator is subject to sampling error which occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated and is based on the statistical methods used to design surveys.

Overall, this indicator has an RSE of less than 25 per cent for all States and Territories except for the ACT, which has an RSE of greater than 50 per cent and is considered too unreliable for general use. Finer levels of disaggregation (e.g. by the inclusion of other cross classifying variables) would result in higher levels of sampling error. The data could not support disaggregation by SEIFA and remoteness.

Coherence

A range of issues should be considered when comparing survey data with administrative data such as medical records or health registers.

	These include possible differences in reference period, potential for bias due to people with certain characteristics being more or less likely to appear in the collections, and differences in the way Indigenous status is collected and recorded.
Interpretability	Information on how to interpret and use the data appropriately is available from the National Health Survey and National Aboriginal and Torres Strait Islander Health Survey 2004-05: Data Reference Package (4363.0.55.002) and 2004-05 NATSIHS Users' Guide (4715.0.55.004).
Accessibility	See also National Aboriginal and Torres Strait Islander Health Survey, 2004-05 (4715.0). Specialised data tables and Confidentialised Unit Record Files (CURFs) are also available on request.

Data Quality Statement — Indicator 10: Breast cancer screening rates

Key data quality points

- Remoteness and socioeconomic status are based on postcode of residential address at the time of screening. These data are only available at the national level. Further breakdown by state and territory would give inaccurate results.
- Indigenous status data are only available at the national level as cells sizes are too small to provide meaningful comparison between jurisdictions.

Target/Outcome	Prevention
Indicator	This indicator presents the number of women within the national target age group (50–69 years) screened in a 2-year period as a proportion of the total female population aged 50–69 years and age-standardised to the Australian population at 30 June 2001.
Measure (computation)	*Numerator:* Total number of women aged 50–69 years who were screened in the 2-year period. *Denominator:* Total number of women aged 50–69. *Calculation:* 100 × (Numerator ÷ Denominator) and age-standardised to the Australian population at 30 June 2001, using 5-year age groups. The total female population aged 50–69 years is the average of the Australian Bureau of Statistics (ABS) estimated resident female population aged 50–69 years for the 2-year reporting period.
Data source/s	*Numerator:* State and territory BreastScreen program registers *Denominators:* For BreastScreen participation: Australian Bureau of Statistics Estimated Resident Population (ERP) for females aged 50–69 For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA). Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The BreastScreen Australia Program (BSA) is a joint program of the Australian Government and state and territory governments. The target age group is women aged 50–69 years. The BSA is monitored annually. Results are compiled and reported at the national level by the AIHW in an annual *BreastScreen Australia monitoring report.* *Numerator:* BSA program registers in each state and territory are maintained by jurisdictional Program managers. Data from state and territory registers are provided to the AIHW annually as unit record data. For further information see the AIHW website.
Relevance	The Program registers collect information on all breast cancer screening undertaken as part of the BSA Program. The use of ERPs based on Census data for denominators provide the most comprehensive data coverage possible. It is possible that some breast cancer screening is undertaken outside of the BSA Program. This additional screening means the data provided for this indicator is an underestimation of all women in the target age group who undergo breast cancer screening. It is not possible to estimate the extent of this underestimation. However,

	the data for the BSA Program are of high quality.
Timeliness	Data available for the 2010 COAG Reform Council baseline report is based on the 2-year calendar period 1 January 2007 to 31 December 2008. Data are presented as a rate for the 2-year period to reflect the recommended screening interval.
Accuracy	Remoteness and socioeconomic status are based on postcode of residential address at the time of screening. However, while the numerator is based on the postcode that a woman reports at the time of screen, the denominator is based on population by Statistical Local Area. This generally means that data can be acceptable at the national level, but produce spurious results at the jurisdictional level. Indigenous status disaggregated by jurisdiction leads to very small numbers leading to issues around confidentiality and comparability. This indicator is calculated on data that have been supplied to the AIHW by individual state and territory registers. Prior to publication, the results of analysis are referred back to jurisdictions for checking and clearance. Any errors found by jurisdictions are corrected once confirmed. The Estimated Resident Population and Indigenous Experimental Estimates and Projections are provided by the ABS.
Coherence	While this is the first year of reporting this indicator, these data are published annually in Program monitoring reports prepared by the AIHW. The most recent of these reports is *BreastScreen Australia monitoring report 2005–2006.*
Accessibility	The BSA annual reports are available via the AIHW website where they can be downloaded free of charge.
Interpretability	While numbers of women screened are easy to interpret, calculation of age-standardised rates is more complex and the concept may be confusing to some users. Information on how and why age-standardised rates have been calculated and how to interpret them is available in all AIHW BSA monitoring reports, for example, *BreastScreen Australia monitoring report 2005–2006.* Information on ABS data is available on the ABS website. Extensive information is also available on breast cancer screening and can be located both on the internet and in hard copy.

Data Quality Statement — Indicator 11: Cervical screening rates (National Cervical Screening Program data)

Key data quality points

- Remoteness and socioeconomic status are based on postcode of residential address at the time of screening. These data are only available at the national level. Further breakdown by state and territory would give inaccurate results.
- Hysterectomy fractions are derived from the 2001 NHS, and were validated in 2008 using data from the National Hospital Morbidity Database.
- Indigenous status is not collected by cervical cytology registers.

Target/Outcome	Prevention
Indicator	This indicator presents the number of women within the national target age group (20–69 years) screened in a 2 year period as a proportion of the eligible female population and age-standardised to the Australian population at 30 June 2001.
Measure (computation)	*Numerator:* Total number of women aged 20–69 years who were screened in the 2 year period. *Denominator:* Total number of women aged 20–69 years adjusted to exclude the estimated number of women who have had a hysterectomy, using national hysterectomy fractions *Calculation:* 100 × (Numerator ÷ Denominator) and age-standardised to the Australian population at 30 June 2001, using 5-year age groups. The eligible female population is the average of the Australian Bureau of Statistics (ABS) estimated resident female population for the 2 year reporting period. This population is adjusted for the estimated proportion of women who have had a hysterectomy using derived national hysterectomy fractions.
Data source/s	*Numerator:* State and territory cervical cytology registers *Denominators:* For cervical screening participation: Australian Bureau of Statistics Estimated Resident Population (ERP) for females aged 20–69 adjusted using ABS Hysterectomy fraction derived from the ABS' 2001 National Health Survey (NHS) For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA). Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The National Cervical Screening Program (NCSP) is a joint program of the Australian Government and state and territory governments. The target age group is women aged 20–69 years. The NCSP is monitored annually. Results are compiled and reported at the national level by the AIHW in an annual *Cervical screening in Australia* report. Cervical cytology registries in each state and territory are maintained by jurisdictional Program managers. Data is supplied to the registries from pathology laboratories. Data from cervical cytology registers are provided to the AIHW annually in an aggregated format. For further information see the AIHW website.

Relevance	The data used to calculate this indicator are relevant and of high quality. The cervical cytology registers collect information on all Pap tests undertaken in Australia except where women advise the clinician they do not wish to have their data collected. The use of ERPs based on Census data for denominators provide the most comprehensive data coverage possible. The data are entirely appropriate for this indicator. Denominators have been adjusted to account for the estimated proportion of women who have had a hysterectomy (these women have been effectively excluded from the calculation). National hysterectomy fractions were obtained from the 2001 National Health Survey, the first in a series of regular triennial health surveys conducted by the ABS. The fractions were validated in 2008 using data from the National Hospital Morbidity Database.
Timeliness	Data available for the 2010 COAG Reform Council baseline report are based on the two-year calendar period 1 January 2007 to 31 December 2008. Data are presented as a rate for the two year period to reflect the recommended screening interval.
Accuracy	Remoteness and socioeconomic status are based on postcode of residential address at the time of screening. However, while the numerator is based on the postcode that a participant reports at the time of screen, the denominator is based on population by Statistical Local Area. This generally means that data can be acceptable at the national level, but produce spurious results at the jurisdictional level. This indicator is calculated on data that have been supplied to the AIHW. Prior to publication, the results of analysis are referred back to jurisdictions for checking and clearance. Any errors found by jurisdictions are corrected once confirmed. The Estimated Resident Populations are provided by the ABS.
Coherence	While this is the first year of reporting this indicator, these data are published annually in Program monitoring reports prepared by the AIHW. The most recent of these reports is *Cervical screening in Australia 2006-2007,* published in 2009.
Accessibility	The NCSP annual reports are available via the AIHW website where they can be downloaded free of charge.
Interpretability	While numbers of women screened are easy to interpret, calculation of age-standardised rates with allowance for the proportion of the population who have had a hysterectomy is more complex and the concept may be confusing to some users. Information on how and why age-standardised rates have been calculated and how to interpret them as well as the hysterectomy fraction is available in all AIHW NCSP monitoring reports, for example, *Cervical screening in Australia 2006-2007.* Information on ABS data is available on the ABS website. Extensive information is also available on cervical screening and can be located both on the internet and in hard copy.

Data Quality Statement — Indicator 11: Cervical screening rates (National Aboriginal and Torres Strait Islander Health Survey data)

Target/Outcome	Prevention
Indicator	Cervical cancer screening rates - Indigenous
Measure (Proportion)	Numerator: Number of women aged 20–69 years who have been screened in the past 2 years Denominator: Total number of women aged 20–69 years.
Data Source/s	The National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) provides estimates that allow for reporting on Indigenous women against this indicator. This survey is weighted to benchmarks for the total in-scope population derived from the Experimental Indigenous Estimated Resident Population (Indigenous ERP). For information on scope and coverage see the relevant survey user guide (see Interpretability section below).
Institutional environment	This survey is conducted under the Census and Statistics Act 1905. For information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, see ABS Institutional Environment.
Relevance	The NATSIHS is a national survey that collects information on health status, risk factors and health-related actions. In the NATSIHS, women were asked whether or not they had ever had a pap smear test and frequency if they had regular tests. This indicator was based on women who had regular tests at least every two years. Data on cervical screening in the NATSIHS is 'as reported' by respondents and may differ from results that would be obtained from medical records or health registers. Cervical screening data are collected in each State and Territory and co-ordinated nationally, however these registers are unable to identify Indigenous women. Therefore a survey-based approach is the best alternative for obtaining data for Indigenous women.
Timeliness	The NATSIHS is conducted every 6 years. The 2004–05 survey was conducted between August 2004 and July 2005. Results were released in April 2006.
Accuracy	The NATSIHS is conducted in all States and Territories and includes remote and non-remote areas. The 2004–05 sample was 10,000 persons/5,200 households, with a response rate of about 81 per cent of households. This survey is weighted to account for non-response. Since it is derived from a sample survey, this indicator is subject to sampling error which occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated and is based on the statistical methods used to design surveys. This indicator generally has acceptable levels of sampling error for total Australia and State/Territory estimates. However , finer levels of disaggregation (e.g. by age group) may result in high levels of sampling error.
Coherence	A range of issues should be considered when comparing survey data with administrative data such as cervical screening registers. These

include possible differences in reference period, potential for bias due to people with certain characteristics being more or less likely to appear in the collections and differences in the way Indigenous status is collected and recorded.

Interpretability

Many health-related issues are closely associated with age, therefore data for this indicator have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the States and Territories and the Indigenous and non-Indigenous population. Age standardised rates should be used to assess the relative differences between groups, not to infer the rates that actually exist in the population.

Information on how to interpret and use the data appropriately is available from the National Health Survey and National Aboriginal and Torres Strait Islander Health Survey 2004 –05: Data Reference Package (4363.0.55.002) and 2004–05 NATSIHS User's Guide (4715.0.55.004).

Accessibility

See also National Aboriginal and Torres Strait Islander Health Survey, 2004 –05 (4715.0). Specialised data tables and Confidentialised Unit Record Files (CURFs) are also available on request.

Data Quality Statement — Indicator 12: Bowel cancer screening rates

Key data quality points

- Remoteness and socioeconomic status are based on postcode of residential address at the time of screening. These data are only available at the national level. Further breakdown by state and territory would give inaccurate results.
- Indigenous status is self-reported by participating individuals. However, high non-response by participants means this data item currently does not give meaningful results.
- Lack of inclusion of people screened outside the NBCSP will result in an underestimate of the population screening rates in the target ages.

Target/Outcome	Prevention
Indicator	This indicator presents the number of people in the national target ages (50, 55 and 65 years) screened for bowel cancer annually as a proportion of the total population aged 50, 55 and 65 years.
Measure (computation)	*Numerator:* Number of persons aged 50, 55 and 65 years who have been screened by the National Bowel Cancer Screening Program (NBCSP) in the reference calendar year *Denominator:* Total number of people in Australia aged 50, 55 and 65. *Calculation:* 100 × (Numerator ÷ Denominator)
Data source/s	*Numerator:* NBCSP Register maintained by Medicare Australia *Denominators:* For bowel cancer screening participation: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) aged 50, 55 and 65 calculated using single year ERP for 2008. For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous population) Series B (calculated as a proportion of each age in their respective 5-year age group as documented in the 2006 Census of population and housing for the Australian population). For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage (calculated as a proportion of each age in their respective 5-year age group ERP as documented in the 2006 Census of population and housing for the Australian population). Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS' Australian Standard Geographical Classification (calculated as a proportion of each age in their respective 5-year age group ERP as documented in the 2006 Census of population and housing for the Australian population).
Institutional environment	The National Bowel Cancer Screening Program (NBCSP) is a joint program of the Australian Government and state and territory governments. The target ages are 50, 55 and 65 years. The NBCSP is monitored annually. Results are compiled and reported at the national level by the AIHW in an annual *National bowel cancer screening program monitoring report.* The NBCSP register is maintained by Medicare Australia. Data from the register are provided to the AIHW six monthly as unit record data. For further information see the AIHW website.
Relevance	The Program register collects available data at all stages on the bowel cancer screening pathway undertaken as part of the NBCSP. However,

	there are no mandatory requirements for data supply at any stage in the bowel cancer screening pathway so data are incomplete. It is also important to note that additional bowel cancer screening is undertaken outside of the NBCSP. Data on people screened outside the program are not routinely collected; therefore, the level of underestimation of overall bowel cancer screening is unknown.
Timeliness	Data available for the 2010 COAG Reform Council baseline report is based on the calendar period 1 January 2008 to 31 December 2008.
Accuracy	Remoteness and socioeconomic status are based on postcode of residential address at the time of screening. However, while the numerator is based on the postcode that a participant reports at the time of screen, the denominator is based on population by Statistical Local Area. This generally means that data can be acceptable at the national level, but produce spurious results at the jurisdictional level. Self-reporting of Indigenous status within the program is poor, with around 32 per cent of participants not responding to this question in 2008. Thus, participation rates based on Indigenous status are considered too unreliable to be included.
Coherence	This is the first year of reporting this indicator. Similar data are published annually in NBCSP monitoring reports prepared by the AIHW. The most recent of these reports is *National bowel cancer screening program monitoring report 2009.* In the NBCSP reports screening rates are presented as a proportion of the number of invitations to participate in a given time. In this indicator screening rates are presented as a proportion of the ERP for people aged 50, 55 and 65. In addition both numerators and denominators used for NBCSP monitoring reports exclude those people who opt off, or suspend participation from the program. This indicator does not exclude these people from either numerator or denominator. Consequently, results of this indicator will vary from Program participation presented in annual NBCSP reports and the results should not be compared.
Accessibility	The NBCSP annual reports are available via the AIHW website where they can be downloaded free of charge.
Interpretability	While numbers of people screened are easy to interpret, the NBCSP screening pathway may be confusing to some users. Information on the NBCSP is available in all AIHW NBCSP monitoring reports, for example, *National bowel cancer screening program monitoring report 2009.* Information on ABS data is available on the ABS website. Extensive information is also available on bowel cancer screening and can be located both on the internet and in hard copy.

Data Quality Statement — Indicator 13: Proportion of children with 4th year developmental health check

Key data quality points

- The MBS items included in this indicator do not cover all developmental health check activity such as that conducted through State and Territory early childhood health assessments in preschools and community health centres.
- The analyses by State/Territory remoteness and socioeconomic status are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, these data do not necessarily reflect the location in which services were received.
- No adjustment was made to this indicator to account for under-identification of Indigenous children in Medicare data.

Target/Outcome	Prevention
Indicator	Proportion of children with 4th year development health check
Measure (computation)	The numerator is the number of persons aged 3–5 years with an MBS claim for Items 709 and 711 (Healthy Kids Check) and 708 (Aboriginal and Torres Strait Islander Child Health Check) in the reference period The denominator is the population aged 4 years, estimated by the AIHW using ERP data from the ABS. It was calculated by multiplying the 0-4 years ERP in each disaggregation (Indigenous status, remoteness and SEIFA) by the percentage of children aged 4 in this age group nationally. Calculation is 100 × (Numerator ÷ Denominator), presented as a percentage.
Data source/s	*Numerator* Australian Government Department of Health and Ageing Medicare Statistics data *Denominators* <u>For total population:</u> Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2008. <u>For data by Indigenous status:</u> ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2008. <u>For data by socioeconomic status:</u> calculated using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2008. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. <u>For data by remoteness:</u> ABS ERPs as at 30 June 2008, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The MBS claims data is based on administrative by-product of Medicare Australia administering the Medicare fee-for-service payment systems. Medicare Australia collects the MBS data under the Medicare Australia Act 1973. This data is then regularly provided to the Department of Health and Ageing. The numerator for this indicator was prepared by the Department of Health and Ageing and quality-assessed by the AIHW. The AIHW prepared the denominator and calculated the indicator based on numerators supplied. The Department of Health and Ageing drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant datasets required to

independently verify the data tables for this indicator. For further information see the AIHW Institutional website.

Relevance

The measure relates to specific identified Medicare services, for which claims data are available. Medicare data allows disaggregation by the demographic of the person and area (based on postcode) using data held on the Medicare system~~.~~

The MBS items included in this indicator do not cover all developmental health check activity such as that conducted through State and Territory early childhood health assessments in preschools and community health centres.

4th year development health checks can be received when children are aged 3 to 5 years old.

Indigenous numbers include only those children receiving MBS Item 708 (Aboriginal and Torres Strait Islander population Child Health Check). Data for total children was calculated using the total number of patients with MBS Item 709, 711 or 708.

The figures for the Northern Territory exclude children receiving Northern Territory Emergency Response Child Health Checks.

The analyses by State/Territory, remoteness and SEIFA are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, this data does not necessarily reflect the location in which services were received. Further, all MBS services received by clients who moved location during the reference period are allocated to the postcode of their address at date of last service received.

Timeliness

MBS claims data are available within 14 days of the end of a month. The indicator relates to all claims processed in the 2008–09 financial year.

Accuracy

As with any administrative system a small degree of error may be present in the data captured.

Medicare claims data used for statistical purposes is based on enrolment postcode of the patient. This postcode may not reflect the current postcode of the patient if an address change has not been notified to Medicare Australia.

The data provided are based on the date on which a Medicare claim was processed by Medicare Australia, not when the service was rendered. The use of data based on when the claim was processed, rather than when the service was rendered, produces little difference in the total number of persons included in the numerator for the reference period.

Children who received more than one type of health check (MBS item 709, 711 & 708) are counted once only in the calculations for this indicator. Where an Indigenous child received more than one Aboriginal and Torres Strait Islander population Child Health Check during the reference period, the child was only counted once in the numerator.

Where a child has received more than one health check during the relevant period, the residence at the time of the last service is used to allocate them to a remoteness and SEIFA category.

Medicare data presented by Indigenous status have not been adjusted to account for known under-identification of Indigenous status in MBS data.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

The data items used to construct the measures are consistently collected,

	comparable, and support assessment of annual change. Disaggregation by SEIFA and Remoteness Area are not publicly available elsewhere.
Accessibility	Information is available for MBS Claims data from: http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1
Interpretability	Medicare claims statistics are available at: http://www.nhhrc.org.au/internet/main/publishing.nsf/Content/Medicare+Statistics-1 https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml

Data Quality Statement — Indicator 18: Life expectancy

Target/Outcome	Primary and community health
Indicator	Life expectancy at birth.
Measure (computation)	Direct estimation of experimental life tables for Indigenous and non-Indigenous Australians, from which life expectancy at birth is obtained. Age/sex-specific death rates used in the construction of the life tables are calculated as: Numerator: death registrations for 2005–2007 provided by State and Territory Registrars of Births, Deaths and Marriages. Deaths registrations for Indigenous Australians were adjusted using factors obtained from the 2006 Census Data Enhancement Indigenous Mortality Quality Study to account for under-identification of Indigenous deaths. Denominator: 30 June 2006 experimental estimated resident Australian Indigenous and non-Indigenous populations.
Data source/s	Life Tables, Australia, 2005-2007. Experimental Life Tables for Aboriginal and Torres Strait Islander Australians, Australia, 2005-07.
Institutional environment	For information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment. Death statistics are sourced from death registrations systems administered by the various State and Territory Registrars of Births, Deaths and Marriages. It is a legal requirement of each State and Territory that all deaths are registered. Information about the deceased is supplied by a relative or other person acquainted with the deceased, or by an official of the institution where the death occurred. As part of the registration process, information on the cause of death is either supplied by the medical practitioner certifying the death on a Medical Certificate of Cause of Death, or supplied as a result of a coronial investigation.
Relevance	Life tables based on assumed improvements in mortality are produced by the ABS using assumptions on future life expectancy at birth, based on recent trends in life expectancy. Experimental life tables for Aboriginal and Torres Strait Islander Australians from which life expectancy at birth estimates were sourced were produced to enable the construction of ABS experimental estimates and projections of the Aboriginal and Torres Strait Islander population of Australia for the period 1991 to 2021. Estimates of life expectancy at birth for Indigenous Australians are commonly used as a measure for assessing Indigenous population health and disadvantage.
Timeliness:	Estimates of Indigenous and non-Indigenous life expectancy at birth are available every five years, with 2005–2007 estimates released in May 2009. The most recent estimates used a different methodology and therefore are not comparable with previous estimates. Life expectancy estimates for 2010–2012 are expected to be produced using a similar methodology to that used for the 2005–2007 estimates.
Accuracy	Compilation of life tables requires complete and accurate data on deaths that occur in a period, and reliable estimates of the population exposed to the risk of dying during that period. These data are required by age and sex so as to calculate age-sex specific death rates. In the case of life tables for the Indigenous population, registrations of

	Indigenous deaths and Indigenous population estimates present particular methodological challenges. For example, there are a number of factors which may contribute to under-identification of Indigenous deaths in death registrations records. In addition, there are quality issues associated with Indigenous population estimates, such as undercount of the Indigenous population in the Census, and non-response to the Indigenous status question on the Census form. Due to the inherent uncertainties in these data, the life tables should be considered as experimental and as such, care should be exercised when interpreting them.
Coherence	Due to significant changes in methodology, ABS strongly advises that comparisons between 2005–2007 estimates of Indigenous life expectancy at birth and previously published estimates should not be made.
Accessibility	ABS life expectancy estimates are published on the ABS website www.abs.gov.au (see Life Tables, Australia, 2005-2007) . Indigenous life expectancy estimates are also published on the ABS website, (see Experimental Life Tables for Aboriginal and Torres Strait Islander Australians, Australia, 2005-07).
Interpretability:	Please view Explanatory Notes and Glossary that provide information on the data sources, terminology, classifications and other technical aspects associated with these statistics.

Data Quality Statement — Indicator 19: Infant/young child mortality rate

Target/Outcome

Primary and community health

Indicator

Infant/young child mortality rate.

Measure (computation)

Numerator: death registrations for 2003–2007 provided by State and Territory Registrars of Births, Deaths and Marriages:

- Infant: Number of deaths among children aged under 1 year
- Child 0-4: Number of deaths among children aged 0 to 4 years
- Child 1-4: Number of deaths among children aged 1 to 4 years

Denominator:

- Infant: Number of live births in the period
- Child 0-4: Population aged 0 to 4 years
- Child 1-4: Population aged 1 to 4 years

Data source/s

Numerator – ABS Causes of Death Collection (3302.0).

Denominator - ABS Births Collection, ABS Estimated Residential Population (3101.0):

- Infant: ABS Births Collection (3301.0)
- Child 0-4: ABS Estimated Residential Population (3101.0)
- Child 1-4: ABS Estimated Residential Population (3101.0)

Institutional environment

The Causes of Death collection is published by the Australian Bureau of Statistics (ABS), with data sourced from deaths registrations administered by the various State and Territory Registrars of Births, Deaths and Marriages. It is a legal requirement of each State and Territory that all deaths are registered.

The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

Relevance

The ABS Causes of Death collection includes all deaths that occurred and were registered in Australia, including deaths of persons whose usual residence is overseas. Deaths of Australian residents that occurred outside Australia may be registered by individual Registrars, but are not included in ABS deaths or causes of death statistics.

Data in the Causes of Death collection include demographic items, as well as Causes of Death information coded according to the International Classification of Diseases (ICD). The ICD is the international standard classification for epidemiological purposes and is designed to promote international comparability in the collection, processing, classification, and presentation of cause of death statistics. The classification is used to classify diseases and causes of disease or injury as recorded on many types of medical records as well as death records. The ICD has been revised periodically to incorporate changes in the medical field. The 10th revision of ICD (ICD-10) has been used since 1997.

Timeliness

Causes of Death data is published on an annual basis.

Death records are provided electronically to the ABS by individual Registrars on a monthly basis for compilation into aggregate statistics on a quarterly and annual basis. One dimension of timeliness in death registrations data is the interval between the occurrence and registration of a death. As a result, a small number of deaths occurring in one year are not registered until the following year or later.

Births records are provided electronically to the ABS by individual Registrars on a monthly basis for compilation into aggregate statistics on a quarterly and annual basis. One dimension of timeliness in birth registrations data is the interval between the occurrence and registration of a birth. As a result, some births occurring in one year are not registered until the following year or even later. This can be caused by either a delay by the parent(s) in submitting a completed form to the registry, or a delay by the registry in processing the birth (for example, due to follow up activity due to missing information on the form, or resource limitations).

Preliminary ERP data is compiled and published quarterly and is generally made available five to six months after the end of each reference quarter. Every year, the 30 June ERP is further disaggregated by sex and single year of age, and is made available five to six months after end of the reference quarter. Commencing with data for September quarter 2006, revised estimates are released annually and made available 21 months after the end of the reference period for the previous financial year, once more accurate births, deaths and net overseas migration data becomes available. In the case of births and deaths, the revised data is compiled on a date of occurrence basis. In the case of net overseas migration, final data is based on actual traveller behaviour. Final estimates are made available every 5 years after a census and revisions are made to the previous inter-censal period. ERP data is not changed once it has been finalised. Releasing preliminary, revised and final ERP involves a balance between timeliness and accuracy.

Accuracy

Information on Causes of Death is obtained from a complete enumeration of deaths registered during a specified period and is not subject to sampling error. However, deaths data sources are subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data. Although it is considered likely that most deaths of Aboriginal and Torres Strait Islander (Indigenous) Australians are registered, a proportion of these deaths are not registered as Indigenous. Information about the deceased is supplied by a relative or other person acquainted with the deceased, or by an official of the institution where the death occurred and may differ from the self-identified Indigenous origin of the deceased. Forms are often not subject to the same best practice design principles as statistical questionnaires, and respondent and/or interviewer understanding is rarely tested. Over-precise analysis of Indigenous deaths and mortality should be avoided.

All ERP data sources are subject to non-sampling error. Non-sampling error can arise from inaccuracies in collecting, recording and processing the data. In the case of Census and Post Enumeration Survey (PES) data, every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. The ABS does not have control over any non sampling error associated with births, deaths and migration data. For more information see the *Demography Working Paper 1998/2 - Quarterly birth and death estimates, 1998 (cat. no. 3114.0)* and Australian Demographic Statistics (cat. no. 3101.0).

Causes of Death and Perinatal Deaths data for 2007 are subject to revision. All coroner certified deaths registered after 1 January 2007 will be subject to a revision process. This is a change from previous years, where all ABS processing of causes of death data for a particular reference period was finalised approximately 13 months after the end of the reference period. Where insufficient information was available to code a cause of death (e.g. a coroner certified death was yet to be finalised by the Coroner), less specific ICD codes were assigned as required by the ICD coding rules. The revision process will enable the use of additional information relating to coroner certified deaths as it becomes available over time. This will result in increased specificity of the assigned ICD-10 codes. Causes of death data for 2007 coroner certified deaths will be updated as more information becomes available to the ABS. Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Causes of Death, 2007, 3303.0.

Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

Some rates are unreliable due to small numbers of deaths over the reference period. Resultant rates could be misleading for example where the non-Indigenous mortality rate is higher than the Indigenous mortality rate. All rates in this indicator must be used with caution.

Coherence: The methods used to construct the indicator are consistent and comparable with other collections and with international practice.

Interpretability Data for this indicator have been presented as crude rates, either per 1,000 live births or 1,000 estimated resident population. Information on how to interpret and use the data appropriately is available from Explanatory Notes in Causes of Death, Australia (3303.0).

Data are reported by jurisdiction of residence for NSW, Queensland, WA, SA and the NT only. These five States and Territories are considered to have adequate levels of Indigenous identification in mortality data. Data are presented in five-year groupings due to volatility of the small numbers involved.

Accessibility Causes of Death data are available in a variety of formats on the ABS website under the 3303.0 product family. ERP data is available in a variety of formats on the ABS website, www.abs.gov.au, under the 3101.0 and 3201.0 product families. Further information on deaths and mortality may be available on request. The ABS observes strict confidentiality protocols as required by the Census and Statistics Act (1905). This may restrict access to data at a very detailed level.

Data Quality Statement — Indicator 20: Potentially avoidable deaths

Target/Outcome	Primary and community health
Indicator	Potentially avoidable deaths.
Measure (Benchmark)	Numerator: death registrations for 2003–2007 provided by state and territory Registrars of Births, Deaths and Marriages which have an ICD10 code which has been further classified as preventable or treatable as per the NHA Technical Manual Denominator: Estimated Resident Population , Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians
Data source	ABS Causes of Deaths collection (3303.0), ABS Estimated Resident Population (3101.0), Experimental Estimates and Aboriginal and Torres Strait Islander Australians, Jun 2006 (cat. no. 3238.0.55.001).
Institutional environment	The Causes of Death collection is published by the Australian Bureau of Statistics (ABS) with data sourced from deaths registrations administered by the various State and Territory Registrars of Births, Deaths and Marriages. It is a legal requirement of each State and Territory that all deaths are registered. The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.
Relevance	The ABS cause of death collection includes all deaths that occurred and were registered in Australia, including deaths of persons whose usual residence is overseas. Deaths of Australian residents that occurred outside Australia may be registered by individual Registrars, but are not included in ABS deaths or causes of death statistics. Data in the Causes of Death collection include demographic items, as well as Causes of Death information, which is coded according to the International Classification of Diseases (ICD). ICD is the international standard classification for epidemiological purposes and is designed to promote international comparability in the collection, processing, classification, and presentation of cause of death statistics. The classification is used to classify diseases and causes of disease or injury as recorded on many types of medical records as well as death records The ICD has been revised periodically to incorporate changes in the medical field. The 10th revision of ICD (ICD-10) has been used since 1997.
Timeliness	Causes of Death data is published on an annual basis. Preliminary ERP data is compiled and published quarterly and is generally made available five to six months after the end of each reference quarter. Every year, the 30 June ERP is further disaggregated by sex and single year of age, and is made available five to six months after end of the reference quarter. Commencing with data for September quarter 2006, revised estimates are released annually and made available 21 months after the end of the reference period for the previous financial year, once more accurate births, deaths and net overseas migration data becomes available. In the case of births and deaths, the revised data is compiled on a date of occurrence basis. In the case of net overseas migration, final data is based on actual traveller behaviour. Final estimates are made available every 5 years after a census and

revisions are made to the previous intercensal period. ERP data is not changed once it has been finalised. Releasing preliminary, revised and final ERP involves a balance between timeliness and accuracy.

Non-Indigenous estimates are available for census years only

Accuracy

Information on causes of death is obtained from a complete enumeration of deaths registered during a specified period and are not subject to sampling error. However, deaths data sources are subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data. Although it is considered likely that most deaths of Aboriginal and Torres Strait Islander (Indigenous) Australians are registered, a proportion of these deaths are not registered as Indigenous. Information about the deceased is supplied by a relative or other person acquainted with the deceased, or by an official of the institution where the death occurred and may differ from the self-identified Indigenous origin of the deceased. Forms are often not subject to the same best practice design principles as statistical questionnaires, and respondent and/or interviewer understanding is rarely tested. Over-precise analysis of Indigenous deaths and mortality should be avoided.

All ERP data sources are subject to non-sampling error. Non-sampling error can arise from inaccuracies in collecting, recording and processing the data. In the case of Census and PES data every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. The ABS does not have control over any non sampling error associated with births, deaths and migration data.

Another dimension of non-sampling error in ERP is the fact that the measures of components of population growth become more accurate as more time elapses after the reference period. As discussed under Timeliness, the trade-off between timeliness and accuracy means that a user can access more accurate data by using the revised or final ERP data. While the vast majority of births and deaths are registered promptly, a small proportion of registrations are delayed for months or even years. As a result, preliminary quarterly estimates can be an underestimate of the true number of births and deaths occurring in a reference period. Revised figures for a reference period incorporate births and deaths registrations that were received after the preliminary data collection phase as well as the estimated number of registrations that have still not been received for that reference period. For more information see the *Demography Working Paper 1998/2 - Quarterly birth and death estimates, 1998 (cat. no. 3114.0)*. and Australian Demographic Statistics (cat. no. 3101.0).

Causes of death data for 2007 is subject to revision. All coroner certified deaths registered after 1 January 2007 will be subject to a revision process. This is a change from previous years where all ABS processing of causes of death data for a particular reference period was finalised approximately 13 months after the end of the reference period. Where insufficient information was available to code a cause of death (e.g. a coroner certified death was yet to be finalised by the Coroner), less specific ICD codes were assigned as required by the ICD coding rules. The revision process will enable the use of additional information relating to coroner certified deaths as it becomes available over time. This will result in increased specificity of the assigned ICD-10 codes. Causes of death data for 2007 coroner certified deaths will be updated as more information becomes available to the ABS. Revised data for 2007 will be published both on a year registration basis and a year of occurrence basis in the 2008 Causes of death publication, due to be released in March 2010, and again in the publication relating to the 2009 collection due for release in 2011. Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Causes of Death, 2007, 3303.0.

Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

Coherence

The methods used to construct the indicator are consistent and comparable with other collections and with international practice.

Interpretability

Data for this indicator have been age-standardised, using the indirect method, to account for differences between the age structures of the Indigenous and non-Indigenous populations. Indirect age-standardisation to the 2001 total Australian population was used. Age-standardised results provide a measure of relative difference only between populations.

Information on how to interpret and use the data appropriately is available from Explanatory Notes in Causes of Death, Australia (3303.0).

Accessibility

Causes of Death data are available in a variety of formats on the ABS website under the 3303.0 product family. ERP data is available in a variety of formats on the ABS website under the 3101.0 and 3201.0 product families Further information on deaths and mortality may be available on request. The ABS observes strict confidentiality protocols as required by the Census and Statistics Act (1905). This may restrict access to data at a very detailed level which is sought by some users.

Data Quality Statement — Indicator 21: Treatment rate for mental illness

Key data quality points

State and territory jurisdictions differ in their approaches to counting clients under care, including different thresholds for registering a client. Additionally, they differ in their capacity to provide accurate estimates of individual persons receiving mental health services. Therefore comparisons between jurisdictions need to be made with caution.

- The Indigenous status data should be interpreted with caution:
  - public sector community mental health services (Public) data: There is varying and, in some instances, unknown quality of Indigenous identification across jurisdictions. The Other Australians category includes contacts where Indigenous status was missing or not reported (around 10 per cent of all clients)
  - private sector admitted patient (Private) data: Indigenous status is not collected by the Private Mental Health Alliance (PMHA)
  - Medicare Benefits Schedule (MBS) data: MBS data on Indigenous status are not published for this performance indicator. Indigenous identification is reported voluntarily by Indigenous Medicare enrolees and there is good evidence that the data significantly under-enumerates Indigenous persons
- persons can receive services from more than one type of these service providers. The extent to which this occurs is unknown. However, it is likely that there is considerable overlap between the private data and the MBS data

A small number of persons receiving mental health treatment are not included in any of the data sources used for this performance indicator.

Target/Outcome	Primary and community health
Indicator	Proportion of population receiving clinical mental health services
Measure (computation)	The numerator is the number of people receiving mental health services, separately for three service types. The denominator is the Estimated Resident Population (ERP). Calculation is 100 × (Numerator ÷ Denominator), presented as a percentage and age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years. Indigenous population data are not available for all states and territories for 5-year age groups beyond 64 years, so Indigenous disaggregations were standardised to 64 years. These are calculated separately for public, private and Medicare Benefits Schedule (MBS) -funded services.
Data source/s	*Numerators:* For Public data: State/Territory community mental health care data. For Private data: Private Mental Health Alliance (PMHA) Centralised Data Management System (CDMS) data. For MBS data: Australian Government Department of Health and Ageing (DoHA) Medicare Statistics data. *Denominator*: For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2007. For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2007. For data by socioeconomic status: calculated by the Australian Institute of Health and Welfare (AIHW) using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA)

as at 30 June 2007. Each SLA in Australia is ranked and divided into quintiles such that each quintile has an equal number of SLAs. However, quintiles do not necessarily have the same population size.

For data by remoteness: ABS ERPs as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.

Institutional environment

The AIHW prepared the denominator and calculated the indicator based on numerators supplied by other data providers. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Numerators for this indicator were prepared by state and territory health authorities, the PMHA and DoHA and quality-assessed by the AIHW.

The AIHW and DoHA drafted the initial data quality statement. The statement was finalised by AIHW following input from state and territory health authorities, PMHA and DoHA. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator.

Public data

The state and territory health authorities receive these data from public sector community mental health services. States and territories use these data for service planning, monitoring and internal and public reporting.

Private data

The PMHA's Centralised Data Management Service provided data submitted by private hospitals with psychiatric beds. The data are used by hospitals for activities such as quality improvement.

MBS data

Medicare Australia collects the MBS data under the *Medicare Australia Act 1973*. These data are then regularly provided to DoHA. The MBS claims data are an administrative by-product of Medicare Australia administering the Medicare fee-for-service payment systems.

Relevance

Estimates are based on counts of individuals receiving care within the year, by each service type, where each individual is generally counted once regardless of the number of services received. Persons can receive services of more than one type within the year; a count of persons receiving services regardless of type is not available.

A number of persons receiving mental health treatment are not captured in these data sources. These include:

- individuals receiving only admitted and/or residential services from state and territory public sector specialised mental health services.
- individuals receiving mental health services (other than as admitted patients in private hospitals) funded through Department of Veterans' Affairs, other third party funders (e.g. transport accident insurers, workers compensation insurers) or out of pocket sources.

There is likely to be considerable overlap between the MBS data and private hospital data, as most patients accessing private hospital services would access MBS items in association with the private hospital service.

Public data

Person counts for state and territory mental health services are counts of persons receiving one or more service contacts provided by public sector community mental health services. South Australia and Tasmania submitted data that were not based on unique patient identifier or data matching approaches.

Private data

Private hospital estimates are counts of individuals receiving admitted patient specialist psychiatric care in private hospitals.

MBS data

MBS are counts of individuals receiving mental health-specific Medicare services for which claims data are available.

Analyses by state/territory, remoteness and SEIFA are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, these data do not necessarily reflect the location in which services were received. Further, all MBS services received by clients who moved location during the reference period are allocated to the postcode of their address at date of last service received.

MBS claims that are reimbursed through the Department of Veterans' Affairs are not included in this measure.

Timeliness The reference period for these data is 2007–08.

Accuracy Public data

State and territory jurisdictions differ in their capacity to provide accurate estimates of person receiving services (see above). Additionally, jurisdictions differ in their approaches to counting clients under care. For example, people who are assessed for a mental health service but do not go on to be treated for a mental illness are included in the data by some jurisdictions but not others. Therefore, comparisons between jurisdictions should be made with caution.

The Indigenous status data should be interpreted with caution due to the varying and, in some instances, unknown quality of Indigenous identification across jurisdictions. The *Other Australians* category includes patients where Indigenous status was missing or not reported (around 10 per cent of all clients).

Private data

Not all private psychiatric hospitals are included in the PMHA's CDMS. Those that are included accounted for approximately 75 per cent of all activity in the sector. The data provided are an estimate of overall activity. Actual counts are multiplied by a factor that accounts for the proportion of data missing from the CDMS collection. That adjustment is performed at the level of state and territory, since non-participation rates varied between jurisdictions.

Indigenous status information is not collected for these data.

MBS Data

As with any administrative system a small degree of error may be present in the data captured.

Medicare claims data used for statistical purposes are based on enrolment postcode of the patient. This postcode may not reflect the current postcode of the patient if an address change has not been notified to Medicare Australia.

The data provided are based on the date on which a Medicare claim was processed by Medicare Australia, not when the service was rendered. The use of data based on when the claim was processed, rather than when the service was rendered, produces little difference in the total number of persons included in the numerator for the reference period.

People who received more than one type of MBS service are counted once only in the calculations for this indicator.

MBS data on Indigenous status are not published for this performance indicator. Indigenous identification is reported voluntarily by Indigenous Medicare enrolees and there is good evidence that the data significantly under-enumerates Indigenous persons.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

The data used in this indicator are also published in the *COAG National Action Plan on Mental Health—progress report 2007–08*. There may be some differences between the data published in these two sources as in the *COAG National Action Plan on Mental Health—progress report 2007–08*:

- rates may be calculated using different ERPs rather than the June 2007 ERPs that are used for this indicator,
- the 2007–08 figures are based on preliminary data for the public and private sectors and may not cover the full financial year, and
- MBS numbers are extracted using a different methodology. The *COAG National Action Plan on Mental Health—progress report 2007–08* counts a patient in each state they resided in during the reference period but only once in the total whereas this indicator counts a patient in only one state/territory.

Accessibility

Information is available in the *COAG National Action Plan on Mental Health—progress report 2007–08.*

Medicare claims statistics are available at:

http://www.nhhrc.org.au/internet/main/publishing.nsf/Content/Medicare+Statistics-1

https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml

Disaggregation of MBS data by SEIFA is not publicly available elsewhere.

Interpretability

Information is available for MBS claims data from:

http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1

Data Quality Statement — Indicator 22: Selected potentially preventable hospitalisations

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- Separations are reported by the jurisdiction of usual residence of the patient, not the jurisdiction of hospitalisation.
- There is some variation in the recording of diabetes as an additional diagnosis. The number of separations for Western Australia was markedly higher for chronic potentially preventable conditions, mainly due to the inclusion of renal dialysis admissions in the chronic disease category 'Complications of diabetes'.
- The hospital separations data do not include care provided in outpatient clinics or emergency departments.
- Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.

Target/Outcome Primary and community health

Indicator Admissions to hospital that could have potentially been prevented through the provision of appropriate non-hospital health services.

Measure (computation) The numerator is the number of separations for selected potentially preventable hospitalisations, divided into three groups:

- vaccine-preventable conditions (e.g. tetanus, measles, mumps, rubella)
- potentially preventable acute conditions (e.g. ear, nose and throat infections, dehydration/gastroenteritis)
- potentially preventable chronic conditions (e.g. diabetes, asthma, angina, hypertension, congestive heart failure and chronic obstructive pulmonary disease).

The denominator is the estimated resident population.

A separation is an episode of care for an admitted patient. Potentially preventable hospitalisations are defined by ICD-10-AM diagnosis codes and/or ACHI procedure codes in scope for each category of potentially preventable hospitalisations (see Appendix 1, Australian hospital statistics 2007–08).

Calculation is 1,000 × (Numerator ÷ Denominator), presented as a rate per 1,000 and age-standardised to the Australian population as at 30 June 2001 using 5-year age groups to 84 years. Indigenous population data are not available for all states and territories for 5-year age groups beyond 64 years, so Indigenous disaggregations were standardised to 64 years.

Data source/s Data sources

Numerator:

This indicator is calculated using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care.

Denominators:

For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2007.

For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2007.

For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2007. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population.

For data by remoteness: ABS ERP as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.

Institutional environment

The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting.

The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance

The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The analyses by state and territory, remoteness and socioeconomic status are based on Statistical Local Area of usual residence of the patient, not the location of the hospital.

The hospital separations data do not include care provided in outpatient clinics or emergency departments.

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, for 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.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (NT public hospitals only).

Variations in admission practices and policies lead to variation among

	providers in the number of admissions for some conditions. There is some variation in the recording of diabetes as an additional diagnosis. The number of separations for Western Australia was markedly higher for chronic potentially preventable conditions, mainly due to the inclusion of renal dialysis admissions in the chronic disease category ‘Complications of diabetes’. Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).
Coherence	The information presented for this indicator is calculated using the same methodology as data published in Australian hospital statistics 2007–08, except that for the Indigenous disaggregation age standardisation is to 64 years here, rather than to 74 as in Australian hospital statistics.
Accessibility	The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database. Published products available on the AIHW website are: • Australian hospital statistics with associated Excel tables. • Interactive data cube for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).
Interpretability	Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in Australian hospital statistics (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and changes in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW’s online metadata repository —METeOR, and the National health data dictionary.

Data Quality Statement — Indicator 23: Selected potentially avoidable GP-type presentations to emergency departments

Key data quality points

- Coverage of the data collection is almost complete for public hospitals in peer groups A and B. Hospitals in these peer groups provided approximately 69 per cent of all Emergency Department services in public hospitals.
- The quality of the data reported for Indigenous status in emergency departments has not been formally assessed for completeness; therefore, caution should be exercised when interpreting these data.
- As the indicator is limited to hospitals in peer groups A and B, disaggregation by remoteness and Indigenous status should be interpreted with caution.
- Remoteness and socioeconomic status are based on the reported area of usual residence of the patient.

Target/Outcome	Primary and community health
Indicator	Attendances at public hospital emergency departments that could have potentially been avoided through the provision of appropriate non-hospital services in the community
Measure (computation)	The number of presentations to public hospital emergency departments in hospitals that were classified as either peer group A (*Principal referral and Specialist women's and children's hospitals*) or peer group B (*Large hospitals*), with a Type of visit of Emergency presentation (or Not reported) that: • were allocated a Triage category of 4 or 5 and • did not arrive by ambulance or police or correctional vehicle and • were not admitted to the hospital, or referred to another hospital, or died.
Data source/s	This indicator is calculated using data from the AIHW's National Non-admitted Patient Emergency Department Care Database (NNAPEDCD), based on the National Minimum Data Set for Non-admitted patient emergency department care (NAPEDC).
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation. States and territories supplied these data under the terms of the National Health Information Agreement (see link). http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc
Relevance	The purpose of this NMDS is to collect information on the characteristics of emergency department care (including waiting times for care) for non-admitted patients registered for care in emergency departments in selected public hospitals that were classified as either peer group A (Principal referral and Specialist women's and children's hospitals) or B (Large hospitals). Hospitals in these peer groups provided approximately 69 per cent of all Emergency Department services in public hospitals.

The definition is considered a reasonable starting approximation of the population that should be receiving service in the primary care sector. The indicator includes only peer group A (*Principal referral and Specialist women's and children's hospitals*) and peer group B (*Large hospitals*).

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007-08, the coverage of this NMDS was almost 100 per cent in all jurisdictions for pubic hospitals in peer groups A and B. The data presented here are not necessarily representative of the hospitals not included in the NNAPEDCD. Hospitals not included do not necessarily have emergency departments that are equivalent to those in hospitals in peer groups A and B.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

The quality of the data reported for Indigenous status in emergency departments has not been formally assessed for completeness; therefore, caution should be exercised when interpreting these data.

As this indicator is limited to public hospitals which were classified in peer groups A and B, most of the data relates to hospitals within major cities. Consequently, the coverage may not include areas where the proportion of Indigenous people (compared with other Australians) may be higher than average. Similarly, disaggregations by socioeconomic status and remoteness should be interpreted with caution.

Remoteness and socioeconomic status are based on the reported area of usual residence of the patient. The SEIFA categories for socioeconomic status are at the national level, not at the individual state/territory level. Some data have been suppressed to protect confidentiality, or where data quality is known to be of insufficient quality.

Coherence

This indicator is based on the same data and analysis methods used in *Australian hospital statistics*.

Accessibility

The AIHW provides a variety of products that draw upon the NNAPEDCD data. Published products available on the AIHW website include *Australian hospital statistics,* and associated Excel tables.

Interpretability

Supporting information on the quality and use of the NNAPEDCD are published annually in *Australian hospital statistics* (Chapter 5 and technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage that might affect interpretation of the published data. Metadata information for the NAPEDC NMDS are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 24: GP-type services

Key data quality points

- The data used to calculate this indicator are from an administrative data collection designed for payment of subsidies to service providers and has accurate data on the number of services provided.
- The analyses by State/Territory remoteness and socioeconomic status are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, this data does not necessarily reflect the location in which services were received.
- Medical claims that are reimbursed through the Department of Veterans' Affairs are not included in this measure.

Target/Outcome:	Primary and community health
Indicator	GP-type service use per 1,000 population
Measure (computation)	The numerator is the number of services for non-referred GP attendances, defined by MBS Items under broad type of service groups A, B, M and O. The denominator is the estimated resident population. Calculation is 1,000 × (Numerator ÷ Denominator), presented as a rate per 1,000 and age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years.
Data source/s	*Numerator:* Australian Government Department of Health and Ageing Medicare Statistics data *Denominators:* For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2008. For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2008. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP as at 30 June 2008, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The MBS claims data are based on administrative by-product of Medicare Australia administering the Medicare fee-for-service payment systems. Medicare Australia collects the MBS data under the Medicare Australia Act 1973. The data are then regularly provided to the Department of Health and Ageing. The tables for this indicator were prepared by the Department of Health and Ageing and quality-assessed by the AIHW. The Department of Health and Ageing drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.
Relevance	The measure relates to specific identified Medicare services. The analyses by State/Territory, remoteness and SEIFA are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, this data does not

	necessarily reflect the location in which services were received. Medical claims that are reimbursed through the Department of Veterans' Affairs are not included in this measure.
Timeliness	The indicator relates to all claims processed in the 2008–09 financial year.
Accuracy	As with any administrative system a small degree of error may be present in the data captured. Medicare claims data used for statistical purposes is based on enrolment postcode of the patient. This postcode may not reflect the current postcode of the patient if an address change has not been notified to Medicare Australia. The data provided are based on the date on which a Medicare claim was processed by Medicare Australia, not when the service was rendered. The use of data based on when the claim was processed rather than when the service was rendered produces little difference in the total number of persons included in the numerator for the reference period. MBS data on Indigenous status are not published for this performance indicator. Indigenous identification is reported voluntarily by Indigenous Medicare enrolees and there is good evidence that the data significantly under-enumerates Indigenous persons. Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are highly volatile (i.e. the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).
Coherence	The data items used to construct the measures are consistently collected, comparable, and support assessment of annual change. They are consistent with service numbers published by Medicare. Disaggregation by SEIFA and Remoteness Area are not publicly available elsewhere.
Accessibility	Medicare claims statistics are available at: http://www.nhhrc.org.au/internet/main/publishing.nsf/Content/Medicare+Statistics-1 https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml
Interpretability	Information is available for MBS Claims data from: http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1

Data Quality Statement — Indicator 25: Specialist services claimed through Medicare

Key data quality points

- This is a proxy measure for the indicator as it only includes specialist services reimbursed through the Medicare system (for out-of-hospital private patients) and not specialist services provided in public hospital outpatient and other settings (which are not reimbursed through the Medicare system).
- This measure does not reflect total Medicare-reimbursed specialist activity as it excludes specialist services provided to hospital inpatients (and reimbursed through the Medicare system).

Target/Outcome	Primary and community health
Indicator	Differential rates for specialist service use (out-of-hospital private patient) per 1,000 population
Measure (computation)	The numerator is the number of specialist services claimed through Medicare, all MBS Items excluding broad type of service groups A, B, M, O, J, P and Q (i.e. GP, optometry and dental services). The denominator is the estimated resident population. Calculation is 1,000 × (Numerator ÷ Denominator), presented as a rate per 1,000 and age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years.
Data source/s	*Numerator:* Australian Government Department of Health and Ageing Medicare Statistics data *Denominators:* For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2008. For data by socioeconomic status: calculated using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2008. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP as at 30 June 2008, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The MBS claims data are based on administrative by-product of Medicare Australia administering the Medicare fee-for-service payment systems. Medicare Australia collects the MBS data under the Medicare Australia Act 1973. The data are then regularly provided to the Department of Health and Ageing. The tables for this indicator were prepared by the Department of Health and Ageing and quality-assessed by the AIHW. The Department of Health and Ageing drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.
Relevance	The measure relates to specific identified Medicare services. This is a proxy measure for the indicator as it only includes specialist services reimbursed through the Medicare system (for out-of-hospital private patients) and not specialist services provided in public hospital outpatient and other settings (which are not reimbursed through the Medicare

system).

This measure does not reflect total Medicare-reimbursed specialist activity as it excludes specialist services provided to hospital inpatients (and reimbursed through the Medicare system).

The analyses by State/Territory, remoteness and SEIFA are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, data does not necessarily reflect the location in which services were received.

Medical claims that are reimbursed through the Department of Veterans' Affairs are not included in this measure.

Timeliness The indicator relates to all claims processed in the 2008-09 financial year.

Accuracy As with any administrative system a small degree of error may be present in the data captured.

Medicare claims data used for statistical purposes are based on enrolment postcode of the patient. This postcode may not reflect the current postcode of the patient if an address change has not been notified to Medicare Australia.

The data provided are based on the date on which a Medicare claim was processed by Medicare Australia, not when the service was rendered. The use of data based on when the claim was processed rather than when the service was rendered produces little difference in the total number of persons included in the numerator for the reference period.

MBS data on Indigenous status are not published for this performance indicator. Indigenous identification is reported voluntarily by Indigenous Medicare enrolees and there is good evidence that the data significantly under-enumerates Indigenous persons.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are highly volatile (i.e. the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence The data items used to construct the measures are consistently collected, comparable, and support assessment of annual change. They are consistent with service numbers published by Medicare.

Disaggregation by SEIFA and Remoteness Area are not publicly available elsewhere.

Accessibility Medicare claims statistics are available at:

http://www.nhhrc.org.au/internet/main/publishing.nsf/Content/Medicare+Statistics-1

https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml

Interpretability Information is available for MBS Claims data from:

http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1

Data Quality Statement — Indicator 26: Number of dental services (National Dental Telephone Interview Survey data)

Key data quality points

- The NDTIS is the most comprehensive source of population data on dental health and use of dental services in Australia.
- Children aged 0-4 years were not surveyed and hence were excluded from service usage rates.
- Edentulous persons were excluded from service usage rates.
- As with all survey data, the indicator is subject to sampling error and non-response bias. To indicate the magnitude of sampling error, relative standard errors (RSE per cents) have been provided for rate estimates.

Target/Outcome

Primary and community health

Indicator

Differential rates for use of dental services per 1,000 population

Measure (computation)

Numerator: Number of dentate persons aged 5 years and older visiting a dental provider within last 12 months

Denominator: Number of dentate persons aged 5 years and older

The computation: is 1,000 × (Numerator ÷ Denominator), age-standardised.

Data are presented separately for the reason for the last visit (emergency and general) and the provider (public or private) of the most recent service.

An emergency visit is classified as a visit for relief of pain. Other visits are classified as general.

Public providers include government clinics, school dental services, and services provided to members of the armed services/defence force. Private providers include private practitioners, dental technicians and clinics operated by private health insurance funds.

Data source/s

Numerator and denominator : National Dental Telephone Interview Survey (NDTIS) 2008

For data by socioeconomic status: ABS' Postal Area (POA) Index of Relative Socio-economic Disadvantage 2006 (cat. no. 2033.0.55.001). The index is divided into quintiles such that each quintile has an equal number of Statistical Local Areas; however, they do not necessarily have equal population sizes.

For data by remoteness: ABS' Australian Standard Geographical Classification

(ASGC) Remoteness Classification for Postcodes 2006

The total number of people who received dental services in each jurisdiction and nationally was estimated by multiplying service usage rates by the State/Territory or Australian Estimated Resident Population aged 5 years or over as at 30 June 2008.

Institutional environment

This indicator was calculated by the Dental Statistics Research Unit (DSRU), a collaborating unit of the AIHW. DRSU is located in the Australian Research Centre for Population Oral Health (ARCPOH) at the University of Adelaide. ARCPOH is Australia's pre-eminent population oral health research body undertaking dental research and providing a broad range of dental and oral health statistics for Australia.

The AIHW is Australia's national agency for health and welfare statistics and information. The role of the AIHW is to provide information on Australia's health and welfare, through statistics and data development that inform discussion and decisions on policy and services.

The AIHW works closely with all State, Territory and Australian

Government health authorities in collecting, analysing and disseminating data. However, the Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Relevance

The NDTIS is a random sample survey that collects information on the dental health and use of dental services of Australians in all States and Territories. The scope of the survey includes both public and private dental services, and emergency as well as general visits (i.e. check ups and consultations for problems not classified as emergencies).

The indicator is limited to dentate people (that is, people with at least one remaining natural tooth) aged 5 years or over, whose telephone number was listed in the electronic White Pages. Participation in the survey is voluntary. In 2008, the response rate was 59 per cent.

The indicator does not provide information about oral health services provided to edentulous persons. As NDTIS does not specifically identify dental services provided through hospitals or services provided for orthodontic reasons it was not possible to exclude these services from usage rates.

Timeliness

The reference period for data collection is March to September 2008.

Accuracy

The indicator provides a non-duplicative count of the number of people who received a dental service over a 12 month period. Information about the reason for visit and the type of provider relates to the most recent service received. As some people may have received more than one dental service over the period, the total rates for each separate type of service may be an underestimate.

Rates were age-standardised to the Australian population to enable comparison between jurisdictions and population groups. Estimated numbers of people receiving dental services were calculated by multiplying service usage rates by the Estimated Resident Population aged 5 years or over. However, variability in the percentage of dentate persons between jurisdictions or population groups, particularly at older ages, will affect comparability.

As with all survey data, the indicator is subject to sampling error and non-response bias. To indicate the magnitude of sampling error RSE per cent's have been provided for rate estimates. It is not possible to quantify the effect of non-response bias but survey data has been weighted to the age/sex distribution of the Australian population to limit the effect of this bias.

Cells have been suppressed to protect confidentiality (where the presentation could identify patient or a single service provider), where rates are highly volatile (i.e. the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

The NDTIS has been conducted regularly since 1994. The data items used to derive classifications are consistent over time.

Accessibility

The DSRU produces a number of statistical reports based on the NDTIS, available free of charge from its website: http://www.arcpoh.adelaide.edu.au/publications/report/statistics/

Customised tables are available on request (on a fee for service basis).

Interpretability

Supporting information on the NDTIS 2008 will be publicly available on the ARCPOH website.

Data Quality Statement — Indicator 26: Number of dental services (National Aboriginal and Torres Strait Islander Health Survey data)

Target/Outcome	Primary and community health
Indicator	Number of dental services.
Measure (Proportion)	Numerator: Number of persons 2 years and over who visited a dentist in the last 12 months. Denominator: Population aged 2 years or over.
Data Source/s	The National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) provides estimates that allow for reporting on Indigenous people against this indicator. This survey is weighted to benchmarks for the total in-scope population derived from the Experimental Indigenous Estimated Resident Population (Indigenous ERP). Data for non-Indigenous persons is provided from the National Health Survey (NHS) data, which is weighted to benchmarks for the total NHS in-scope population derived from the Estimated Resident Population (ERP). For information on NHS scope and coverage, see the National Health Survey Users Guide (cat. no. 4363.0.55.001) on the ABS website, www.abs.gov.au. For information on scope and coverage see the relevant survey user guide (see Interpretability section below).
Institutional environment	The NHS and NATSIHS are collected, processed, and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.
Relevance	The NHS and NATSIHS are national surveys that collect information on health status, risk factors and health-related actions. In the NHS and the NATSIHS, respondents were asked when they last consulted a dentist or dental professional. This indicator was based on those who had reported visiting a dentist or dental professional in the previous 12 months. Data on dental visits in the NHS and NATSIHS are 'as reported' by respondents and may differ from results that would be obtained from medical records or health registers.
Timeliness	The NHS is conducted every three years over a 12 month period. Results from the 2007-08 NHS were released in May 2009. The NATSIHS is conducted every six years. Results from the 2004-05 survey were released in April 2006.
Accuracy	The NHS is conducted in all States and Territories, excluding very remote areas. The exclusion of persons usually resident in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population. The 2007-08 NHS response rate was 91 per cent. NHS data are weighted to account for non-response. The NATSIHS is conducted in all States and Territories and includes remote and non-remote areas. The 2004–05 sample was 10,000

	persons/5,200 households, with a response rate of about 81 per cent of households. The survey is weighted to account for non-response. Since it is derived from a sample survey, this indicator is subject to sampling error which occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated and is based on the statistical methods used to design surveys. This indicator has low levels of sampling error by Indigenous status for national and State/Territory estimates.
Coherence	The 2004-05 NATSIHS and 2004-05 NHS had similar data content, shared common elements in the questionnaire, and were processed side by side. The NHS and NATSIHS collect a range of other health-related information that can be analysed in conjunction with data on dental visits. A range of issues should be considered when comparing survey data with administrative data such as medical records or health registers. These include possible differences in reference period, potential for bias due to people with certain characteristics being more or less likely to appear in the collections and differences in the way Indigenous status is collected and recorded.
Interpretability	Many health-related issues are closely associated with age, therefore data for this indicator have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the States and Territories and the Indigenous and non-Indigenous population. Age standardised rates should be used to assess the relative differences between groups, not to infer the rates that actually exist in the population. Information on how to interpret and use the data appropriately is available from the National Health Survey and National Aboriginal and Torres Strait Islander Health Survey 2004 –05: Data Reference Package (4363.0.55.002) and 2004–05 NATSIHS User's Guide (4715.0.55.004).
Accessibility	See National Health Survey, Summary of Results (cat. no. 4364.0) for an overview of results from the NHS, and National Health Survey: State tables (cat. no. 4362.0) for State and Territory specific tables. See the National Aboriginal and Torres Strait Islander Health Survey (cat. no. 4715) for an overview of results from the NATSIHS. Specialised data tables and Confidentialised Unit Record Files (CURFs) are also available on request.

Data Quality Statement — Indicator 27: Optometry services

Key data quality points

- The data used to calculate this indicator are from an administrative data collection designed for payment of subsidies to service providers and has accurate data on the number of services provided.
- The analyses by State or Territory remoteness and socioeconomic status are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, this data does not necessarily reflect the location in which services were received.
- Medical claims that are reimbursed through the Department of Veterans' Affairs are not included in this measure.

Target/Outcome	Primary and community health
Indicator	Optometry service use per 1,000 population
Measure (computation)	The numerator is the number of optometry services claimed through Medicare, defined by items in broad type of service group J. The denominator is the estimated resident population. Calculation is 1,000 × (Numerator ÷ Denominator), presented as a rate per 1,000 and age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years.
Data source/s	*Numerator:* Australian Government Department of Health and Ageing Medicare Statistics data *Denominators:* For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2008. For data by socioeconomic status: calculated using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2008. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP as at 30 June 2008, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The MBS claims data are based on administrative by-product of Medicare Australia administering the Medicare fee-for-service payment systems. Medicare Australia collects the MBS data under the Medicare Australia Act 1973. The data are then regularly provided to the Department of Health and Ageing. The tables for this indicator were prepared by the Department of Health and Ageing and quality-assessed by the AIHW. The Department of Health and Ageing drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.
Relevance	The measure relates to specific identified Medicare services. The analyses by State/Territory, remoteness and SEIFA are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, this data does not necessarily reflect the location in which services were received. Further, all MBS services received by clients who moved location during the

	reference period are allocated to the postcode of their address at date of last service received. Optometry claims that are reimbursed through the Department of Veterans' Affairs are not included in this measure
Timeliness	The indicator relates to all claims processed in the 2008–09 financial year.
Accuracy	As with any administrative system a small degree of error may be present in the data captured. Medicare claims data used for statistical purposes is based on enrolment postcode of the patient. This postcode may not reflect the current postcode of the patient if an address change has not been notified to Medicare Australia. The data provided are based on the date on which a Medicare claim was processed by Medicare Australia, not when the service was rendered. The use of data based on when the claim was processed rather than when the service was rendered produce little difference in the total number of persons included in the numerator for the reference period. MBS data on Indigenous status are not published for this performance indicator. Indigenous identification is reported voluntarily by Indigenous Medicare enrolees and there is good evidence that the data significantly under-enumerates Indigenous persons. Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).
Coherence	The data items used to construct the measures are consistently collected, comparable, and support assessment of annual change. They are consistent with service numbers published by Medicare. Disaggregation by SEIFA and Remoteness Area are not publicly available elsewhere.
Accessibility	Medicare claims statistics are available at: http://www.nhhrc.org.au/internet/main/publishing.nsf/Content/Medicare+Statistics-1 https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml
Interpretability	Information is available for MBS Claims data from: http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1

Data Quality Statement — Indicator 28: Public sector community mental health services

Key data quality points

- The National Community Mental Health Care Database is a near-comprehensive collection of data on service contacts provided by specialised mental health services for patients/clients of all public sector community mental health services in Australia.
- There is some variation in the types of service contacts included across jurisdictions.
- The Indigenous status data should be interpreted with caution due to the varying and, in some instances, unknown quality of Indigenous identification across jurisdictions. The *Other Australians* category includes contacts where Indigenous status was missing or not reported (around 7 per cent of all contacts).
- Data are reported by the state or territory that delivered the service and will include people receiving services in one jurisdiction who reside in another. These cross-border flows are particularly relevant in interpreting ACT data.

Target/Outcome	Primary and community health
Indicator	Public community mental health service utilisation
Measure (computation)	The numerator is the number of community mental health service contacts provided by public sector community mental health services. The denominator is the Estimated Resident Population (ERP). Calculation is 1,000 × (Numerator ÷ Denominator), presented as a rate per 1,000 population and age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years. Indigenous population data are not available for all states and territories for 5-year age groups beyond 64 years, so Indigenous disaggregations were standardised to 64 years.
Data source/s	*Numerator:* National Community Mental Health Care Database (NCMHCD) as specified by the Community Mental Health Care National Minimum Data Set (CMHC NMDS). *Denominator:* For total population: Australian Bureau of Statistics (ABS) Estimated Residential Population (ERP) as at 30 June 2007. For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2007. For data by socioeconomic status: calculated using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2008. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP as at 30 June 2008, by remoteness areas, as specified in the Australian Standard Geographical Classification.

Institutional environment

The AIHW has calculated this indicator. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

The data were supplied to the AIHW by state and territory health authorities. The state and territory health authorities receive these data from public sector community mental health services. States and territories use these data for service planning, monitoring and internal and public reporting.

Community mental health services may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance

The CMHC NMDS specification defines a mental health service contact as the provision of a clinically significant service by a specialised mental health service provider. The scope of the CMHC NMDS is service contacts provided by specialised mental health services in the community for patients/clients, other than those admitted to psychiatric hospitals or designated psychiatric units in acute care hospitals, and those resident in 24-hour staffed specialised residential mental health services, i.e. non-admitted, non-residential care.

There is some variation in the types of service contacts included across jurisdictions. For example, some jurisdictions include written correspondence as service contacts while others do not.

The Northern Territory estimates that there could be a deficit of between 25–35 per cent of service contact records. Coverage for most other jurisdictions is estimated to be between 95–100 per cent.

For most jurisdictions it is estimated that between 95-100 per cent of in-scope community mental health services provide data to the NMDS collection. Although the majority of services provide service contact records, the data are not always complete. For example, from a review undertaken in 2006, Queensland estimates that there was about a 40 per cent deficit in service contact reporting.

The numerator includes people who receive a service in one jurisdiction but normally reside in another. There will be some mismatch between numerator and denominator in areas with cross-border flows.

Timeliness

The reference period for the CMHC NMDS data is 2007–08.

Accuracy

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

The Indigenous status data should be interpreted with caution due to the varying and, in some instances, unknown quality of Indigenous identification across jurisdictions. The *Other Australians* category includes contacts where Indigenous status was missing or not reported (around 7 per cent of all contacts).

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence The data used in this indicator are routinely published in *Mental health services in Australia*. However, in that publication, rates may be calculated using different ERPs rather than June 2007 ERPs that are used for this indicator. Consequently, there may be some differences in the calculated rates.

Accessibility The AIHW produces the following products that report CMHC NMDS data:

The annual series *Mental health services in Australia* (available in hard copy or electronically on the AIHW website.)

Internet only Excel tables and data cubes.

Interpretability: Supporting information on the quality and use of the NCMHCD are published annually in *Mental health services in Australia* (Chapter 4 and technical appendix refers), which is available in hard copy or electronically on the AIHW website. Supporting information includes discussion of the quality of Indigenous data, the quality of principal diagnosis data, and estimates of the number of patients. Metadata information for the CMHC NMDS is published in the AIHW's online metadata repository—METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 29: Private sector mental health services

Key data quality points

- The numerator data used to calculate this indicator are from an administrative data collection designed for payment of subsidies to patients and has accurate data on the number of services provided.
- Medical claims that are reimbursed through the Department of Veteran' Affairs are not included in this measure.

Target/Outcome	Primary and community health
Indicator	Ambulatory mental health services provided by private psychiatrists, GPs and allied health providers (psychologists, occupational therapists, social workers)
Measure (computation)	The numerator is the number of mental health services claimed through the Medicare Benefits Schedule (MBS) provided by private psychiatrists, clinical psychologists, GPs and other allied health workers. The denominator is the Estimated Resident Population (ERP). Calculation is 1,000 × (Numerator ÷ Denominator), presented as a rate per 1,000 and age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years.
Data source/s	*Numerator*: Australian Government Department of Health and Ageing (DoHA) Medicare Statistics data. *Denominators:* <u>For total population:</u> Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2008. <u>For data by socioeconomic status:</u> calculated using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2008. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. <u>For data by remoteness:</u> ABS ERP as at 30 June 2008, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	Medicare Australia collects the MBS data under the *Medicare Australia Act 1973*. These data are then regularly provided to DoHA. The MBS claims data are an administrative by-product of Medicare Australia administering the Medicare fee-for-service payment systems. The numerator for this indicator was prepared by DoHA and quality-assessed by the AIHW. The AIHW prepared the denominator and calculated the indicator based on numerator supplied. DoHA drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.
Relevance	The measure relates to mental health-specific Medicare services for which claims data are available. Analyses by state/territory, remoteness and SEIFA are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may

receive services in locations other than where they live, these data do not necessarily reflect the location in which services were received. Further, all MBS services received by clients who moved location during the reference period are allocated to the postcode of their address at date of last service received.

MBS claims that are reimbursed through the Department of Veterans' Affairs are not included in this measure.

Timeliness The indicator relates to all claims processed in the 2008–09 financial year.

Accuracy As with any administrative system a small degree of error may be present in the data captured.

Medicare claims data used for statistical purposes are based on enrolment postcode of the patient. This postcode may not reflect the current postcode of the patient if an address change has not been notified to Medicare Australia.

The data provided are based on the date on which a Medicare claim was processed by Medicare Australia, not when the service was rendered. The use of data based on when the claim was processed rather than when the service was rendered produces little difference in the total number of persons included in the numerator for the reference period.

The MBS items used to construct this indicator include services that may be rendered in a hospital setting.

MBS data on Indigenous status are not published for this performance indicator. Indigenous identification is reported voluntarily by Indigenous Medicare enrolees and there is good evidence that the data significantly under-enumerates Indigenous persons.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence The data used in this indicator are routinely published in *Mental health services in Australia*. However, in that publication, rates may be calculated using different ERPs rather than June 2008 ERPs that are used for this indicator. Consequently, there may be some differences in the calculated rates.

Additionally, all psychologist items have been reported under the general heading of *Psychologist services* in *Mental health services in Australia* whereas this indicator reports *Clinical psychologists* separately and all other psychologist items are reported as *Other allied health*.

Accessibility Medicare claims statistics are available at:

http://www.nhhrc.org.au/internet/main/publishing.nsf/Content/Medicare+Statistics-1

https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml

Disaggregation by SEIFA is not publicly available elsewhere.

The AIHW produces the annual series *Mental health services in Australia* (available in hard copy or electronically on the AIHW website.)

Interpretability Information is available for MBS Claims data from:

http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1

Data Quality Statement — Indicator 30: Proportion of people with diabetes who have a GP annual cycle of care

Key data quality points

- The Indicator appears reliable at a national level. However, comparison between jurisdictions and population groups may be problematic due to different population structures (include relative prevalence of Type 1 and Type 2 diabetes) which have not been accounted for in the calculation of this indicator.
- Compared with other states, results for the ACT and NT appear to be less reliable, perhaps due to their smaller population and lower coverage of services in the NT.
- The NDSS gives the best available approximation of people with diagnosed diabetes in Australia in 2008–09 but it does not cover all people with diabetes and its uptake is lower in remote areas.

Target/Outcome	Primary and community health
Indicator	Proportion of people with diabetes mellitus who have received a Medicare Benefits Schedule (MBS) annual cycle of care.
Measure (computation)	Numerator – Number of people with a completed MBS diabetes annual cycle of care. Denominator – Number of people diagnosed with Type 1 and Type 2 diabetes in the community. The calculation is 100 × (Numerator ÷ Denominator)
Data source/s	Medicare Benefits Schedule (MBS) Australian Government Department of Health and Ageing Medicare Statistics data. National Diabetes Services Scheme (NDSS) An administrative database that provides counts of people known to have diabetes (through certification of diagnosis by a doctor or diabetes educator) who access NDSS services.
Institutional environment	MBS The MBS claims data are based on administrative by-product of Medicare Australia administering the Medicare fee-for-service payment systems. Medicare Australia collects the MBS data under the Medicare Australia Act 1973. These data are then regularly provided to the Department of Health and Ageing. NDSS The NDSS is a subsidy scheme administered by Diabetes Australia Ltd, since its establishment in 1987, on behalf of the Australian Government Department of Health and Ageing. At the point of registration with the Scheme, people provide demographic data, details of the type of diabetes they have and how it is treated. This information is held on a central database by Diabetes Australia Ltd and is uploaded monthly. Diabetes Australia Ltd is a national federated body supporting people with diabetes and professional and research bodies concerned with the treatment and prevention of diabetes; see http://www.diabetesaustralia.com.au/en/About-Diabetes-Australia/. The tables for this indicator were prepared by the Department of Health and Ageing and quality-assessed by the AIHW. The Department of Health and Ageing drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant

datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.

Relevance

MBS

The measure relates to specific identified Medicare services.

MBS claims that are reimbursed through the Department of Veterans' Affairs are not included in this measure.

MBS Indigenous status is based on a Voluntary Indigenous Identifier and therefore understates the services received by Indigenous persons.

MBS geographic location is based on patient enrolment postcode which does not perfectly match the ABS Post Office Area used to concord the claims data to SEIFA and Remoteness Area.

The analyses by State/Territory remoteness and socioeconomic status are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, these data do not necessarily reflect the location in which services were received. Further, all MBS services received by clients who moved location during the reference period are allocated to the postcode of their address at date of last service received.

NDSS

The number of registrants on the NDSS can be counted to estimate diabetes prevalence. However, registration is voluntary and therefore it is likely that a proportion of people with diagnosed diabetes are not registered with the Scheme. Diabetes Australia estimates that the NDSS covers 80 per cent to 90 per cent of people with diagnosed diabetes.

NDSS data allow for disaggregations by Indigenous status and area (based on postcode). The Indigenous status rates should be interpreted with caution due to the relatively high missing/not reported records in some jurisdictions. As with the MBS data, there were a small number of records that did not concord to a SEIFA quintile or remoteness area and were therefore excluded from the analysis.

The indicator aggregates people with Type 1 and Type 2 diabetes (as using data linkage to disaggregate the data would raise Privacy Act concerns). However, while people with type 1 diabetes are significantly more likely to require a care plan, type 2 diabetes comprises around 85 per cent of all records. Consequently, aggregating data does not give an accurate proportion of persons with each type of diabetes who have an MBS annual cycle of care.

Timeliness

MBS

The MBS data used in this indicator relate to all claims processed in the 2008–09 financial year.

NDSS

NDSS data are updated continuously. Data are available on a monthly basis from Diabetes Australia Ltd. The NDSS data used for this indicator relate to all registrants as at 30 June 2009.

Accuracy

MBS

As with any administrative system a small degree of error may be present in the data captured. These errors may include a service being attributed to the wrong person on a Medicare Card (e.g. Mother rather than child) in a small number of instances.

Medicare claims data used for statistical purposes are based on enrolment postcode of the patient. This postcode may not reflect the current postcode of the patient if an address change has not been notified to Medicare Australia.

The data provided are based on the date on which a Medicare claim was processed by Medicare Australia, not when the service was rendered. The use of data based on when the claim was processed rather than when the service was rendered produce little difference in the total number of persons included in the numerator term for the reference period.

MBS data for this indicator have not been adjusted to account for under-identification of Indigenous people in the dataset. Approximately 50 per cent of the indigenous population are estimated to have identified under the Voluntary Indigenous Identifier.

NDSS

The AIHW estimates the number of duplicate records in the NDSS to be small (only 0.3 per cent of records from a subset of NDSS data as at June 2008). A small number of people who no longer have diabetes or who have died are likely to still be in the database.

The NDSS requires certification of a diagnosis of diabetes before an individual can register. This eliminates any self-report bias, but excludes those people with undiagnosed diabetes.

The NDSS may underestimate the number of Indigenous people with diabetes because of, for example, under-reporting of Indigenous status on NDSS records and low registration rates among Indigenous people. Indigenous status is missing or not reported on 4 per cent of all records (ranging from 2 per cent in NSW and Queensland to 11 per cent in Tasmania as of 30 June 2009). NDSS data have not been adjusted to account for under-identification of Indigenous people.

The NDSS may also underestimate the prevalence of diabetes in remote areas due to a shortage of doctors/diabetes educators needed to approve registration application.

Postcodes (used for disaggregation by SEIFA and remoteness area) relate to the registrant’s place of residence as recorded at the point of registration. This is likely to be accurate, as registrants have an incentive to update this information if and when they move so as to ensure products supplied to them under the NDSS are delivered to their correct place of residence.

Coherence

The reference period is not consistent across the data sources: the MBS data relate to all claims processed over the 2008-09 financial year; while the NDSS data include all registrants on the database at a point in time (30 June 2009).

While both data sources are likely to under-report estimates for Indigenous Australians, the degree of under-reporting is likely to be different.

The data items for each data source are consistently collected and support assessment of annual change.

Accessibility

MBS

Medicare claims statistics are available at: http://www.nhhrc.org.au/internet/main/publishing.nsf/Content/Medicare+Statistics-1

https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml

Disaggregation by SEIFA and Remoteness Area are not publicly available elsewhere.

NDSS

NDSS data are not publicly accessible.

Interpretability

Information is available for MBS Claims data from:

http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1

Further information on the NDSS is available at http://www.ndss.com.au.

Data Quality Statement — Indicator 31: Proportion of people with asthma with a written asthma plan

Target/Outcome	Primary and community health
Indicator	Proportion of asthmatics with a written asthma action plan.
Measure	Numerator: Estimated number of persons with asthma with a written asthma action plan. Denominator: Estimated number of persons with asthma.
Data source/s	The denominator and numerator for this indicator use ABS National Health Survey (NHS) data, which is weighted to benchmarks for the total NHS in-scope population derived from the Estimated Resident Population (ERP). For information on NHS scope and coverage, see the National Health Survey Users Guide (cat. no. 4363.0.55.001) on the ABS website, www.abs.gov.au. Estimates for Indigenous persons are drawn from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which was benchmarked to the estimated Indigenous population (adjusted for the scope of the survey).
Institutional environment	The NHS and NATSIHS are collected, processed, and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.
Relevance	The NHS 2007-08 asked all respondents whether they had ever been told by a doctor or nurse that they have asthma, whether symptoms were present or they had taken treatment in the 12 months prior to interview, and whether they still had asthma. Those who answered yes to these questions were asked whether they had “a written asthma action plan, that is, written instructions of what to do if your asthma is worse or out of control”. A very small number of respondents who were sequenced around these questions may have reported current long-term asthma in response to later general questions about medical conditions. These persons are included in and contribute to estimates of the prevalence of asthma, but information about written action plans was not collected from them. In the 2004-05 NATSIHS, non-remote respondents who answered yes to the questions about having asthma were asked about written asthma action plans. In both the 2004-05 NHS and NATSIHS, respondents were asked simply if they had “a written asthma action plan”. If they queried the interviewer about what to include, they were told to include management plans developed in consultation with a doctor, cards associated with peak flow meters and medication cards distributed through chemists. In 2007, if respondents queried the interviewer, they were asked to include plans that were worked out in consultation with a doctor, but not cards associated with peak flow meters or medications cards handed out by chemists. Ideally this indicator would relate to the proportion of people with moderate to severe asthma, as people with only very mild asthma are unlikely to require planned care. Consequently, there is no clear direction of improvement in this indicator: a lower proportion of people with asthma with an asthma care plan may simply mean that those people with asthma have

less severe asthma (which would actually be a positive outcome).

Timeliness

The NHS is conducted every three years over a 12 month period. Results from the 2007-08 NHS were released in May 2009.

The NATSIHS is conducted every six years. Results from the 2004-05 survey were released in April 2006.

Accuracy

The NHS is conducted in all States and Territories, excluding very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were also not included in the survey. The exclusion of persons usually resident in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population. The 2007-08 NHS response rate was 91 per cent. NHS data are weighted to account for non-response.

The NATSIHS is conducted in all States and Territories and includes remote and non-remote areas. The 2004–05 sample was 10,000 persons/5,200 households, with a response rate of 81 per cent of households.

As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the scientific methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.

This indicator has acceptable levels of sampling error at the State and Territory level by Indigenous status. Remoteness and SEIFA breakdowns by State and Territory are generally acceptable at the national level but most dissagregated data should be used with caution. RSEs greater than 50 per cent exist for data on the higher quintiles of disadvantage for WA and NT and data is not considered reliable enough for general use.

Coherence

Questions used in the 2007-08 NHS to collect data for this indicator are consistent with the questions recommended for use by the Australian Centre for Asthma Monitoring (ACAM). Changes to the NHS since 2004-05 to better align questions and concepts with the ACAM recommendations mean that data for this indicator is not comparable over time.

The NHS and NATSIHS collect a range of other health-related information (for example, information on smoking) that can be analysed in conjunction with data on asthma and asthma plans.

Interpretability

Information to aid interpretation of the data is available from the National Health Survey User Guide, and the National Aboriginal and Torres Strait Islander Health Survey User Guide on the ABS website.

Many health-related issues are closely associated with age, therefore data for this indicator have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the States and Territories and the Indigenous and non-Indigenous population. Age standardised rates should be used to assess the relative differences between groups, not to infer the rates that actually exist in the population.

Accessibility

See National Health Survey, Summary of Results (cat. no. 4364.0) for an overview of results from the NHS, and National Health Survey: State tables (cat. no. 4362.0) for State and Territory specific tables. See the National Aboriginal and Torres Strait Islander Health Survey (cat. no. 4715) for an overview of results from the NATSIHS. Other information from these surveys is also available on request.

Data Quality Statement — Indicator 32: Proportion of people with a mental illness with GP care plans

Key data quality points

- The numerator data used to calculate this indicator are from an administrative data collection designed for payment of subsidies to patients and has accurate data on the number of services provided.
- There are issues with the consistency of the numerator and denominator for this indicator, as they are drawn from differently defined populations and different data sources.

Target/Outcome	Primary and community health
Indicator	Proportion of people with mental illness with GP Mental Health Care Plans
Measure (computation)	The numerator is the number of people with a GP Mental Health Care Plan (MBS item 2710) aged between 16 and 84. The denominator is the estimated proportion (age and sex-specific) of the population with mental illness applied to the Estimated Resident Population (ERP). Calculation is 100 × (Numerator ÷ Denominator), presented as a percentage and age-standardised to the Australian population aged 16–84 as at 30 June 2001, using the following age groups: 16–19 then 5-year age groups to 84 years.
Data source/s	Numerator: Department of Health and Ageing (DoHA) Medicare Statistics data. Denominator: Calculated by the Australian Bureau of Statistics (ABS) by multiplying the age and sex-specific 12-month prevalence rate of selected mental disorders (from the National Survey of Mental Health and Wellbeing 2007) by the age and sex-specific ABS Estimated Resident Population (ERP) as at 30 June 2008 in each state/territory, remoteness area and SEIFA quintile. SEIFA is calculated using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2008. Each SLA in Australia is ranked and divided into quintiles such that each quintile has an equal number of SLAs. However, quintiles do not necessarily have the same population size.
Institutional environment	Medicare Australia collects the MBS data under the *Medicare Australia Act 1973*. These data are then regularly provided to DoHA. The MBS claims data are an administrative by-product of Medicare Australia administering the Medicare fee-for-service payment systems. The ABS is Australia's official national statistical agency. The ABS operates within a framework that includes the *Australian Bureau of Statistics Act 1975* and the *Census and Statistics Act 1905*. For more information see the ABS Institutional Environment. The numerator for this indicator was prepared by DoHA, the denominator by the ABS and both were quality-assessed by the Australian Institute of Health and Welfare (AIHW). The AIHW calculated the indicator based on the numerator and denominator supplied by DOHA and ABS, respectively. DoHA drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW and ABS, in consultation with the Department. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.
Relevance	There are issues with the consistency of the numerator and denominator for this indicator, as they are drawn from differently defined populations

and different data sources.

MBS data

MBS data relates to mental health-specific Medicare services for which claims data are available.

Analyses by state/territory, remoteness and SEIFA are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, this data does not necessarily reflect the location in which services were received. Further, all MBS services received by clients who moved location during the reference period are allocated to the postcode of their address at date of last service received.

MBS claims that are reimbursed through the Department of Veterans' Affairs are not included in this measure.

During 2008–09, a diagnosis of mental illness was not required to access a GP Mental Health Care Plan. Therefore, the numerator will potentially include some people not captured in the denominator.

National Survey of Mental Health and Wellbeing 2007

The National Survey of Mental Health and Wellbeing (SMHWB) was conducted with a representative sample of people aged 16–85 years who lived in private dwellings across Australia.

The survey provides information on diagnostic prevalence of mental disorders in the Australian population as assessed for the last 12 months using the World Health Organization's (WHO) Composite International Diagnostic Interview.

This survey only captures common/high prevalence mental disorders. It does not capture low-prevalence disorders, such as psychosis.

Timeliness

MBS data

The indicator relates to all claims processed in the 2008–09 financial year.

National Survey of Mental Health and Wellbeing 2007

The National Survey of Mental Health and Wellbeing (SMHWB) was conducted from August to December 2007, and adjusted to generate 2008 prevalence estimates.

Accuracy

MBS data

As with any administrative system a small degree of error may be present in the data captured.

Medicare claims data used for statistical purposes are based on enrolment postcode of the patient. This postcode may not reflect the current postcode of the patient if an address change has not been notified to Medicare Australia.

The data provided are based on the date on which a Medicare claim was processed by Medicare Australia, not when the service was rendered. The use of data based on when the claim was processed rather than when the service was rendered produces little difference in the total number of persons included in the numerator for the reference period.

People who received more than one GP Mental Health Care Plan (MBS item 2710) are counted once only in the calculations for this indicator.

National Survey of Mental Health and Wellbeing 2007

Data measuring the size of the population with mental illness for the denominator were not available for the specified time point. Synthetic estimates of the population with a mental illness were derived by applying national level age and sex-specific rates of any 12 month mental disorder from the 2007 Survey of Mental Health and Wellbeing to the 30 June

2008 ERPs in various strata (SEIFA quintiles, remoteness, etc). This methodology assumes that age and sex-specific rates of any mental disorder are consistent across geography and over time.

Estimated Resident Population

ERPs were not available for the 16-85 age range specified for this indicator. Therefore, the ERPs for the 16–84 age range were used and the numerator adjusted accordingly.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

MBS data

The MBS data are consistent with MBS data published elsewhere.

National Survey of Mental Health and Wellbeing 2007

The data are not comparable with data previously published using the National Survey of Mental Health and Wellbeing 2007, as the data have been adjusted to reflect the population in 2008.

Accessibility

Medicare claims statistics are available at:

http://www.nhhrc.org.au/internet/main/publishing.nsf/Content/Medicare+Statistics-1

https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml

Disaggregations by SEIFA and remoteness area are not publicly available elsewhere.

National Survey of Mental Health and Wellbeing 2007 information is available at:

http://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/4327.0?OpenDocument

http://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/4326.0?OpenDocument

Interpretability

Information is available for MBS data from:

http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1

Information is available for the National Survey of Mental Health and Wellbeing from *National Survey of Mental Health and Wellbeing: Summary of Results* (cat. no. 4326.0). It contains a Summary of Findings and tables with footnoted data to aid the interpretation of the survey results. The supporting documentation released with the survey data can assist in understanding the relationships between data variables within the dataset and in comparisons with data from other sources.

Data Quality Statement — Indicator 33: Number of women with at least one antenatal visit in the first trimester of pregnancy

Key data quality points

- The Perinatal NMDS did not include antenatal care data items in 2007 and national data are not currently available. Information about antenatal care in the first trimester was available for New South Wales, South Australia and the Northern Territory only. Antenatal care data items were collected using non-standardised definitions and with variable response rates. The validity of the data is unknown. Completeness of the data varies widely between jurisdictions and comparisons are not advised
- Since 2005, all jurisdictions have provided information on Indigenous status of the mother in accordance with the Perinatal NMDS.
- No formal national assessment has been undertaken to determine completeness of the coverage or identification of Indigenous mothers in the NPDC or to determine variability between states and territories. The current data have not been adjusted for potential under-identification of Indigenous status of the mother.
- Area of usual residence of the mother is included in the Perinatal NMDS and data are complete for over 99.9 per cent of mother records.

Target/Outcome	Primary and community health
Indicator	This indicator presents the number of pregnancies resulting in a birth, where an antenatal visit was reported in the first trimester (up to and including 13 completed weeks gestation) as a proportion of pregnancies resulting in at least one live or stillborn baby.
Measure (computation)	*Numerator:* Number of women who attended at least 1 antenatal visit in the first trimester (up to and including 13 completed weeks gestation) and gave birth to at least one live or stillborn baby in a calendar year. *Denominator:* Total number of women who gave birth to at least one live or stillborn baby in a calendar year *Calculation:* 100 × (Numerator ÷ Denominator)
Data source/s	This indicator is calculated using data from the AIHW National Perinatal Data Collection (NPDC). For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as 30 June 2007. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. Data included in the National Perinatal Data Collection are collected as part of a National Minimum Data Set and were supplied by state and territory health authorities to the National Perinatal Statistics Unit (NPSU), a collaborating unit of the Institute. The state and territory health authorities receive these data from patient administrative and clinical records. This information is usually collected by midwives or other birth attendants. States and territories use these data for service planning, monitoring and internal and public reporting. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website. States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Data specifications for the Perinatal NMDS are documented in the AIHW online metadata repository —METeOR (see link).

http://meteor.aihw.gov.au/content/index.phtml/itemId/181162

Relevance

The National Perinatal Data Collection comprises data items as specified in the Perinatal National Minimum Data Set (NMDS) plus additional items collected by the states and territories. The purpose of the Perinatal NMDS is to collect information at birth for monitoring pregnancy, childbirth and the neonatal period for both the mother and baby(s)

The Perinatal NMDS is a specification for data collected on all births in Australia in hospitals, birth centres and the community. It includes information for all live births and stillbirths of at least 400 grams birthweight or at least 20 weeks gestation. It includes data items relating to the mother, including demographic characteristics and factors relating to the pregnancy, labour and birth; and data items relating to the baby, including birth status (live or stillbirth), sex, gestational age at birth, birth weight, Apgar score and neonatal length of stay.

Although the NPDC provides all relevant data elements of interest for this indicator, this is not included in the NMDS and data are not available for all states and territories. Data reported for 2007 on number of women who gave birth who attended at least one antenatal visit in the first trimester are for New South Wales, South Australia and the Northern Territory only. Although data on gestation at first antenatal visit are also collected in the Australian Capital Territory, they were not considered of sufficient quality to publish. Totals reported for this indicator can not be generalised to Australia.

Information collected on antenatal care differs among the jurisdictions. No formal national assessment has been undertaken to assess these. Comparisons between states and territories should therefore be interpreted with caution.

Each jurisdiction has a unique perinatal form for collecting data. There are minor differences in the format of the Indigenous status question but all are compliant with the NMDS item on Indigenous status of mother.

No formal national assessment has been undertaken to determine completeness of the coverage of Indigenous mothers in the Perinatal NMDS or to determine variability between states and territories. However, the proportion of Indigenous mothers for the period 1997-2006 has been consistent, at 3.2–3.7 per cent of women who gave birth. For maternal records (0.1 per cent) where Indigenous status was not stated, data were excluded. Comparisons between states and territories should be interpreted with this caution.

SEIFA quintiles based on the Index of Relative Socio-economic Disadvantage (IRSD) for the total population have been applied for this indicator for reporting by SEIFA. Reporting by remoteness is in accordance with the Australian Standard Geographical Classification (ASGC).

Timeliness

The reference period for the data is 2007.

Accuracy

Inaccurate responses may occur in all data provided to the Institute. The Institute does not have direct access to perinatal records to determine the accuracy of the data provided. However, the Institute undertakes validation on receipt of data. Data received from states and territories are checked for completeness, validity and logical errors. Potential errors are queried with jurisdictions, and corrections and resubmissions are made in response to these edit queries. The AIHW does not adjust data to account for possible data errors.

Errors may occur during the processing of data by the states and territories or at the AIHW. Processing errors prior to data supply may be found through the validation checks applied by the Institute. This indicator is calculated on data that has been reported to the AIHW. Prior to publication, these data are referred back to jurisdictions for checking and review. The Institute does not adjust the data to correct for missing values. Note that because of data editing and subsequent updates of state/territory databases, and because data are being reported by place of residence rather than place of birth the numbers reported for this indicator differ from those in reports published by the states and territories. The data are not rounded.

National data are not available for antenatal care. Information collected on antenatal care differs among the jurisdictions. For 2007 data, no formal national assessment has been undertaken of these data. Data reported for 2007 on number of women who gave birth who attended at least 1 antenatal visit in the first trimester are available for New South Wales, South Australia and the Northern Territory only. Residents of these jurisdictions who give birth in a different jurisdiction will not have data on antenatal care.

Proportions of records missing antenatal care information on whether the first visit was in the first trimester are very different for women who resided in New South Wales (2.3 per cent) and the Northern Territory (2.6 per cent) compared with South Australia (34.9 per cent). No information is available on the missing data. The timing of the first visits for women missing data may be distributed differently to those whose data have been reported. Therefore, computation of the indicator includes data with completed information about gestation at first antenatal visit.

The geographical location code for the area of usual residence of the mother is included in the Perinatal NMDS. Fewer than 0.08 per cent of records could not be assigned to a state or territory of residence. There is no scope in the data element *Area of usual residence of mother* to discriminate temporary residence of mother for the purposes of accessing birthing services from usual residence. The former may differentially impact populations from remote and very remote areas, where services are not available locally.

Data presented by Indigenous status are influenced by the quality and completeness of Indigenous identification of mothers which is likely to differ among jurisdictions. Approximately 0.1 per cent of mothers who gave birth in the reference period had missing Indigenous status information. No adjustments have been made for under-identification or missing Indigenous status information.

The indicator is presented by Socio-Economic Indexes for Areas (SEIFA) Index for Relative Socio-Economic Disadvantage (IRSD). The NPDC receives a 5-digit code for SLA from all states and territories except Tasmania (which supplies postal area codes).

Reporting by remoteness is in accordance with the Australian Standard Geographical Classification (ASGC). Remoteness is assigned from SLA or postal area codes.

Cells have been suppressed to protect confidentiality (where the presentation could identify a person or a single service provider), where rates are highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

An interim measure is presented for this indicator, pending development and implementation of standard data definitions in the Perinatal NMDS. Data presented in future years may not be consistent or comparable with data presented here. Changing levels of Indigenous identification over time and across jurisdictions may affect the accuracy of compiling a consistent time series in future years.

Accessibility The AIHW provides a variety of products that draw upon the NPDC. Published products available on the AIHW website are:

- METeOR – online metadata repository
- National health data dictionary.

Ad hoc data are also available on request (charges apply to recover costs).

Data for this indicator are published biennially in the *Aboriginal and Torres Strait Islander Health Performance Framework report* and the *Overcoming Indigenous Disadvantage report* (although minor differences may arise due to small variations in the definition of ‘first trimester’).

Interpretability Supporting information on the use and quality of the NPDC are published annually in *Australia’s mothers and babies* (Chapter 1), available in hard copy or on the AIHW website. Comprehensive information on the quality of Perinatal NMDS elements are published in *Perinatal National Minimum Data Set compliance evaluation 2001 to 2005.* Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. More detailed information on the quality of Indigenous data that might affect interpretation of the indicator was published in *Indigenous mothers and their babies, Australia 2001-2004* (Chapter 1 & Chapter 5).

Proportions of records missing antenatal care information are very different in NSW (4.9 per cent) and South Australia (34.9 per cent). With this level of missing data proportions calculated using all residents will reflect differential rates of missing data. Reporting for this indicator has therefore been restricted to records with completed information. Caution must be used interpreting data from jurisdictions with a high proportion of records missing data. The first visits for women missing may be distributed differently to those whose data have been reported.

Once nationally consistent data items on antenatal care are added to the Perinatal NMDS, metadata information for this indicator will be published in the AIHW’s online metadata repository —METeOR, and the National Health Data Dictionary.

Data Quality Statement — Indicator 34: Waiting times for elective surgery

Key data quality points

- The NESWTDC contains records for patients removed from waiting lists for elective surgery which are managed by public acute hospitals. For 2007–08, coverage of the NESWTDC was about 91 per cent of elective surgery in Australian public hospitals.
- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- Records from the NESWTDC and the NHMD were linked for disaggregations by remoteness areas, SEIFA categories and Indigenous status from the admitted patient record to the corresponding elective surgery waiting times record.
- Approximately 97 per cent of NESWTDC records were linked to the NHMD.
- Analyses for remoteness and socioeconomic status are based on the reported area of usual residence of the patient, regardless of the jurisdiction of hospital.
- Interpretation of rates for jurisdictions should take into consideration cross-border flows, particularly for the ACT.

Target/Outcome Hospital and related care

Indicator Median and 90th percentile waiting times for elective surgery in public hospitals, including by indicator procedure

Measure (computation) The number of days waiting time is calculated by subtracting the listing date for care from the removal date, minus any days when the patient was 'not ready for care', and also minus any days the patient was waiting with a less urgent clinical urgency category than their clinical urgency category at removal.

The 50th percentile (median) represents the number of days within which 50 per cent of patients were admitted; half the waiting times will have been shorter, and half the waiting times longer, than the median. The 90th percentile data represent the number of days within which 90 per cent of patients were admitted.

Data source/s This indicator is calculated using data from the National Elective Surgery Waiting Times Data Collection (NESWTDC), based on the National Minimum Data Set for Elective Surgery Waiting Times (removals data).

For Indigenous, remoteness and SEIFA disaggregation, the NESWTDC is linked to the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care).

Institutional environment The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting.

The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance The purpose of the NMDS for Elective Surgery Waiting Times (removals data) is to collect information about patients waiting for elective surgery in public hospitals. The scope of the NMDS is patients removed from waiting lists for elective surgery 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.

The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The analyses by remoteness and socioeconomic status are based on Statistical Local Area of usual residence of the patient. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, the data represent the waiting time for each remoteness area or SEIFA population group (regardless of where they reside) in the jurisdiction of hospitalisation. This may be relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction.

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007–08, coverage of the NESWTDC was about 91 per cent. Coverage was 100 per cent for the *Principal referral and Specialist women’s and children’s hospitals* peer group (peer group A) and was progressively lower for the *Large hospitals* (peer group B) and *Medium hospitals* groups (peer group C). Coverage also varied by jurisdiction and ranged from 100 per cent in New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory to 70 per cent in South Australia.

For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of a mothercraft hospital in the ACT.

Records from both the NESWTDC and the NHMD were linked to assign remoteness areas, SEIFA categories and Indigenous status from the admitted patient record to the corresponding elective surgery waiting times record. For 2007–08, approximately 97 per cent of NESWTDC records were linked to the NHMD.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (public hospitals only).

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence	The information presented for this indicator is based on the same data as published in *Australian hospital statistics 2007–08*. However, as the linked data used for this indicator represents only 97 per cent of records in the NESWTDC, the data presented here differ from that presented in *Australian hospital statistics 2007–08*.
Accessibility	The AIHW provides a variety of products that draw upon the NESWTDC and NHMD data. Published products available on the AIHW website are: • *Australian hospital statistics* with associated Excel tables. • Interactive data cube for Elective surgery waiting times.
Interpretability	Supporting information on the quality and use of the NESWTDC and NHMD are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and changes in service delivery that might affect interpretation of the published data. Metadata information for the NMDSs for Elective surgery waiting times and Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 35: Waiting times for emergency department care

Key data quality points

- Coverage of the data collection is almost complete for public hospitals in peer groups A and B. Hospitals in these peer groups provided approximately 69 per cent of all Emergency Department services in public hospitals.
- The quality of the data reported for Indigenous status in Emergency Departments has not been formally assessed, therefore caution should be exercised when interpreting these data.
- As coverage is limited to hospitals in peer groups A and B, disaggregation by remoteness and indigenous status should be interpreted with caution.

Target/Outcome Hospital and related care

Indicator Percentage of patients who are treated within national benchmarks for waiting times for each triage category in public hospital emergency departments, in hospitals that were classified as either peer group A (*Principal referral and Specialist women's and children's hospitals*) or peer group B (*Large hospitals*).

Measure (computation) The national benchmark waiting times are:

Triage category 1: seen within seconds, calculated as less than or equal to 2 minutes

- Triage category 2: seen within 10 minutes
- Triage category 3: seen within 30 minutes
- Triage category 4: seen within 60 minutes
- Triage category 5: seen within 120 minutes

The proportion of patients seen on time is calculated as:

Numerator = Number of patients seen within the cut-off point, by triage category

Denominator = Number of patients by triage category

Inclusions: Records with Type of visit of 'Emergency presentation' or 'Not reported' Exclusions: Records with Episode end status of 'Did not wait to be attended by a health care professional 'or 'Dead on arrival, not treated in emergency department'. Records also excluded if the waiting time was missing or otherwise invalid.

Data source/s This indicator is calculated using data from the AIHW's National Non-admitted Patient Emergency Department Care Database (NNAPEDCD). The NNAPEDCD is based on the National Minimum Data Set (NMDS) for Non-admitted patient emergency department care (NAPEDC).

For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2007. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population.

For data by remoteness: ABS ERP as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.

Institutional environment The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public hospitals. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories use these data for service planning, monitoring and internal and public reporting.

The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance The purpose of this NMDS is to collect information on the characteristics of emergency department care (including waiting times for care) for non-admitted patients registered for care in emergency departments in selected public hospitals that were classified as either peer group A (Principal referral and Specialist women's and children's hospitals) or B (Large hospitals). Hospitals in these peer groups provided approximately 69 per cent of all Emergency Department services in public hospitals.

Timeliness The reference period for this data set is 2007–08.

Accuracy For peer groups A and B, the coverage of this NMDS was almost 100 per cent in all jurisdictions in 2007–08. The data presented here are not necessarily representative of the hospitals not included in the NNAPEDCD. Hospitals not included do not necessarily have emergency departments that are equivalent to those in hospitals in peer groups A and B.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

The quality of data reported for Indigenous status in emergency departments has not been formally assessed for completeness; therefore, caution should be exercised when interpreting these data.

As this indicator is limited to public hospitals which were classified in peer groups A and B, most of the data relates to hospitals within major cities. Consequently, the coverage may not include areas where the proportion of Indigenous people (compared with other Australians) may be higher than average. Similarly, disaggregations by socioeconomic status and remoteness should be interpreted with caution.

Remoteness and socioeconomic status are based on the reported area of usual residence of the patient. The SEIFA categories for socioeconomic status are at the national level, not at the individual state/territory level. Some data have been suppressed to protect confidentiality, or where data quality is known to be of insufficient quality.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (i.e. the denominator is small), or data quality is known to be of insufficient quality.

Coherence The information presented for this indicator are calculated using the same methodology as data published in *Australian hospital statistics 2007–08.*

Accessibility The AIHW provides a variety of products that draw upon the NNAPEDCD data. Published products available on the AIHW website include *Australian hospital statistics,* and associated Excel tables.

Interpretability Supporting information on the quality and use of the NNAPEDCD are published annually in *Australian hospital statistics* (Chapter 5 and technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage that might affect interpretation of the published data. Metadata information for the NAPEDC NMDS are published in the AIHW's online metadata repository —METeOR, and the National health data dictionary.

Data Quality Statement — Indicator 39: Healthcare-associated Staphylococcus aureus (including MRSA) bacteraemia in acute care hospitals

Key data quality points

- The data used to calculate the indicator were supplied by five states and territories (data for NSW, Victoria and the Northern Territory were not available). They were collected by states and territories through their healthcare-associated infection surveillance programs.
- The data were collected prior to the development of agreed national definitions and a national agreement on a national indicator. Hence, they were not collected in a consistent manner for 2008-09. They are reported across jurisdictions using different definitions with different levels of hospital involvement and different patient categories (e.g., Queensland does not include data for children under 15). The interpretation of this indicator should take into consideration this variability and the effect it has on comparability across jurisdictions.
- The Australian Commission on Safety and Quality in Health Care has consulted with infectious disease and surveillance specialists to develop a standard definition to apply nationally. This definition was endorsed by the Commission's Inter Jurisdictional Committee on 22 October 2009. Since then, health jurisdictions and hospitals have been making changes to their surveillance programs in hospitals across the country in order to standardise data collection for future reporting.

Target/Outcome	Hospital and related care
Indicator	Healthcare-associated Staphylococcus aureus (including MRSA) bacteraemia in acute care hospitals
Measure (computation)	For hospitals in public hospital peer groups A and B, the number of patient episodes of Staphylococcus aureus bacteraemia (both methicillin-resistant and methicillin-sensitive) where the time when the first positive blood culture was collected was 48 hours or more after admission to hospital plus The number of patient episodes of Staphylococcus aureus bacteraemia (both methicillin-resistant and methicillin-sensitive) where the time when the first positive blood culture was collected was within 48 hours of the time of a discharge from hospital. plus The number of any additional patient episodes of Staphylococcus aureus bacteraemia (both methicillin-resistant and methicillin-sensitive) where the time when the first positive blood culture was collected was within 48 hours of the time of admission and one of the following clinical criteria were met: SAB is a complication of the presence of an indwelling medical device SAB occurs within 30 days of a surgical procedure and is related to the surgical site SAB occurs within 48 hours of, and is related to, an invasive instrumentation or incision SAB is associated with neutropenia (<1x10^9/L) contributed to by cytotoxic therapy Calculation of the Indicator A count of the number of episodes.
Data source/s	State and territory healthcare-associated infection surveillance data
Institutional environment	The AIHW calculated the indicator from data provided by states and territories. The AIHW is an independent statutory authority within the

Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

The data supplied by the states and territories were collected from hospitals through the healthcare infection surveillance programs run by the states and territories. The arrangements for the collection of data by hospitals and the reporting to state and territory health authorities may vary among the jurisdictions. The AIHW does not have the relevant datasets to verify independently the data provided for this indicator.

Relevance

This indicator is for episodes of SAB acquired, diagnosed and treated in public acute hospitals. However, the data provided include other healthcare-associated SAB which is diagnosed and treated in hospital but may have been acquired in non-hospital settings.

The reporting of this indicator has been limited to public hospitals categorised as peer groups A and B. Data for NSW, Victoria and the Northern Territory are not available.

Timeliness

The reference period for this data set is 2008-09.

Accuracy

The Queensland data only includes episodes for patients aged 15 years of age and above. Hence the data exclude the two Queensland children's hospitals, which are categorised in peer group A. There are minor differences in the wording of definitions used in other states.

The comparability of the data will be affected by the fact that it has not been adjusted for any different casemix between the states and territories.

Coherence

The data presented for the indicator have not previously been published at the national level. However, some jurisdictions have published their own data– see accessibility below.

Accessibility

The following states and territories publish data relating to healthcare-associated SAB in various report formats on their websites:

New South Wales: Healthcare associated infections reporting.

http://www.health.nsw.gov.au/hospitals/hai/index.asp

Tasmania: Acute public hospitals healthcare associated infection surveillance report.

http://www.dhhs.tas.gov.au/health__and__wellbeing/public_and_environmental_health/related_topics/tasmanian_infection_prevention_and_control_unit/publications__and__guidelines

Western Australia: Healthcare Associated Infection Unit - Annual Report

http://www.public.health.wa.gov.au/3/455/3/reports__healthcare_associated_infection_unit.pm

South Australia: Bloodstream infection surveillance report

http://www.health.sa.gov.au/INFECTIONCONTROL/Default.aspx?PageContentID=18&tabid=147

Interpretability

The definitions used appear on the websites listed above.

Data Quality Statement — Indicator 41: Falls resulting in patient harm in hospitals

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- Data on falls are recorded uniformly using the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM).
- The recorded number of falls occurring in hospitals may be an under-estimate (as around 25 per cent of the records of separations involving falls did not have a code assigned for the place of occurrence). Under-estimation and over-estimation may also have occurred due to other limitations of the data.
- The indicator provides a count of separations involving one or more falls. It does not provide a count of falls.
- The comparability of the data will be affected by the fact that it has not been adjusted for differences in casemix (e.g. patient age).

Target/Outcome	Hospital and related care
Indicator	Separations in which a fall in hospital results in patient harm in hospital.
Measure (computation)	Numerator: Number of hospital separations with an external cause code for a fall and a place of occurrence of *Health service area*. Denominator: Total number of separations. A separation is an episode of care for an admitted patient, 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 to rehabilitation). Excludes separations with a principal diagnosis of ‘injury’. Computation: Numerator only; and 1,000 × (Numerator ÷ Denominator)
Data source/s	This indicator is calculated using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website. Hospitals are required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation. States and territories supplied these data under the terms of the National Health Information Agreement (see link). http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc
Relevance	The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other

specialised acute medical or surgical care are included.

The analyses by remoteness and socioeconomic status are based on Statistical Local Area of usual residence of the patient. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence.

Timeliness The reference period for this data set is 2007-08.

Accuracy For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of 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.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (NT public hospitals only).

‘Patient harm’ is defined as conditions meeting the definition of Additional diagnosis in the Admitted Patient Care NMDS.

The specification for the indicator defines a fall in hospital as being one for which the place of occurrence is coded as *Health service area*. The *Health service area* as a place of occurrence is broader in scope than hospitals – it includes other health care settings such as day surgery centres or hospices. Hence, the numbers presented could be an over-estimate as they include falls in health care settings other than hospitals.

Around 25 per cent of the records of separations involving falls did not have a code assigned for the place of occurrence. Consequently, the recorded number of falls occurring in hospitals may be an under-estimate.

If there is more than one external cause reported, there is uncertainty about whether the place of occurrence ‘health service area’ relates to the fall or to the other external cause. As a consequence there may be some over-counting in the calculation of the indicator.

In calculating this indicator, separations where a person was admitted to hospital with a principal diagnosis of an injury were excluded on the basis that if the injury was the principal diagnosis it is likely to have been associated with an event occurring prior to admission. These exclusions may result in an under-estimation of the indicator, because it would not include separations where a person is injured and admitted to hospital and then subsequently experiences a fall in hospital.

Data on falls recorded uniformly using the ICD-10-AM.

The indicator provides a count of separations involving one or more falls. It does not provide a count of falls.

The comparability of the data will be affected by the fact that it has not been adjusted for differences in casemix (e.g. patient age).

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08* and *Hospitalisations due to falls by older people, Australia 2005-06.*

Accessibility The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database. Published products available on the AIHW website are:

- *Australian hospital statistics* with associated Excel tables.
- Interactive data cube for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).

Interpretability Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and variation in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 42: Intentional self-harm in hospitals

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- Data on self-harm are recorded uniformly using the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM).
- The recorded number of separations involving intentional self-harm may be an under-estimate (as around 30 per cent of separations involving intentional self-harm did not have a code assigned for the place of occurrence). Under-estimation and over-estimation may also have occurred due to other limitations of the data.
- The comparability of the data will be affected by the fact that it has not been adjusted for differences in casemix (e.g. patient age).

Target/Outcome	Hospital and related care
Indicator	Separations in which a patient self-harmed during admission.
Measure (computation)	Numerator: Number of separations where an admitted patient self-harmed. Intentional self-harm is identified by ICD-10-AM external cause codes X60–X84. Self-harm is defined in ICD-10-AM as ‘Intentional self-harm: includes purposefully-inflicted poisoning or injury, suicide and attempted suicide.’ A separation is an episode of care for an admitted patient, 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 to rehabilitation). Excludes separations with a principal diagnosis of an injury or poisoning. Denominator: Total number of separations. Computation: Numerator only; and 1,000 × (Numerator ÷ Denominator)
Data source/s	This indicator is calculated using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website. Hospitals are required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation. States and territories supplied these data under the terms of the National Health Information Agreement (see link). http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc
Relevance	The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The analyses by remoteness and socioeconomic status are based on Statistical Local Area of usual residence of the patient. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence.

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007–08, all public hospitals provided data for the NHMD with the exception of a mothercraft hospital in the ACT. The great majority of private hospitals also provided data. The exceptions are 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.

Inaccurate responses may occur in all data provided to the AIHW. The AIHW does not have direct access to hospital records to determine the accuracy of the data provided. However, it 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.

The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (NT public hospitals only).

‘Patient harm’ is defined as conditions meeting the definition of Additional diagnosis in the Admitted Patient Care NMDS.

The specification for the indicator defines a separation involving self-harm as being one for which the place of occurrence is a *Health service area*. The *Health service area* as a place of occurrence is broader in scope than hospitals – it includes other health care settings such as day surgery centres or hospices. Hence, the numbers presented could be an over-estimate as they may include separations involving intentional self-harm occurring in health service areas other than ‘hospitals’.

Around 30 per cent of all separations involving intentional self harm did not have a code assigned for the place of occurrence. Consequently, the recorded number of separations involving intentional self-harm hospital may be an under-estimate.

If there is more than one external cause reported, there is uncertainty about whether the place of occurrence ‘health service area’ relates to the self-harm or to the other external cause. As a consequence there may be some over-counting in the calculation of the indicator.

In the calculation of the indicator, separations with a principal diagnosis of an injury or poisoning have been excluded on the assumption that the self-harm occurred prior to admission to hospital. However, it is possible that some of these separations would have additionally involved self-harm that occurred in hospital.

The issue of whether a patient who self harms while on leave from hospital has not been addressed in the specification of the indicator.

Data on self-harm are recorded uniformly using the ICD-10-AM.

The comparability of the data will be affected by the fact that it has not been adjusted for differences in casemix (e.g. patient age).

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where

	rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).
Coherence	The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08*.
Accessibility	The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database. Published products available on the AIHW website are: *Australian hospital statistics* with associated Excel tables. Interactive data cube for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).
Interpretability	Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and variation in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 43: Unplanned/unexpected readmissions within 28 days of selected surgical admissions

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- Data on procedures are recorded uniformly using the Australian Classification of Health Interventions. Data on diagnoses are recorded uniformly using the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM).
- Calculation of the indicator for Western Australia was not possible using data from the NHMD. Data for WA were supplied by WA Health and total rates and numbers do not include WA.
- The unplanned and/or unexpected readmissions are limited to those having a principal diagnosis of a post-operative adverse event for which a specified ICD-10-AM diagnosis code has been assigned. This does not include all possible unplanned/unexpected readmissions, so the indicator is likely to be an under-estimate.
- The indicator could only be calculated for public hospitals and for readmissions to the same hospital. This limitation means that the calculated value of the indicator will be an under-estimate.
- Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.

Target/Outcome	Hospital and related care
Indicator	Unplanned and/or unexpected hospital readmissions which occur within 28 days of an episode of care involving selected surgical procedures.
Measure (computation)	Numerator: the number of episodes of care in a public hospital which meet the following criteria: • The episode is a readmission to the same hospital following a episode in which one of the following procedures was performed: knee replacement; hip replacement; tonsillectomy and adenoidectomy; hysterectomy; prostatectomy; cataract surgery; appendicectomy • The readmission occurs within 28 days of the previous date of separation • The principal diagnosis for the readmission is a post-operative complication. Denominator: the number of separations in which one of the following surgical procedures was undertaken: knee replacement; hip replacement; tonsillectomy and adenoidectomy; hysterectomy; prostatectomy; cataract surgery; appendicectomy.
Data source/s	For all jurisdictions except WA, this indicator is calculated by AIHW using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care. For WA, the indicator was calculated and supplied by WA Health and was not independently verified by the AIHW.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance

The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The analyses by remoteness and socioeconomic status are based on Statistical Local Area of usual residence of the patient. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence.

The unplanned and/or unexpected readmissions counted in the computation for this indicator have been limited to those having a principal diagnosis of a post-operative adverse events for which a specified ICD-10-AM diagnosis code has been assigned. Unplanned and/or unexpected readmissions attributable to other causes have not been included.

The calculation of the indicator is limited to public hospitals and to readmissions to the same hospital.

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of a mothercraft hospital in the ACT.

Inaccurate responses may occur in all data provided to the Institute, and the Institute does not have direct access to hospital records to determine the accuracy of the data provided. However, the Institute 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.

Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (NT public hospitals only).

For this indicator, the linkage of separations records is based on the patient identifiers which are reported for public hospitals. As a consequence, only readmissions to the same public hospital are in scope; and readmissions to different public hospitals and readmissions involving private hospitals are not included.

Data to allow calculation of this indicator were not provided to the AIHW by WA.

To calculate this indicator, the readmissions needed to be reported in the 2007–08 financial year. This led to the specification of 19 May as the cut-off date for the initial separations. This cut-off date ensures that about 96 per cent of all eligible readmissions will be reported in 2007–08.

Cells have been suppressed to protect confidentiality (where the

	presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).
Coherence	The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08*.
Accessibility	The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database. Published products available on the AIHW website are: • *Australian hospital statistics* with associated Excel tables. • Interactive data cube for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).
Interpretability	Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and variation in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 44: Survival of people diagnosed with cancer

Key data quality points

- Data are only available from the AIHW at the national level this year. To date this indicator has been produced by the AIHW irregularly, according to funded ad-hoc requests. Data available for the 2010 CRC baseline report were published in Cancer survival and prevalence in Australia: cancers diagnosed from 1982 to 2004.
- The indicator cannot be reported by Indigenous status this year as Indigenous identification in the data is not adequate to support analysis or generation of life tables.
- The indicator as currently specified is not age adjusted which limits comparability across groups and over time.
- Cancer staging and treatment data are not currently available nationally and cancer survival analysis would benefit greatly from this additional information.
- Cancer survival varies by cancer type. As this indicator is based on all cancers (except 2 types of skin cancer), differences in the relative incidence of different types of cancer between groups may affect comparability.

Target/Outcome	Hospital and related care
Indicator	Survival of people diagnosed with cancer
Measure (computation)	Five-year relative survival for people diagnosed with cancer is calculated by dividing the proportion of people diagnosed with cancer who survived for five years after diagnosis by the proportion of similar people in the general population who survived for the same period. People in the numerators and denominators are matched on sex, age (to match to 'age at diagnosis' for people in the cancer cohort) and calendar year. Analysis was undertaken using the 'cohort' method of calculation. See AIHW 2008 Cancer Series no. 42. Cat. no. CAN 38. *Cancer survival and prevalence in Australia: cancers diagnosed from 1982 to 2004.*
Data source/s	Numerator: National Death Index & Australian Cancer Database Denominator: National Mortality Database & ABS Estimated Resident Population (generated life tables)
Institutional environment	The AIHW has calculated this indicator with assistance from the Australasian Association of Cancer Registries (AACR). Cancer incidence data used for the numerator are supplied by cancer registries with additional death information updated from linkage to the National Death Index (NDI). Expected survival data in the denominator are calculated using life tables from the Australian Bureau of Statistics (ABS) and data from the National Mortality Database (NMD). Both data sources are robust and the matching of numerator to denominator is appropriate. *Numerator* Cancer incidence data are supplied to the AIHW by state and territory cancer registries under a protocol last revised August 2009. These data are compiled to form the Australian Cancer Database (ACD). All jurisdictions have legislation requiring mandatory reporting of all cancer cases with the exception of basal cell carcinoma and squamous cell carcinoma. This means cancer incidence ascertainment is complete for all other cancers. Cancer incidence data sent to the AIHW already contain some mortality information. In addition to this, cancer records on the ACD are linked to the NDI to obtain date of death. The NDI is a national compilation of data

on all deaths occurring in each jurisdiction. Data are supplied by Registrars of Births Deaths and Marriages (RBDM) from each state and territory and this results in a database which contains all deaths occurring in Australia since 1980. RBDM have legislation to collect information on all deaths occurring in their jurisdiction. NDI data are provided by state and territory RBDM to AIHW on a monthly basis under an MOU last revised in September 2009. This is a robust data source and appropriate to apply to cancer data.

Denominator

Life tables are needed to calculate expected survival in the general population. Australia-wide life tables are published by the ABS but tables by remoteness or socioeconomic status are not readily available. Therefore it is necessary to derive approximate life tables for these subpopulations. In order to build a life table for subpopulation 'S', the following two pieces of information are required for each combination of calendar year, sex and 1-year age group:

- the mid-year population of S for that calendar year, sex and age
- the number of deaths in S for that calendar year, sex and age.

The methods used by AIHW to construct those data and the subsequent life tables are explained on pp 73–76 of the publication *Cancer survival and prevalence in Australia: cancers diagnosed from 1982 to 2004.*

The AIHW is Australia's national agency for health and welfare statistics and information. The role of the AIHW is to provide information on Australia's health and welfare, through statistics and data development that inform discussion and decisions on policy and services.

The AIHW works closely with all state, territory and Australian government health authorities in collecting, analysing and disseminating data. However, the AIHW is an independent statutory authority within the Health and Ageing portfolio, and is responsible to the Minister for Health and Ageing. The Institute is governed by a Board, which is accountable to the parliament of Australia through the Minister.

When errors are found in published data, those errors are corrected immediately with the revised version posted on the AIHW website and where necessary in on-line tables and online interactive data cubes. Corrections are documented on the AIHW website.

Relevance

The data used to calculate this PI at the national level are of high quality. While it is possible to calculate relative survival using different methods, the method used to calculate the indicator this year is adequate for reporting against the indicator at the national level.

Timeliness

Data available for the 2010 CRC baseline report is previously published data. The indicator is based on cancers diagnosed from 1982 to 2004. However, for the requested disaggregations, different time periods are used. For analysis by sex, cancers diagnosed from 1998 to 2004 were used. For analysis by remoteness, cancers diagnosed from 1997 to 2004 were used and for analysis by socioeconomic status cancers diagnosed from 2000 to 2004 were used. These years were selected based on the available information for constructing the life tables used in survival analysis. Changes in cancer survival usually occur gradually so the disparate time periods used in the indicator are unlikely to have a major impact on comparability.

The collation of cancer incidence data at cancer registries is a complex process which includes vetting data from numerous sources. The cancer registry processes ensure good quality data but to achieve this quality, a significant time lag between cancer diagnosis and finalisation of an incident case in the cancer registry transpires. Once data are supplied to the AIHW, cancer diagnoses which have been reported to more than one jurisdiction are identified and the data adjusted accordingly. This ensures a high quality national cancer incidence dataset. The time from cancer diagnosis to availability at the national level is approximately three years.

Calculation of 5 year survival also requires passing of an adequate time period for follow-up. For this analysis the follow-up period was to the end of 2006.

Accuracy

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to data held by cancer registries ABS or RBDM to determine the accuracy of the data provided. However, each of these data sources has broad population coverage and local data checking and validation processes leading to high quality data. In addition, the AIHW undertakes extensive validations on receipt of data. Data are checked for compliance with data definitions, 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. Registries continually update their historical data in the light of new information (such as when a new pathology report or a death notification triggers a revision of old information) and when AIHW is advised of such changes, these are incorporated in the ACD leading to slight changes over time.

Errors may occur during the processing of data by the states and territories or at the AIHW. Processing errors prior to data supply may be found through the validation checks applied by the AIHW. This PI is calculated on data that have been reported by the AIHW. Prior to publication, the results of analysis are referred back to jurisdictions for checking and clearance. Any errors found by jurisdictions are corrected once confirmed. The AIHW does not adjust the data to correct for missing or incorrect values unless agreed by the jurisdiction supplying the data. Where errors are found post publication, the AIHW corrects as soon as possible, with resubmission of data by the affected states or territories as required.

Other factors which may affect accuracy are:

- For analyses by remoteness and socioeconomic status, there may be differences in the definition for ‘usual residence’. Census data are rigorous when applying the definition for ‘usual residence’. However, mortality data may use the place that clients are living at the time of their treatment. It is common for people from remote and outer regional areas to move to major centres at the time of treatment for a significant illness. This will result in them being reported for example as ‘Major cities’ in death data, but as ‘Remote’ in census counts. The discrepancy becomes evident when comparing mortality rates, which may be lower in very remote areas and inconsistent with the population age structure from census estimates. The poorer outcome for more remote localities could be a significant underestimate of the true discrepancy, particularly in small jurisdictions.
- For the denominator, 2005 survival probabilities of the general population were used as proxies for the 2006 survival probabilities, as 2006 mortality data were not available at the time of calculation.
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Coherence

N/A

Accessibility

The AIHW with the assistance of the AACR and funding from Cancer Australia has published these data in *Cancer survival and prevalence in Australia: cancers diagnosed from 1982 to 2004.* This report is available on the AIHW website where it can be downloaded and printed without charge. Hard copies are also available for purchase from the AIHW.

Interpretability Calculation of relative survival is complex and the concept may be confusing to some users. Information on how relative survival has been calculated and how to interpret it is available in the publication *Cancer survival and prevalence in Australia: cancers diagnosed from 1982 to 2004.* Information on all of the AIHW held data sets (ACD, NMD & NDI) is available on the AIHW website. Information on ABS data is available on the ABS website. Extensive information is also available on cancer coding and interpretation of cancer data be searched both electronically and in hard copy.

Data Quality Statement — Indicator 45: Rates of services: Overnight separations

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- The number of overnight separations is considered to be more comparable than the total number of separations among jurisdictions and between the public and private sectors. This is because there is variation in admission practices and policies, which mainly lead to variation in the number of same-day admissions among providers.
- Numerators for remoteness and socioeconomic status are based on the reported area of usual residence of the patient, regardless of the jurisdiction of residence. Hence there are mismatches between numerators and denominators that affect interpretation of rates.
- Interpretation of rates for jurisdictions should take into consideration cross-border flows, particularly in the ACT.

Target/Outcome	Hospital and related care
Indicator	Number of overnight hospital separations per 1000 population
Measure (computation)	The numerator is the number of overnight (hospital) separations. The denominator is the estimated resident population. An overnight separation is an episode of care for an admitted patient that involves at least one overnight stay—that is, the date of admission and date of separation are different. Calculation is 1000 × (Numerator ÷ Denominator), presented as a rate per 1000 and age-standardised to the Australian population as at 30 June 2001 using 5-year age groups to 84 years. Indigenous population data are not available for all states and territories for 5-year age groups beyond 64 years, so Indigenous disaggregations were standardised to 64 years.
Data source/s	*Numerator:* This indicator is calculated using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care. *Denominators:* For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2007. For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections Series B as at 30 June 2007. For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2007. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia

through the Minister. For further information see the AIHW website.

Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance

The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The analyses by remoteness and socioeconomic status are based on Statistical Local Area of usual residence of the patient. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each remoteness area or SEIFA population group (regardless of the jurisdiction in which the patient resides) divided by the number of people in that remoteness or SEIFA population group in the jurisdiction of hospitalisation. Therefore, there will be mismatches between the numerators and denominators for separation rates. Mismatches are particularly relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction.

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of 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.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

The number of overnight separations is considered to be more comparable than the total number of separations among jurisdictions and between the public and private sectors. This is because there is variation in admission practices and policies, which mainly lead to variation in the number of same-day admissions among providers.

Numerators for remoteness and socioeconomic status are based on the reported area of usual residence of the patient, regardless of the jurisdiction of residence. Hence there are mismatches between numerators and denominators that affect interpretation of rates.

The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (NT public hospitals only).

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08*, except that for the Indigenous disaggregation age standardisation is to 64 years here, rather than to 74 as in *Australian hospital statistics*.

Accessibility

The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database . Published products available on the AIHW website are:

- *Australian hospital statistics* with associated Excel tables.
- Interactive data cube for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).

Interpretability

Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and variation in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 46: Rates of services: Outpatient occasions of service

Key data quality points

- Variations in counting and classification practices and in admission practices and policies across jurisdictions may affect the comparability of these data.
- Interpretation of rates for jurisdictions should take into consideration cross-border flows, particularly in the ACT.

Target/Outcome

Hospital and related care

Indicator

Number of hospital outpatient occasions of service per 1,000 population.

Measure (computation)

The numerator is the number of outpatient occasions of service. The denominator is the total Australian population for the same year.

The rate is calculated as the number of individual and group occasions of service divided by the Estimated Resident Population as at 30 June 2007.

Data source/s

Numerator:

This indicator is calculated using data from the National Public Hospital Establishments Database (NPHED). The NPHED is based on the National Minimum Data Set (NMDS) for Public hospital establishments.

Denominator:

Australian Bureau of Statistics Estimated Resident Population as at 30 June 2007.

Institutional environment

The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting.

The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance

The purpose of the NMDS for Public hospital establishments is to collect information on the characteristics of public hospitals and summary information on non-admitted services provided by them. The scope is public hospitals in Australia, including public acute hospitals, psychiatric hospitals, drug and alcohol hospitals and dental hospitals in all states and territories. The collection covers hospitals within the jurisdiction of the state and territory health authorities. Hence, public hospitals not administered by the state and territory health authorities (hospitals operated by the Department of Health and Ageing, or correctional authorities for example, and hospitals located in offshore territories) are not included. For 2007-08, essentially all public hospitals were included.

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007–08, coverage of the NPHED was essentially complete. The data are defined and/or documented in the NMDS for Public hospital establishments. However, differences in admission practices, counting and classification practices across jurisdictions may affect the comparability of these data. In addition, a patient may receive more than one outpatient occasion of service at the same attendance and this should be taken into consideration in the interpretation of these data.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

Coherence

The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08*.

Accessibility

The AIHW provides a variety of products that draw upon the NPHED data. Published products available on the AIHW website are:

- *Australian hospital statistics* with associated Excel tables.
- Interactive data cube for public hospital establishments data

Interpretability

Supporting information on the quality and use of the NPHED is published annually in *Australian hospital statistics* (chapter 2 and technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of changes in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Public hospital establishments are published in the AIHW's online metadata repository — METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 47: Rates of services: Non-acute care separations

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- There is some variation among jurisdictions in the assignment of care type categories.
- The number of overnight separations is considered to be more comparable than the total number of separations among jurisdictions and between the public and private sectors. This is because there is variation in admission practices and policies, which mainly lead to variation in the number of same-day admissions among providers.
- Numerators for remoteness and socioeconomic status are based on the reported area of usual residence of the patient, regardless of the jurisdiction of residence. Hence there are mismatches between numerators and denominators that affect interpretation of rates.
- Interpretation of rates for jurisdictions should take into consideration cross-border flows, particularly in the ACT.
- Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.

Target/Outcome

Hospital and related care

Indicator

Number of non-acute care overnight separations per 1,000 population, by care type

Measure (computation)

The numerator is the number of non-acute care overnight (hospital) separations. The denominator is the estimated resident population.

An overnight separation is an episode of care for an admitted patient that involves at least one overnight stay—that is, the date of admission and date of separation are different.

A non-acute care separation is defined where the type of care is reported as rehabilitation, palliative care, geriatric evaluation and management, psychogeriatric care, or maintenance care.

Calculation is 1,000 × (Numerator ÷ Denominator), presented as a rate per 1,000 and age-standardised to the Australian population as at 30 June 2001, using 5-year age groups to 84 years. Indigenous population data are not available for all states and territories for 5-year age groups beyond 64 years, so Indigenous disaggregations were standardised to 64 years.

Data source/s

Numerator:

This indicator is calculated using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care.

Denominators:

<u>For total population:</u> Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2007.

<u>For data by Indigenous status:</u> ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2007.

<u>For data by socioeconomic status:</u> calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2007. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population.

<u>For data by remoteness:</u> ABS ERP as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.

Institutional environment

The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting.

The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance

The purpose of the NMDS for Admitted patient care is to guide collection of standardised information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The analyses by remoteness and socioeconomic status are based on Statistical Local Area of usual residence of the patient. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each remoteness area or SEIFA population group (regardless of the jurisdiction in which the patient resides) divided by the number of people in that remoteness or SEIFA population group in the jurisdiction of hospitalisation. Therefore, there will be mismatches between the numerators and denominators for separation rates. Mismatches are particularly relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction.

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, except for 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.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

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

There is some variation among jurisdictions in the assignment of care type categories.

The number of overnight separations is considered to be more comparable than the total number of separations among jurisdictions and between the public and private sectors. This is because there is variation in admission practices and policies, which mainly lead to variation in the number of same-day admissions among providers. The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (NT public hospitals only).

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08*, except that for the Indigenous disaggregation age standardisation is to 64 years here, rather than to 74 as in *Australian hospital statistics*.

Accessibility

The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database. Published products available on the AIHW website include:

- *Australian hospital statistics* with associated Excel tables.
- Interactive data cubes for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).

Interpretability

Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and changes in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 48: Rates of services: Hosspital procedures

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- Data on procedures are recorded uniformly using the Australian Classification of Health Interventions.
- Numerators for remoteness and socioeconomic status are based on the reported area of usual residence of the patient, regardless of the jurisdiction of residence. Hence there are mismatches between numerators and denominators that affect interpretation of rates.
- Interpretation of rates for jurisdictions should take into consideration cross-border flows, particularly in the ACT.
- Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.

Target/Outcome Hospital and related care

Indicator Rates at which selected hospital procedures are performed for different population groups and in public and private hospital sectors

Measure (computation) The numerator is the number of hospital separations involving the procedures: Cataract extraction, Cholecystectomy, Coronary artery bypass graft, Coronary angioplasty, Cystoscopy, Haemorrhoidectomy, Hip replacement, Inguinal herniorrhaphy, Knee replacement, Lens insertion, Myringotomy, Tonsillectomy, Varicose veins stripping and ligation, Septoplasty, Prostatectomy and Hysterectomy. The denominator is the estimated resident population.

Calculation is 1,000 × (Numerator ÷ Denominator), presented as a rate per 1,000 and age-standardised to the Australian population as at 30 June 2001 using 5-year age groups to 84 years. Indigenous population data are not available for all states and territories for 5-year age groups beyond 64 years, so Indigenous disaggregations were standardised to 64 years.

Data source/s *Numerator:*

This indicator is calculated using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care.

Denominators:

For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2007.

For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2007.

For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2007. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population.

For data by remoteness: ABS ERP as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.

Institutional environment The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting.

The Institute is an independent statutory authority within the Health and

Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The analyses by remoteness and socioeconomic status are based on Statistical Local Area of usual residence of the patient. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each remoteness area or SEIFA population group (regardless of the jurisdiction in which the patient resides) divided by the number of people in that remoteness or SEIFA population group in the jurisdiction of hospitalisation. Therefore, there will be mismatches between the numerators and denominators for separation rates. Mismatches are particularly relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction.

Timeliness The reference period for this data set is 2007–08.

Accuracy For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of 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.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

Data on procedures are recorded uniformly using the Australian Classification of Health Interventions.

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

The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (NT public hospitals only).

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence	The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08*, except that for the Indigenous disaggregation age standardisation is to 64 years here, rather than to 74 as in *Australian hospital statistics*.
Accessibility	The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database. Published products available on the AIHW website are: • *Australian hospital statistics* with associated Excel tables. • Interactive data cube for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).
Interpretability	Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and changes in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 49: Residential and community aged care services per 1000 population aged 70+ years

Key data quality points

- The data used to calculate this indicator are from an administrative data collection designed for payment of subsidies to service providers and have accurate data on the number and location of funded aged care places.
- The presented measure excludes information about services delivered to older people under the Home and Community Care (HACC) program.

Target/Outcome	Aged care
Indicator	Operational residential and community aged care places per 1,000 people aged 70 years or over (or Aboriginal and Torres Strait Islander people aged 50 and over), excluding services funded through HACC
Measure (computation)	Numerator: Number of operational residential and community aged care places at 30 June (excluding services funded through Home and Community Care). *Residential aged care places* is a count of operational residential care places delivered in Australian Government subsidised residential aged care facilities. It includes Multi-Purpose Services and places delivered under the National Aboriginal Torres Strait Islander Flexible Aged Care Program provided in a residential aged care facility. *Community Aged Care places* is a count of operational places and packages under the following programs: Community Aged Care Packages (CACP); Extended Aged Care at Home (EACH); EACH Dementia (EACHD); Transition Care Program; Multi-Purpose Services; and places delivered under the Aboriginal and Torres Strait Islander Aged Care Strategy in the community. Denominator: All people aged 70 years and over plus Indigenous people aged 50-69 years at 30 June 2008 Rate (per 1,000 population) calculated separately for residential and community aged care services.
Data source/s	*Numerator:* Australian Government Department of Health and Ageing aged care data warehouse. The aged care data warehouse is a consolidated data warehouse of service provider and service recipient data held by the Ageing and Aged Care Division and the Office of Aged Care Quality and Compliance of the Department of Health and Ageing. *Denominator:* For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2008. For data by Aged Care Planning Regions: ABS small area population data developed for the Department of Health and Ageing.
Institutional environment	Approved providers submit data to Medicare Australia to claim subsidies from the Australian Government. This data is provided to the Department of Health and Ageing to administer services under the *Aged Care Act 1997* and the *Aged Care Principles,* and to administer places delivered under the Aboriginal and Torres Strait Islander Aged Care Strategy. The tables for this indicator were prepared by the Department of Health and Ageing. The data quality statement was developed by the Department and includes comments from the AIHW. The AIHW did not have all of the relevant datasets required to independently verify the data tables for this

	indicator. The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.
Relevance	The data provides complete coverage of aged care services subsidised by the Australian Government under the programs identified above. This indicator does not include services funded through HACC. Further data development is required to develop an indicator of capacity (i.e. places) available under HACC. As an indication of the relative magnitude of the HACC program, in 2007-08 HACC provided assistance to around 831,000 clients (573,000 70 years or older).
Timeliness	Based on a stocktake of aged care places which were operational at 30 June 2009. Data for the previous financial year is available October each year.
Accuracy	The data used to calculate this indicator are from an administrative data collection designed for payment of subsidies to service providers and have accurate data on the number and location of funded aged care places.
Coherence	The data items used in this indicator are consistent and comparable over time.
Accessibility	Aggregated data items are published in the Productivity Commission’s Report on Government Services, and in the *Reports on the Operation of the Aged Care Act 1997* prepared by the Department of Health and Ageing.
Interpretability	Further information on definitions is available in the *Aged Care Act 1997* and *Aged Care Principles,* in the Residential Aged Care Manual 2009, draft Community Packaged Care Guidelines 2007, and Transition Care Program guidelines.

Data Quality Statement — Indicator 52: Fall resulting in patient harm in residential aged care

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- Data on falls are recorded uniformly using the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM).
- Around 25 per cent of the records of separations involving falls did not have a code assigned for the place of occurrence. Consequently, the recorded number of falls occurring in an aged care facility may be an under-estimate.
- The indicator provides a count of separations involving one or more falls. It does not provide a count of falls.
- This indicator provides a count of patients who experience a fall in a residential aged care facility and required admission to hospital as a result of the fall. It does not provide an indication of the falls which occur in residential aged care facilities that do not require hospitalisation.
- Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.

Target/Outcome	Aged care
Indicator	Fall occurring in residential aged care and resulting in patient harm in hospital.
Measure (computation)	Numerator: Number of separations with a diagnosis of injury resulting from a fall and a place of occurrence of *Aged Care Facility*. A separation is an episode of care for an admitted patient, 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 to rehabilitation). Computation: Numerator only
Data source/s	This indicator is calculated using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website. States and territories supplied these data under the terms of the National Health Information Agreement (see link). http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc
Relevance	The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included. The specification for the indicator defines a fall in residential aged care as

being one for which the place of occurrence assigned to the fall is coded as *Aged Care Facility*. The *Aged Care Facility* as a place of occurrence is broader in scope than residential aged care – it includes other aged care facilities such as retirement villages.

Timeliness The reference period for this data set is 2007–08.

Accuracy For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of a mothercraft hospital in the ACT. The great majority of private hospitals also provided data. The exceptions were 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.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (NT public hospitals only).

The specification for the indicator defines a fall in residential aged care as being one for which the place of occurrence assigned to the fall is coded as *Aged Care Facility*. The *Aged Care Facility* as a place of occurrence is broader in scope than residential aged care – it includes other aged care facilities such as retirement villages. Hence, the numbers presented could be an over-estimate.

Around 25 per cent of the records of separations involving falls did not have a code assigned for the place of occurrence. Consequently, the recorded number of falls occurring in an aged care facility could be an under-estimate.

Data on falls recorded uniformly using the ICD-10-AM.

The indicator provides a count of separations involving one or more falls. It does not provide a count of falls.

The number of separations in which a fall in an aged care facility results in harm that is treated in hospital may be underestimated because the records for some 25 percent of all separations involving a fall requiring treatment listed ‘unspecified’ as the place of occurrence.

The specifications for this indicator only enable the identification of patients who experience a fall in residential aged care and require admission to hospital as a result of the fall. It does not provide an indication of the falls which occur in residential aged care facilities that do not require hospitalisation.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08* and *Hospitalisations due to falls by older people, Australia 2005-06.*

Accessibility The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database. Published products available on the AIHW website are:

Australian hospital statistics with associated Excel tables.

Interactive data cube for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).

Interpretability Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and variation in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 53: Older people receiving aged care services

Key data quality points

- The Aged Care data warehouse is derived from an administrative data collection designed for payment of subsidies to services providers and has accurate data on the numbers of clients, their age and Indigenous status.
- Information about geographical location (remoteness) is based on location of service provider for all programs except HACC (where remoteness is based on location of client).
- HACC data are not as complete as the data presented for other aged care programs.

Target/Outcome	Aged care
Indicator	Number of non-Indigenous people aged 70 years and over, and Indigenous people aged 50 years and over, receiving aged care services in community settings or residential settings.
Measure (computation)	The numerator is all people aged 70 years and over plus Indigenous people aged 50-69 years at 30 June, who received aged care services in community or residential settings during the 12 months to 30 June. The denominator is the estimated resident population aged 70 years and over for the total population and the estimated Indigenous population aged 50 – 69 years. Expressed as numerator only and rate (1,000 x (numerator/denominator), and calculated separately for each program: Home and Community Care (HACC); Community Aged Care Packages (CACP); Extended Aged Care at Home (EACH); EACH Dementia (EACHD); Residential Aged Care; Residential Respite; and Transition Care Program.
Data source/s	*Numerator:* HACC National Data Repository Australian Government Department of Health and Ageing aged care data warehouse The aged care data warehouse is a consolidated data warehouse of service provider and service recipient data held by the Ageing and Aged Care Division and the Office of Aged Care Quality and Compliance of the Department of Health and Ageing. *Denominator:* For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2008. For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2008.
Institutional environment	*HACC National Data Repository* The HACC program is funded and governed through a cooperative working agreement between the Australian and state and territory governments. Service providers receiving funding under the HACC program are required to provide data to populate the HACC National Minimum Data Set (NMDS) to the state and territory governments. This is supplied to the National Data Repository managed by the Department of Health and Ageing. *Aged care data warehouse* Approved providers submit data to Medicare Australia to claim subsidies from the Australian Government for services delivered under the *Aged Care Act*

1997 (the Act) and *Aged Care Principles* (the Principles)[1]. These data are provided to the Department of Health and Ageing and are stored in the DoHA data warehouse.

The flexible care places used in the Transition Care Program are legislated by the *Act* and the *Principles* made under the *Act*. The Transition Care Program is funded and governed in partnership between the Australian and state and territory governments. Service providers submit claims to Medicare Australia to claim for services delivered under the Transition Care Program. These data are provided to the Department of Health and Ageing and are stored in the aged care data warehouse.

The tables for this indicator were prepared by the Department of Health and Ageing. The data quality statement was developed by the Department and includes comments from the AIHW. The AIHW did not have all of the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.

Relevance

HACC: In 2008-09, 93 per cent of all providers receiving funding under the HACC program submitted data to the HACC NMDS. There is no information on the size of service provision for the missing agencies so it is difficult to assess the impact on the completeness of client data.

Other programs: The data provides complete coverage of aged care services funded by the Australian Government under the programs identified above.

Data linkage is needed to estimate the number of individuals receiving aged care services across aged care programs.

Does not include people receiving services under Multi-purpose services or the Aboriginal and Torres Strait Islander Aged Care Strategy since data are collected on places only (i.e. not people).

Data for Veteran’s Home Care was not collected in 2008-09.

The SEIFA status of care recipients has not been calculated since the data sources record place of service differently (for instance, for HACC it is the home of the care recipient, while for community care and residential aged care it is the location of the aged care service).

Timeliness

The reference period for the data sets used to produce this indicator is 2008–09.

HACC NMDS

State and territory governments submit quarterly reports to the HACC National Data Repository.

Aged care data warehouse

Claims are submitted by providers on a monthly basis for services delivered under residential aged care and residential respite care, CACP, EACH & EACHD, and Transition Care. Data for the previous financial year is available in October each year.

Accuracy

HACC: Around 10 per cent of HACC data is missing Indigenous status. Missing data for remoteness and age is less than 1 per cent.

Other programs: Funding to service providers of Aged Care under the *Act* and the *Principles* is contingent on their submitting claims to Medicare Australia. Service providers’ claims are audited annually.

The data presented against this indicator is people who have accessed a service delivered under that program in the financial year. Because a person may receive services under more than one program in a year, the number of unique individuals accessing aged care is less than the total of people accessing the services listed above. The methodology to link individuals is

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[1] Services delivered under the *Act Care Act 1997* and *Aged Care Principles* include: residential care and residential respite care, CACP, EACH, EACHD and the Transition Care Program.

	under development.
Coherence	The data items used to construct this performance indicator will be consistent and comparable over time.
Accessibility	Aggregated data items are published in the Productivity Commission's Report on Government Services, and in the *Reports on the Operation of the Aged Care Act 1997* prepared by the Department of Health and Ageing. Aggregated HACC data are published in the HACC MDS Statistical Bulletin on an annual basis.
Interpretability	Further information on definitions is available in the: *Aged Care Act 1997* and *Aged Care Principles;* the Residential Aged Care Manual 2009; Residential Respite Care Manual; draft Community Packaged Care Guidelines 2007; the HACC Data Dictionary; and the Transition Care Guidelines.

Data Quality Statement — Indicator 54: Aged care assessments completed

Key data quality points

- This data collection is used for approval for clients to access Australian Government-funded aged care programs and coverage of clients is comprehensive.
- This indicator does not represent all assessment activity undertaken by ACATs, only those completed. Note that completed assessments include both assessments where the delegate has and has not approved the client to receive aged care services.

Target/Outcome	Aged care
Indicator	Number of Aged Care Assessments completed under the Aged Care Assessment Program (ACAP).
Measure (computation)	The numerator is the number of ACAP assessments completed. The denominator is the estimated resident population for corresponding age groups. Expressed as numerator only and rate. Computation for rate is (1,000 x (numerator/denominator)).
Data source/s	ACAP Minimum Data Set in the Australian Government Department of Health and Ageing aged care data warehouse.
Institutional environment	Aged Care Assessment Teams (ACATs) are funded and governed through a cooperative working agreement between the Australian and state and territory governments. Submitting data to the ACAP National Minimum Data Set (NMDS) is a condition of ACATs receiving Commonwealth funding. ACAT teams submit their data to the state evaluation unit. The state evaluation unit submits their data to the ACAP National Data Repository managed by the Department of Health and Ageing. The tables for this indicator were prepared by the Department of Health and Ageing. The data quality statement was developed by the Department and includes comments from the AIHW. The AIHW did not have all of the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.
Relevance	The data collection provides complete coverage of the ACAP. This indicator does not represent all assessment activity undertaken by ACATs, only those completed. Note that completed assessments include both assessments where the delegate has and has not approved the client to receive aged care services.
Timeliness	The reference period for this data set is 2007–08. Data are provided to the NMDS on a quarterly basis. The data are reliable for any financial year by June the following year.
Accuracy	Approximately 1.6 per cent of ACAP records do not have an Indigenous status recorded. Approximately 0.3 per cent of ACAP records do not have a valid postcode for the client. These records have been excluded for the Remoteness and SEIFA disaggregations.
Coherence	The data items used to construct this indicator are consistent and comparable over time.
Accessibility	Aggregated data items from the ACAP NMDS are published in the Productivity Commission’s Report on Government Services, and in the *Reports on the Operation of the Aged Care Act 1997* prepared by the Department of Health and Ageing.
Interpretability	Further information on definitions is available in the Aged Care Assessment and Approval Guidelines 2006 and the ACAP Data Dictionary.

Data Quality Statement — Indicator 55: Younger people with disabilities using residential, CACP and EACH aged care services

Key data quality points

- The data used to calculate this indicator are from an administrative data collection designed for payment of subsidies to service providers and have accurate data on the number and location of funded aged care places.

Target/Outcome	Aged care
Indicator	Number of people under 65 years of age with disabilities using residential and community aged care services funded through the *Aged Care Act 1997*.
Measure (computation)	The number of people under 65 years of age who accessed residential care or packaged community aged care services at any time in the 12 months to 30 June. Calculated separately for residential and community aged care services. *Residential aged care services* includes permanent residential care only (i.e., does not include respite care). *Community aged care services* includes CACP, EACH and EACHD services only.
Data source/s	Australian Government Department of Health and Ageing aged care data warehouse. The aged care data warehouse is a consolidated data warehouse of service provider and service recipient data held by the Ageing and Aged Care Division and the Office of Aged Care Quality and Compliance of the Department of Health and Ageing.
Institutional environment	Approved providers of residential and community care submit data to Medicare Australia to claim subsidies from the Australian Government. This data is provided to the Department of Health and Ageing to administer services under the *Aged Care Act 1997* and the *Aged Care Principles.* The tables for this indicator were prepared by the Department of Health and Ageing. The data quality statement was developed by the Department and includes comments from the AIHW. The AIHW did not have all of the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.
Relevance	The data provide complete coverage of aged care services funded by the Australian Government under the programs identified above.
Timeliness	Claims are submitted by approved providers on a monthly basis for services delivered under residential aged care CACP, EACH and EACHD. Data for the previous financial year is available in October each year.
Accuracy	The data used to calculate this indicator are from an administrative data collection designed for payment of subsidies to service providers and have accurate data on the number and location of funded aged care places.
Coherence	The data items used to construct this indicator are consistent and comparable over time.
Accessibility	Information on definitions used in the indicators are available in the *Aged Care Act 1997* and *Aged Care Principles,* in the Residential Aged Care Manual 2009 and draft Community Packaged Care Guidelines 2007.
Interpretability	Aggregated data can be obtained on request from the Department of Health and Ageing.

Data Quality Statement — Indicator 56: People aged 65 years or over receiving sub-acute services

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- This indicator is a count of separations, not a count of persons. The same person may be hospitalised on more than one occasion during the year. Services other than admitted patient services are not included.
- Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.
- Numerators for remoteness and socioeconomic status are based on the reported area of usual residence of the patient, regardless of the jurisdiction of hospital. Hence there are mismatches between numerators and denominators that affect interpretation of rates.
- Interpretation of rates for jurisdictions should take into consideration cross-border flows, particularly in the ACT.
- There is some variation among jurisdictions in the assignment of care type categories.

Target/Outcome	Aged care
Indicator	Number of admitted sub-acute services to people 65 years or over.
Measure (computation)	The numerator is the number of sub-acute care separations for people aged 65 years or over. The denominator is the estimated resident population. A separation is an episode of care for an admitted patient. A sub-acute care separation is defined where the type of care is reported as rehabilitation, palliative care, geriatric evaluation and management or psychogeriatric care. Calculation is 1,000 × (Numerator ÷ Denominator), presented as a rate per 1,000 and age-standardised to the Australian population as at 30 June 2001 using 5-year age groups to 84 years. Indigenous population data are not available for all states and territories for 5-year age groups beyond 64 years, so Indigenous disaggregations were standardised to 64 years.
Data source/s	*Numerator:* This indicator is calculated using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care. *Denominators:* For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2007. For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2007. For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2007. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through

the Minister. For further information see the AIHW website.

Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The analyses by remoteness and socioeconomic status are based on Statistical Local Area of usual residence of the patient. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each remoteness area or SEIFA population group (regardless of the jurisdiction in which the patient resides) divided by the number of people in that remoteness or SEIFA population group in the jurisdiction of hospitalisation. Therefore, there will be mismatches between the numerators and denominators for separation rates. Mismatches are particularly relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction.

This indicator is a count of separations, not a count of persons. The same person may be hospitalised on more than one occasion during the year. Services other than admitted patient services are not included.

Timeliness The reference period for this data set is 2007–08.

Accuracy For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of 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.

Inaccurate responses may occur in all data provided to the Institute, and the Institute does not have direct access to hospital records to determine the accuracy of the data provided. However, the Institute 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.

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

There is some variation among jurisdictions in the assignment of care type categories.

The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (NT public hospitals only).

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where

	rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).
Coherence	The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08*, except that for the Indigenous disaggregation age standardisation is to 64 years here, rather than to 74 as in *Australian hospital statistics*.
Accessibility	The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database. Published products available on the AIHW website are: • *Australian hospital statistics* with associated Excel tables. • Interactive data cubes for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).
Interpretability	Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and changes in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 57: Number hospital patient days used by those eligible and waiting for residential aged care

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- The indicator as presented is not a count of patient days used by those eligible and waiting for residential aged care. The indicator is presented as a proportion of total separations for persons in the older age groups and cannot be interpreted as a volume of activity. In addition, the diagnosis codes are not specific for identifying patients eligible and waiting for residential aged care, and patient days that should be counted could occur in separations that are shorter than 35 days.
- There is some variation among jurisdictions in the assignment of care type categories.

Target/Outcome	Aged care
Indicator	Number of hospital bed days used by patients whose acute or sub-acute episode of admitted patient care has finished and who have been assessed by an Aged Care Assessment Team (ACAT) and approved for residential aged care or packaged community care (CACP or EACH).
Measure (computation)	The numerator is the number of (hospital) separations for persons aged 70 years or over, plus Indigenous patients 50-69 years, with a care type of maintenance and a diagnosis (either principal or additional) of either ‘person awaiting admission to residential aged care service’ or ‘need for assistance at home and no other household member able to render care’ and where the separation lasted 35 days or longer. The denominator is the total number of separations for persons aged 70 years or over, plus Indigenous patients 50-69 years. Calculation is 100 × (Numerator ÷ Denominator).
Data source/s	*Numerator and denominator:* This indicator is calculated using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care.
Institutional environment	The Steering Committee for the Review of Government Service Provision has sourced this indicator from the draft *Report on Government Services 2010*. The indicator was calculated by the AIHW and provided to the Steering Committee for the *Report on Government Services 2010*. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation. States and territories supplied these data under the terms of the National Health Information Agreement (see link). http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc
Relevance	The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The indicator as presented is not a count of patient days used by those eligible and waiting for residential aged care. The indicator is presented as a proportion of total separations for persons in the older age groups, and cannot be interpreted as a volume of activity. In addition, the diagnosis codes are not specific for identifying patients eligible and waiting for residential aged care, and patient days that should be counted could occur in separations that are shorter than 35 days.

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, except for 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.

Inaccurate responses may occur in all data provided to the Institute, and the Institute does not have direct access to hospital records to determine the accuracy of the data provided. However, the Institute undertakes extensive validation 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.

There is some variation among jurisdictions in the assignment of care type categories.

Although the diagnosis codes reflect a care type, they do not determine a person’s eligibility for residential aged care. The code ‘need for assistance at home and no other household member able to render care’ may also be used for respite care for either residential or community care patients. Diagnosis codes may not be applied consistently across jurisdictions.

Coherence

The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08*.

Accessibility

The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database. Published products available on the AIHW website include:

- *Australian hospital statistics* with associated Excel tables.
- Interactive data cubes for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).

Interpretability

Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and changes in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW’s online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 59: Age-standardised mortality by major cause of death

Target/Outcome	Aged care
Indicator	Age standardised mortality.
Measure (computation)	Numerator: death registrations for 2007 provided by State and Territory Registrars of Births, Deaths and Marriages. Denominator: ABS Estimated Residential Population (3101.0), Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians (3238.0)
Data source/s	Numerator – ABS Causes of Deaths collection (3303.0). Denominator - ABS Estimated Residential Population (3101.0), Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians (3238.0).
Institutional environment	The Causes of Death collection is published by the Australian Bureau of Statistics (ABS) with data sourced from deaths registrations administered by the various State and Territory Registrars of Births, Deaths and Marriages. It is a legal requirement of each State and Territory that all deaths are registered. The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.
Relevance	The ABS cause of death collection includes all deaths that occurred and were registered in Australia, including deaths of persons whose usual residence is overseas. Deaths of Australian residents that occurred outside Australia may be registered by individual Registrars, but are not included in ABS deaths or causes of death statistics. Data in the Causes of Death collection include demographic items, as well as Causes of Death information, which is coded according to the International Classification of Diseases (ICD). ICD is the international standard classification for epidemiological purposes and is designed to promote international comparability in the collection, processing, classification, and presentation of cause of death statistics. The classification is used to classify diseases and causes of disease or injury as recorded on many types of medical records as well as death records The ICD has been revised periodically to incorporate changes in the medical field. The 10th revision of ICD (ICD-10) has been used since 1997.
Timeliness	Causes of Death data is published on an annual basis. Preliminary ERP data is compiled and published quarterly and is generally made available five to six months after the end of each reference quarter. Every year, the 30 June ERP is further disaggregated by sex and single year of age, and is made available five to six months after end of the reference quarter. Commencing with data for September quarter 2006, revised estimates are released annually and made available 21 months after the end of the reference period for the previous financial year, once more accurate births, deaths and net overseas migration data becomes available. In the case of births and deaths, the revised data is compiled on a date of occurrence basis. In the case of net overseas migration, final data is based on actual traveller behaviour. Final estimates are made available every 5 years after a census and revisions are made to the previous intercensal period. ERP data is not changed once it

has been finalised. Releasing preliminary, revised and final ERP involves a balance between timeliness and accuracy.

Accuracy

Information on causes of death is obtained from a complete enumeration of deaths registered during a specified period and are not subject to sampling error. However, deaths data sources are subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data. Although it is considered likely that most deaths of Aboriginal and Torres Strait Islander (Indigenous) Australians are registered, a proportion of these deaths are not registered as Indigenous. Information about the deceased is supplied by a relative or other person acquainted with the deceased, or by an official of the institution where the death occurred and may differ from the self-identified Indigenous origin of the deceased. Forms are often not subject to the same best practice design principles as statistical questionnaires, and respondent and/or interviewer understanding is rarely tested. Over-precise analysis of Indigenous deaths and mortality should be avoided.

All ERP data sources are subject to non-sampling error. Non-sampling error can arise from inaccuracies in collecting, recording and processing the data. In the case of Census and Post Enumeration Survey (PES) data every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. The ABS does not have control over any non sampling error associated with births, deaths and migration data.

Another dimension of non-sampling error in ERP data is the fact that the measures of components of population growth become more accurate as more time elapses after the reference period. As discussed under Timeliness, the trade-off between timeliness and accuracy means that a user can access more accurate data by using the revised or final ERP data. While the vast majority of births and deaths are registered promptly, a small proportion of registrations are delayed for months or even years. As a result, preliminary quarterly estimates can be an underestimate of the true number of births and deaths occurring in a reference period. Revised figures for a reference period incorporate births and deaths registrations that were received after the preliminary data collection phase as well as the estimated number of registrations that have still not been received for that reference period. For more information see the *Demography Working Paper 1998/2 - Quarterly birth and death estimates, 1998 (cat. no. 3114.0)*. and Australian Demographic Statistics (cat. no. 3101.0).

Causes of death data for 2007 is subject to revision. All coroner certified deaths registered after 1 January 2007 will be subject to a revision process. This is a change from previous years where all ABS processing of causes of death data for a particular reference period was finalised approximately 13 months after the end of the reference period. Where insufficient information was available to code a cause of death (e.g. a coroner certified death was yet to be finalised by the Coroner), less specific ICD codes were assigned as required by the ICD coding rules. The revision process will enable the use of additional information relating to coroner certified deaths as it becomes available over time. This will result in increased specificity of the assigned ICD-10 codes. Causes of death data for 2007 coroner certified deaths will be updated as more information becomes available to the ABS. Revised data for 2007 will be published both on a year registration basis and a year of occurrence basis in the 2008 Causes of death publication, due to be released in March 2010, and again in the publication relating to the 2009 collection due for release in 2011. Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Causes of Death, 2007, 3303.0.

Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

Some rates are unreliable due to small numbers of deaths over the reference period. Resultant rates could be misleading for example where the non-Indigenous mortality rate is higher than the Indigenous mortality rate for some causes.

Rates in this indicator are based on a single year of data and such are unreliable due to the inherent volatility in Indigenous mortality data.

All rates in this indicator must be used with caution.

Coherence The methods used to construct the indicator are consistent and comparable with other collections and with international practice.

Interpretability Data for this indicator have been age-standardised, using the indirect method, to account for differences between the age structures of the Indigenous and non-Indigenous populations. Indirect age-standardisation to the 2001 total Australian population was used. Age-standardised results provide a measure of relative difference only between populations.

Information on how to interpret and use the data appropriately is available from Explanatory Notes in Causes of Death, Australia (3303.0)

Accessibility Causes of Death data are available in a variety of formats on the ABS website, www.abs.gov.au, under the 3303.0 product family. ERP data is available in a variety of formats on the ABS website under the 3101.0 and 3201.0 product families. Further information on deaths and mortality may be available on request. The ABS observes strict confidentiality protocols as required by the Census and Statistics Act (1905). This may restrict access to data at a very detailed level which is sought by some users.

Data Quality Statement — Indicator 60: Access to services by type of service compared to need

Target/Outcome Aged care

Indicator Access to services by type of service compared to need.

Measure Numerator: Number of people aged 15 years and over who accessed services in a given period (by categories of self-assessed health).

Denominator: Number of persons aged 15 years and over (by categories of self-assessed health).

Data source/s The denominator and numerator for this indicator use ABS National Health Survey (NHS) data, which is weighted to benchmarks for the total NHS in-scope population derived from the Estimated Resident Population (ERP). For information on NHS scope and coverage, see the National Health Survey Users Guide (cat. no. 4363.0.55.001) on the ABS website, www.abs.gov.au.

Estimates for Indigenous persons are drawn from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which was benchmarked to the estimated Indigenous population (adjusted for the scope of the survey).

Institutional environment The NHS and NATSIHS are collected, processed, and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents.

For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

Relevance There is no direct measure available relating to *access* to services, so data for this indicator relates to *use* of services as reported by the respondent. The NHS and NATSIHS 2004-05 collected information about a selected range of health related actions persons had taken for their health in a given reference period. The actions of relevance to this indicator are:

- Admitted to hospital as an inpatient
- Visits to casualty, emergency, outpatient unit
- Visits to day clinics
- Doctor consultations (GP or specialists)
- Dental consultations
- Consultations with other health professional(s)
- The consultation with other health professional topic refers to visits to one or more of a list of nominated health professionals as follows:
- Aboriginal health worker
- Accredited counsellor
- Acupuncturist
- Alcohol and drug worker
- Audiologist/audiometrist
- Chiropractor
- Chemist (for advice only)
- Chiropodist/podiatrist
- Dietician/nutritionist
- Herbalist

- Hypnotherapist
- Naturopath
- Nurse
- Optician/optometrist
- Osteopath
- Occupational therapist
- Physiotherapist/hydrotherapist
- Psychologist
- Social worker/welfare officer
- Speech therapist/pathologist

Except for admissions to hospital, which uses a 12 month reference period, the reference period for these actions is the 2 weeks prior to interview. These reference periods were chosen as an acceptable compromise between enabling respondents to accurately recall and report actions taken in the period and ensuring sufficient observations were recorded in the survey to support reliable results.

Self-assessed health status is used as a proxy for need, as the NHS has no direct measure of need. Persons are asked “In general, would you say your health is excellent, very good, good, fair, or poor?” Self-assessed health status is a subjective data item. Perceptions may be influenced by any number of factors, which may be unrelated to actual health or which may reflect transient rather than usual feelings or circumstances.

While analysis has shown a correlation between self-assessed health status and health status indicated by more objective measures (such as recent and/or long term illness), the assumption that self-assessed health status is a valid proxy measure of need for services is currently untested. Persons may consider their health to be generally good, but still have a need for health services in the previous 2 weeks. Similarly, others might have no need for services but report that their health is poor.

Information for persons aged 15-17 may have had their information reported on their behalf, usually by a parent (though possibly with the child’s assistance). In 2004-05, 34.9 per cent of 15-17 year olds responded on their own behalf, the remainder by a proxy. Data for these persons is therefore not conceptually “self-assessed” health as it is for the other age groups, and responses may have been different if they had responded for themselves.

Timeliness

The NHS is conducted every three years over a 12 month period. Results from the 2004-05 NHS were released in February 2006.

The NATSIHS is conducted every six years. Results from the 2004-05 survey were released in April 2006.

Accuracy

The NHS is conducted in all States and Territories, excluding very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were also not included in the survey. The exclusion of persons usually resident in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population. The 2007-08 NHS response rate was 91 per cent. NHS data are weighted to account for non-response.

The NATSIHS is conducted in all States and Territories and includes remote and non-remote areas. The 2004–05 sample was 10,000 persons/5,200 households, with a response rate of 81 per cent of households.

As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the scientific methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.

Rates of people who have accessed health services by State/Territory and type of service or Indigenous status have acceptable levels of sampling error for all States and Territories except for NT, for which data should be used with caution. Some data for NT in these tables has RSEs greater than 50 per cent. Data disaggregated by health status, remoteness and type of service used for all persons by State/Territory also has acceptable levels of sampling error for all States and Territories except for NT, and for Remote data for all States, which should be used with caution. Data on casualty/outpatient/day clinic visits for Remote respondents is considered too unreliable for general use.

Data disaggregated by health status, index of disadvantage and type of service used for all persons by State/Territory has acceptable levels of sampling error for all States, but not for ACT and NT. Much of the data on casualty/outpatient/day clinic and dental visits for States should be used with caution. Most data for ACT and NT in this table is considered too unreliable for general use.

Coherence: The 2004–05 NATSIHS and 2004–05 NHS had similar data content, shared common elements in the questionnaire, and were processed side by side. The NHS and NATSIHS collect a range of other health-related information that can be analysed in conjunction with data on use of services and self-assessed health status.

Questions used in the 2007-08 NHS on health-related actions, however, are not comparable with those asked in the 2004-05 NHS, as both the questions and the collection periods differ.

Interpretability Information to aid interpretation of the data is available from the National Health Survey User Guide, and the National Aboriginal and Torres Strait Islander Health Survey User Guide on the ABS website.

Many health-related issues are closely associated with age, therefore data for this indicator have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the States and Territories and the Indigenous and non-Indigenous population. Age standardised rates should be used to assess the relative differences between groups, not to infer the rates that actually exist in the population.

Accessibility See National Health Survey, Summary of Results (cat. no. 4364.0) for an overview of results from the NHS, and National Health Survey: State tables (cat. no. 4362.0) for State and Territory specific tables. See the National Aboriginal and Torres Strait Islander Health Survey (cat. no. 4715) for an overview of results from the NATSIHS. Other information from these surveys is also available on request.

Data Quality Statement — Indicator 61: Teenage birth rate

Key data quality points

- The numerator includes births to mothers aged less than 15 years, however the denominator only includes women aged 15 to 19 years. This may result in the rate being slightly overstated.
- Since 2005, all jurisdictions collect information on Indigenous status of the mother in accordance with the NMDS.
- No formal national assessment has been undertaken to determine completeness of the coverage or identification of Indigenous mothers in the NPDC or to determine variability between states and territories. The current data have not been adjusted for under-identification of Indigenous status of the mother. Comparisons between states and territories should be interpreted with this caution.
- Area of usual residence of the mother is included in the Perinatal NMDS and data are complete for over 99.9 per cent mothers.

Target/Outcome

Social inclusion and Indigenous health

Indicator

This indicator presents the number of births to females aged less than 20 years as a proportion of all females aged 15–19 years in the population.

Measure (computation)

Numerator: Number of births to teenagers aged less than 20 years.

Denominator: Number of females aged 15–19 years in the population.

Computation: 1,000 × (Numerator ÷ Denominator)

Data source/s

Numerator: AIHW National Perinatal Data Collection (NPDC)

Denominator:

For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2007.

For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2007.

For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2007. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population.

For data by remoteness: ABS ERP as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.

Institutional environment

The Australian Institute of Health and Welfare (AIHW) has calculated this indicator.

Data included in the National Perinatal Data Collection are collected as part of a National Minimum Data Set and were supplied by state and territory health authorities to the National Perinatal Statistics Unit (NPSU), a collaborating unit of the Institute. The state and territory health authorities receive these data from patient administrative and clinical records. This information is usually collected by midwives or other birth attendants. States and territories use these data for service planning, monitoring and internal and public reporting.

The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Data specifications for the Perinatal NMDS are documented in the AIHW online metadata repository —METeOR (see link).

http://meteor.aihw.gov.au/content/index.phtml/itemId/181162

Relevance The National Perinatal Data Collection comprises data items as specified in the Perinatal National Minimum Data Set plus additional items collected by the states and territories. The purpose of the Perinatal NMDS is to collect information at birth for monitoring pregnancy, childbirth and the neonatal period for both the mother and baby(s).

The Perinatal NMDS is a specification for data collected on all births in Australia in hospitals, birth centres and the community. It includes information for all live births and stillbirths of at least 400 grams birthweight or at least 20 weeks gestation. It includes data items relating to the mother, including demographic characteristics and factors relating to the pregnancy, labour and birth; and data items relating to the baby, including birth status (live or stillbirth), sex, gestational age at birth, birth weight, Apgar score and neonatal length of stay.

The Perinatal NMDS includes all relevant data elements of interest for the numerator of this indicator. While each jurisdiction has a unique perinatal form for collecting data on which the format of the Indigenous status question and recording categories varies slightly, all systems include the NMDS item on Indigenous status of mother.

No formal national assessment has been undertaken to determine completeness of the coverage of Indigenous mothers in the Perinatal NMDS or to determine variability between states and territories. However, the proportion of Indigenous mothers for the period 1997-2006 has been consistent, at 3.2–3.7 per cent of women who gave birth. For maternal records (0.1 per cent) where Indigenous status was not stated, data were excluded. Comparisons between states and territories should be interpreted with this caution.

Maternal age is calculated using the date of birth of the mother and the baby. Both of these items are included in the Perinatal NMDS. For 2007 data, New South Wales was non-compliant with the Perinatal NMDS and provided maternal age rather than maternal dates of birth. No methodology on calculation of maternal age by NSW has been provided. South Australia provided confidentialised dates, adjusted based on the baby's date of birth (recorded as the first of the month). South Australian legislation prevents the release of potentially identifiable data from its perinatal collection.

The indicator is presented by Socio-Economic Indexes for Areas (SEIFA) Index for Relative Socio-Economic Disadvantage (IRSD). The data supplied to the NPDC include a 5-digit code for SLA from all states and territories except Tasmania (which supplies postal area codes).

Reporting by remoteness is in accordance with the Australian Standard Geographical Classification (ASGC). Remoteness is assigned from SLA or postal area codes. The numerator and denominator for the calculation of rates for this indicator come from different sources (numerator from the NPDC and denominator from ABS population data). While population data are adjusted for undercount and missing responses to the Indigenous status question, data from the NPDC are not. This, along with changing levels of Indigenous identification over time and across jurisdictions in both the numerator and denominator may affect the accuracy of compiling a consistent time series.

Timeliness The reference period for the data is 2007.

Accuracy Inaccurate responses may occur in all data provided to the Institute. The Institute does not have direct access to perinatal records to determine the accuracy of the data provided. However, the Institute undertakes validation on receipt of data. Data received from states and territories are checked for completeness, validity and logical errors. Potential errors are queried with jurisdictions, and corrections and resubmissions are made in response to these edit queries. The AIHW does not adjust data to account for possible data errors.

Errors may occur during the processing of data by the states and territories or at the AIHW. Processing errors prior to data supply may be found through the validation checks applied by the Institute. This indicator is calculated on data that has been reported to the AIHW. Prior to publication, these data are referred back to jurisdictions for checking and review. The Institute does not adjust the data to correct for missing values. Note that because of data editing and subsequent updates of state/territory databases, and because data are being reported by place of residence rather than place of birth the numbers reported for this indicator differ from those in reports published by the states and territories. The data are not rounded.

There is not full compliance with the Perinatal NMDS for maternal age. New South Wales did not provide full maternal dates of birth for 2007, instead supplying calculated maternal age. The geographical location code for the area of usual residence of the mother is included in the Perinatal NMDS. Less than 0.08 per cent of records could not be assigned to a state or territory of residence. There is no scope in the data element *Area of usual residence of mother* to discriminate temporary residence of mother for the purposes of accessing birthing services from usual residence. The former may differentially impact populations from remote and very remote areas, where services are not available locally.

Data presented by Indigenous status are influenced by the quality and completeness of Indigenous identification of mothers which is likely to differ among jurisdictions. Approximately 0.1 per cent of mothers who gave birth in the reference period had missing Indigenous status information. No adjustments have been made for under-identification or missing Indigenous status information.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (i.e. the denominator is small), or data quality is known to be of insufficient quality.

Coherence Changing levels of Indigenous identification over time and across jurisdictions may affect the accuracy of compiling a consistent time series.

Differential supply of NMDS item Date of birth (used for calculating maternal age) may impact minimally on the cohesion of the data to report over time and across jurisdictions.

Accessibility The AIHW provides a variety of products that draw upon the NPDC. Published products available on the AIHW website are:

- Australia's mothers and babies annual report
- Indigenous mothers and their babies, Australia 2001-2004
- METeOR – online metadata repository
- National health data dictionary.

Ad hoc data are also available on request (charges apply to recover costs).

Interpretability Supporting information on the quality and use of the NPDC are published annually in *Australia's mothers and babies* (Chapter 1), available in hard copy or on the AIHW website. Comprehensive information on the quality of Perinatal NMDS elements are published in *Perinatal National Minimum Data Set compliance evaluation 2001 to 2005.* Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. More detailed information on the quality of

Indigenous data that might affect interpretation of the indicator was published in *Indigenous mothers and their babies, Australia 2001-2004* (Chapter 1 & Chapter 5). Metadata information for the Perinatal NMDS are published in the AIHW's online metadata repository —METeOR, and the National Health Data Dictionary.

Data Quality Statement — Indicator 62: Hospitalisation for injury and poisoning

Key data quality points

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- Data on diagnoses are recorded uniformly using the International statistical classification of diseases and related health problems, 10th revision, Australian modification.
- Numerators for remoteness and socioeconomic status are based on the reported area of usual residence of the patient, regardless of the jurisdiction of residence. Hence there are mismatches between numerators and denominators that affect interpretation of rates.
- Interpretation of rates for jurisdictions should take into consideration cross-border flows, particularly for the ACT.
- The hospital separations data do not include injuries that are treated in the emergency department and do not require admission to hospital.
- Multiple separations may arise from a single injury or poisoning event.
- Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.

Target/Outcome	Social inclusion and Indigenous health
Indicator	The number of hospital separations with a principal diagnosis of injury or poisoning
Measure (computation)	The numerator is the number of hospital separations with a principal diagnosis of injury or poisoning. The denominator is the estimated resident population. A separation is an episode of care for an admitted patient. Injury and poisoning diagnoses are defined by ICD-10-AM codes S00–T98. Calculation is 1,000 × (Numerator ÷ Denominator), presented as a rate per 1,000 and age-standardised to the Australian population as at 30 June 2001 using 5-year age groups to 84 years. Indigenous population data are not available for all states and territories for 5-year age groups beyond 64 years, so Indigenous disaggregations were standardised to 64 years.
Data source/s	*Numerator:* This indicator is calculated using data from the National Hospital Morbidity Database (NHMD), based on the National Minimum Data Set for Admitted Patient Care. *Denominators:* For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2007. For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2007. For data by socioeconomic status: calculated by AIHW using the ABS' Index of Relative Socioeconomic Disadvantage and ERP by Statistical Local Area (SLA) as at 30 June 2007. Each SLA in Australia is ranked and divided into quintiles in a population-based manner, such that each quintile has approximately 20 per cent of the population. For data by remoteness: ABS ERP as at 30 June 2007, by remoteness areas, as specified in the Australian Standard Geographical Classification.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting.

The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance

The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The analyses by remoteness and socioeconomic status are based on Statistical Local Area of usual residence of the patient. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for each remoteness area or SEIFA population group (regardless of the jurisdiction in which the patient resides) divided by the number of people in that remoteness or SEIFA population group in the jurisdiction of hospitalisation. Therefore, there will be mismatches between the numerators and denominators for separation rates. Mismatches are particularly relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction. Hospital separations data do not include injuries that are treated in the emergency department that do not require admission to hospital. Multiple separations may arise from a single injury or poisoning event.

The hospital separations data do not include injuries that are treated in the emergency department and do not require admission to hospital.

Multiple separations may arise from a single injury or poisoning event.

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

Separations are reported by jurisdiction of hospitalisation. The injury event will not necessarily have occurred in the state or territory of hospitalisation.

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of 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.

Inaccurate responses may occur in all data provided to the AIHW, and the AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

Data on diagnoses are recorded uniformly using the International statistical

	classification of diseases and related health problems, 10th revision, Australian modification. The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: NSW, Vic, Qld, SA, WA, NT (NT public hospitals only). Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).
Coherence	The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08*, except that for the Indigenous disaggregation age standardisation is to 64 years here, rather than to 74 as in Australian hospital statistics.
Accessibility	The AIHW provides a variety of products that draw upon the National Hospital Morbidity Database. Published products available on the AIHW website are: • *Australian hospital statistics* with associated Excel tables. • Interactive data cube for Admitted patient care (for Principal diagnoses, procedures and Diagnosis Related Groups).
Interpretability	Supporting information on the quality and use of the National Hospital Morbidity Database are published annually in *Australian hospital statistics* (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage, completeness of coding, the quality of Indigenous data, and changes in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

Data Quality Statement — Indicator 63: Children's hearing loss

Target/Outcome Social inclusion and Indigenous health

Indicator Children's hearing loss.

Measure (Benchmark) Numerator: Number of children aged 0–14 with hearing loss.

Denominator: Number of children aged 0–14.

Data source/s The denominator and numerator for this indicator use ABS National Health Survey (NHS) data, which is weighted to benchmarks for the total NHS in-scope population derived from the Estimated Resident Population (ERP). For information on NHS scope and coverage, see the National Health Survey Users Guide (cat. no. 4363.0.55.001) on the ABS website, www.abs.gov.au.

Estimates for Indigenous persons are drawn from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which was benchmarked to the estimated Indigenous population (adjusted for the scope of the survey).

Institutional environment The NHS and NATSIHS are collected, processed, and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents.

For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

Relevance The NHS and NATSIHS collected information on conditions of the ear and mastoid from two sets of questions. Respondents were first asked whether they had any hearing problems or problems with their ears which had lasted, or was expected to last for six months or more. A list of conditions was provided to respondents. The listed categories were:

- Total deafness
- Deaf in one ear
- Hearing loss/partially deaf
- Tinnitus
- Meniere's Disease
- Otitis Media
- Other (specify)

Later in the survey, respondents were asked to volunteer any long term conditions which they hadn't previously reported, and these may have included some people reporting hearing problems or other conditions of the ear or mastoid.

The specifications for this indicator State that 'hearing loss' should include complete partial deafness or hearing loss, otitis media, and other diseases of the ear and mastoid. Diseases of the ear and mastoid, however, include conditions unrelated to hearing loss, such as 'earache', boils, tinnitus, 'swimmers ear' and excessive cerumen. Including children with these conditions as having hearing loss would result in an overestimate of the number of children with hearing loss.

Consequently, data has been provided in three categories: Hearing loss; Hearing loss and Otitis media; and All conditions of the ear and mastoid as specified in the detailed specifications. The ABS recommends that any data presented as 'hearing loss' should only include children with specific hearing loss. If a broader definition is used, the label should indicate it as such.

Timeliness

The NHS is conducted every three years over a 12 month period. Results from the 2004-05 NHS were released in February 2006.

The NATSIHS is conducted every six years. Results from the 2004-05 survey were released in April 2006.

Accuracy

The NHS is conducted in all States and Territories, excluding very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were also not included in the survey. The exclusion of persons usually resident in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population. The 2007-08 NHS response rate was 91 per cent. NHS data are weighted to account for non-response.

The NATSIHS is conducted in all States and Territories and includes remote and non-remote areas. The 2004–05 sample was 10,000 persons/5,200 households, with a response rate of 81 per cent of households.

As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the scientific methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.

Data for this indicator has no acceptable levels of sampling error for complete and partial deafness only and is considered too unreliable for general use. Data for the groupings ‘Complete and partial deafness’ and ‘All diseases of the ear and mastoid’ has acceptable levels of sample error at the national level, but most data is not considered reliable enough for general use when disaggregated by State or Territory. Most data split by State or Territory and Indigenous status should be used with caution, although it is acceptable at the national level.

Coherence

Questions used in the 2007-08 NHS on long term conditions are comparable with those asked in the 2004-05 NHS and NATSIHS. This data is considered comparable with data from previous surveys back to the 1989 National Health Survey.

The Survey of Disability, Ageing, and Carers is a major source of information on hearing and the effect of hearing loss. The Survey is run 6-yearly, with the latest data available coming from 2003. It collects data from persons in private households as well as in cared accommodation. The survey collects a range of information on hearing, including:

- whether has loss of hearing
- whether limited or restricted by hearing loss
- whether using a hearing aid or cochlear implant improves hearing
- whether uses aids to assist in hearing
- main condition causing loss of hearing
- whether hearing loss is the main cause of disability.

The 2004-05 NATSIHS and 2004-05 NHS had similar data content, shared common elements in the questionnaire, and were processed side by side. The NHS and NATSIHS also collect a range of other health-related information that can be analysed in conjunction with data on use of services and self-assessed health status.

Rates of hearing loss from NHS and NATSIHS rely on respondents

	accurately reporting which conditions they have to an interviewer, or responding on someone's behalf, if that person is too young or otherwise unable to respond. In some cases, particularly for very young children, it is possible that hearing loss may go unrecognised, and will therefore not be reported. Similarly, there may be differences between the presence and extent of hearing impairment reported by a respondent and the level of impairment that would be apparent from a formal audiological assessment.
Interpretability	Information to aid interpretation of the data is available from the National Health Survey User Guide, and the National Aboriginal and Torres Strait Islander Health Survey User Guide on the ABS website.
Accessibility	See National Health Survey, Summary of Results (cat. no. 4364.0) for an overview of results from the NHS, and National Health Survey: State tables (cat. no. 4362.0) for State and Territory specific tables. See the National Aboriginal and Torres Strait Islander Health Survey (cat. no. 4715) for an overview of results from the NATSIHS. Other information from these surveys is also available on request.

Data Quality Statement — Indicator 64: Indigenous Australians in the health workforce (Medical Labour Force Survey and the Nursing and Midwifery Labour Force Survey data)

Key data quality points

- The AIHW Labour Force Surveys, which are the data source for the indicator, were conducted with a focus on the overall professions, rather than Indigenous people.
- Data are presented on medical practitioners, nurses and midwives only. These professions are only a part of the health workforce and exclude Aboriginal Health Workers, a large segment of the Indigenous health workforce.
- For the indicator, data are limited because of the small numbers of Indigenous people identified in the surveys. Small numbers are a result of:
- small Indigenous representation in the Australian population overall;
- smaller Indigenous representation in the health workforce than Australian population overall;
- the fact that in the survey, the Indigenous workers are self-identified and the supply of this information is voluntary
- Considerable caution is advised with state and territory comparisons due to the interaction of these small numbers with the low response rates in some jurisdictions.

Target/ Outcome	Social inclusion and Indigenous health
Indicator	Indigenous Australians in the health workforce (for selected professions of medical practitioners and nurses/midwives)
Measure (computation)	Percentage of total health workforce (for selected professions) who were Indigenous Australians.
Data source/s	AIHW health labour force surveys, state and territory registration board data.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data are estimates from the AIHW National Health Labour Force Survey series which are annual surveys managed by each state and territory health authorities, with the questionnaire administered by the relevant registration board in each jurisdiction as part of the registration renewal process. Under agreement with AHMAC's Health Workforce Principal Committee, the AIHW cleans, collates, manipulates and weights the state and territory survey results to obtain national estimates of the total medical labour force and reports the findings. These data are used for workforce planning, monitoring and reporting. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.
Relevance	This indicator is an interim measure, pending the implementation of the National Registration and Accreditation Scheme (NRAS) in mid-2010. Long term indicators using NRAS data are expected to be available in 2012 and will include a much larger group of health professions. To date, there have been difficulties collecting consistent, quality data on the health workforce and many of these difficulties are expected to be resolved by the shift to NRAS data, particularly that of national consistency. Data are presented on medical practitioners, nurses and midwives only. These professions are only a part of the health workforce and exclude Aboriginal Health Workers, a large segment of the Indigenous health workforce. The estimates for this indicator are based on the weighted responses from the Medical Labour Force Survey and the Nursing and Midwifery Labour Force Survey. The two surveys have been conducted using very similar

methods and measures similar concepts. The survey populations have been drawn from the medical register and the nursing and midwifery register maintained in each state and territory. The registers contain demographic information on all professionals allowed to practise in that state or territory and have been the most suitable framework for surveying the professions.

The states and territories have agreed on the core content of the data collected, but there has been some variation in actual questions asked and in the format of the questionnaire. Where necessary and possible, the AIHW has mapped responses to provide nationally comparable estimates from each survey dataset. The Australian Bureau of Statistics (ABS) standard question was used in the survey to identify Aboriginal and Torres Strait Islander people working in the two health professions, although Victoria and Western Australia combined the response categories. This has not affected the aggregate figures for 'Indigenous'.

The focus of the surveys was the overall profession, rather than Indigenous people and for the indicator, data are limited because the numbers of Indigenous people identified in the surveys were small. Small numbers are a result of:

- small Indigenous representation in the Australian population overall;
- smaller Indigenous representation in the health workforce than Australian population overall;
- the fact that in the survey, the Indigenous workers are self-identified and the supply of this information is voluntary.

The indicators are disaggregated by state/territory information primarily sourced from the registration boards. It should be noted that, in both surveys, response varied considerably across jurisdictions. This, coupled with small numbers resulted in some variation in the reliability of the estimates across jurisdictions. Care should be taken when drawing conclusions about the size of the differences between estimates. Note that, because of data processing problems, the 2007 indicator data for New South Wales are based on estimates produced from 2006 raw survey data.

Estimates were produced from the survey data, after weighting to adjust for non-response. The estimation process for non-response produces numbers of workers in fractions, but these were rounded to whole numbers for publication. For this indicator, data are presented as a percentage which is calculated excluding any records for which Indigenous status was not reported. Percentages for this indicator are calculated on the rounded figures.

Postcode information was collected in the survey although, for the indicator reporting, the quality of data and small numbers of Indigenous workers prevent disaggregation by variables based on postcode (e.g. ASGC Remoteness Areas).

Timeliness

The reference period for the data in the indicator is the 2007 calendar year, except for New South Wales medical practitioner data which are based on responses to the 2006 survey.

In both medical and nursing surveys, the questionnaires were sent out with registration renewal papers by the respective registration boards for the professions and the timing depended on the registration practices for each profession within each jurisdiction.

Accuracy

Data capture and initial processing for the surveys were conducted by the individual state/territory health authorities and the procedures varied. AIHW conducts independent cleaning, editing and manipulation of the data received in order to produce more nationally consistent data. The cleaning and editing procedures included range and logic checks, clerical scrutiny at unit record level and validation of unit record and aggregate data.

The surveys were conducted in conjunction with the registration renewal process, which means people registering as a medical practitioner, nurse or midwife for the first time in the reference year were not sent a questionnaire. In addition, for the medical survey, overseas trained medical practitioners doing postgraduate or supervised training were not surveyed and interns were surveyed in some jurisdictions, only.

There was no sampling undertaken for the data collection, the entire population of re-registrants was targeted. The national response rate in 2007 for the medical survey was 69.9 per cent and for the nursing and midwifery survey it was 49.6 per cent in 2007. The data have undergone imputation for item non-response and weighting to adjust for population non-response. It should be noted that either of these kinds of non-response is likely to introduce some bias in the final survey data and any bias is likely to become more pronounced as response rates decline. Care should be taken when drawing conclusions about the size of the differences between estimates.

Where possible, benchmark data were the number of registered medical practitioners or nurses/midwives in each state and territory, supplied to the AIHW by the state and territory registration boards for each profession. Also if possible, benchmarks were broken down by age group and sex and if the data were not available from the boards this way, benchmark figures were obtained from other sources, such as medical board annual reports. Where available, benchmark data relate to the time the survey was conducted.

When comparing the 2007 AIHW Medical Labour Force Survey estimates of Indigenous medical practitioners across states and territories, note that:

- New South Wales data are based on responses to the 2006 Medical Labour Force Survey. Data from the 2007 survey were not used due to the estimate of employed Indigenous medical practitioners being much larger than that estimated in 2006, indicating a difference of reporting or coding is likely to have occurred.
- The number of medical practitioners in New South Wales, Queensland and Tasmania are slightly underestimated, as the benchmark figures did not include all registered medical practitioners. New South Wales only sent questionnaires to financial registrants holding general, conditional specialist, limited prescribing or non-practising registration. Only medical practitioners holding general, specialist or non-practising registration were surveyed in Queensland. In Tasmania, only general registrants, conditionally registered specialists and non-practising practitioners received a questionnaire.
- Northern Territory data are based on responses to the 2007 Medical Labour Force Survey weighted to 2007 number of registered practitioners by age group and sex (derived by applying 2008 age group by sex proportions to the 2007 total practitioner number), resulting in a response rate equivalent to 27.1 per cent. Care should be taken when interpreting these figures.

When comparing estimates from the 2007 Nursing and Midwifery Labour Force Survey data, state and territory estimates should be treated as indicative only because of low response rates in some jurisdictions, particularly Queensland (33.9 per cent), Western Australia (36.7 per cent) and the Northern Territory (28.7 per cent).

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

Estimates of Indigenous medical practitioners from the 2006 Medical Labour Force Survey have been compared with the ABS 2006 Census of Population and Housing estimates and the AIHW figures were noticeably higher than those from the Census. There are complex reasons for the difference.

The approach to actually identifying Indigenous Australians has been very similar in the two data collections. Both have used the same self-identification question to collect Indigenous status, and both have used a self-enumeration questionnaire. However, it is also possible in both collections for another person to complete the form on behalf of the respondent. Further, there has been investigative work done which shows that a person's propensity to identify as Indigenous can change in different settings. Both these factors can result in different information being collected about Indigenous people.

In addition, a range of significant differences in collection methods exists between the two data sources and, to varying degrees, these contribute to the differences in the figures between the two sources. The following information relates only to the main factors which need to be taken into account when comparing data used for the two components of Indicator #64.

The main factor of concern regarding the estimates of health workers from the Census is undercounting within occupations. For the AIHW health labour force surveys, concerns are low response rates combined with inadequate medical and nursing registration data. Reference should be made to the Data quality statement for indicator #64b when comparing data from the two sources.

The Census

The Census method of open-response coding to assign 'occupation' is known to result in some undercounting of workers in individual occupations.

In the Census, health workers overall, are defined by the ANZSCO using the respondent's hand-written response to the occupation questions. They are then identified in the data file by filtering on ANZSCO codes. As a means of measuring the health workforce, the Census method results in some undercount because the ability to assign an accurate code, or any code at all, is dependent on the level of detail provided by respondents and the legibility of their responses.

Overall in the 2006 Census, there were some 74,913 employed people who did not provide occupation details which could be coded to the ANZSCO and although this is very low overall (less than 1 per cent of all employed people), an unknown number were health workers, and a proportion of those will have been Indigenous Australians. For example, 1,111 of all those who were not assigned an occupation were known to be employed in health related industries (e.g. hospitals, general/specialist practice, ambulance services and residential care facilities).

When comparing figures between the two data sources it should be noted that the scope for health workers is different. In the Census, occupation information is collected about a person's main job, only, and the ANZSCO assigns a health occupation to clinicians, but not to non-clinicians. Therefore, some health workers are excluded from the Census figures.

The AIHW health Labour Force Surveys (AIHW surveys)

Response

Unlike the Census, the AIHW surveys are voluntary and in recent surveys, low response has been a growing problem in some jurisdictions, particularly in the Northern Territory and this has affected the reliability of estimates of Indigenous medical practitioners and nurses.

In the AIHW health labour force surveys, health workers are identified first, by their registration in a health profession (from administrative records) and then, by being employed in that profession (from the surveys), since they must have registration to enable work in the profession. With this approach, problems can exist if updates of the administrative records lag and if people with registration in more than one jurisdiction cannot be assigned to just one in order to obtain national estimates.

Information is collected via the survey to resolve these problems. People with lapsed registration (e.g. retired etc) can be identified and people with multi-registration can be assigned to a single jurisdiction. However, a high level of response to the survey is required so that the responding group of health workers is as close a representation as possible of the health labour force as a whole and that estimation procedures which are applied to account for non-response have a sound statistical basis.

In the two most recent medical surveys and nursing surveys response levels were approximately 70 per cent for medical registrants and 50 per cent for nursing registrants. Of particular note for estimates of Indigenous Australians is that the 2007 nursing survey response in the Queensland, Western Australia and Northern Territory was 34 per cent, 37 per cent and 27 per cent respectively.

Given the size of these responding populations, it is likely their characteristics were different from the health labour force as a whole, introducing some bias with the non-response adjustments applied to survey data. The result is skewness in the distribution of characteristics, such as Indigenous status, whether employed and whether retired from the profession. The overall totals also will have been affected if the adjustments for multiple registrations were subject to bias. However it is not known whether the final survey estimates were underestimates or overestimates.

Registration data

To account for non-response to the AIHW survey, estimates of the total number of health workers are derived from survey responses weighted to registration numbers provided by state and territory medical boards (known as benchmarks). This process relies on quality registration data and correct administration of the survey by the registration boards. Both of these have been quite variable over time and across jurisdictions.

One of the main problems has been that in some surveys and jurisdictions the surveyed population has been different from the benchmark population. This has resulted in the estimates health workers being either artificially low, or artificially high, depending whether registrants were inadvertently omitted or included in the estimation process. This problem is exacerbated as response to the surveys decline.

Reference should be made to the cautions which are included in the Data Quality Statement for Indicator #64b.

Accessibility

Published products available on the AIHW website are:

- Medical Labour Force Survey reports with associated Excel tables.
- Nursing and Midwifery Labour Force Survey reports with associated Excel tables.
- Ad hoc data are available on request (cost recovery charges apply).

Interpretability

Extensive explanatory information for the medical and nursing and midwifery surveys is contained in the published reports and supplementary Excel tables for each, including collection method, scope and coverage, survey response, imputation and weighting procedures, and limitations on utility of estimates for Indigenous Australians. These are available via the AIHW web site and readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator.

For more information comparing data sources of Indigenous health labour force statistics, see the AIHW publication Aboriginal and Torres Islander health labour force statistics and data quality assessment.

Data Quality Statement — Indicator 64: Indigenous Australians in the health workforce (Census of Population and Housing data)

Target/Outcome	Social inclusion and Indigenous health
Indicator	Indigenous Australians in the health workforce.
Measure	Numerator: Number of Indigenous persons in specified health occupations. Denominator: Total number of persons in specified health occupations.
Data source/s	2006 Census of Population and Housing.
Institutional environment	The Census is conducted by the Australian Bureau of Statistics (ABS) under the authority of the Census and Statistics Act 1905. The Act requires that a Census be conducted every 5 years, and at other times as prescribed. The Census includes all people in Australia on Census night, with the exception of foreign diplomats and their families. The Census is collected, processed and published within a legislative framework that ensures the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. All ABS officers (including temporary employees) are legally bound to secrecy under the Act never to release identifiable personal information to any person or organisation outside the ABS. Section 19 of the Act makes it an offence for any past or present ABS officer to divulge, either directly or indirectly, any confidential information collected under this Act. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.
Relevance	The Census collects information on Occupation for all employed people aged 15 years and over. Two questions are used in the Census: 'In the main job held last week, what was the person's occupation? – Give full title'; and 'What are the main tasks that the person usually performs in the occupation?' Occupation is then coded according to the Australian and New Zealand Standard Classification of Occupations (ANZSCO) using these written responses. The 'Commonwealth working definition' of an Aboriginal or Torres Strait Islander is 'a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he or she lives'. In statistical collections, it is not feasible to collect information on the community acceptance part of this definition, and therefore questions on Indigenous Status relate to descent and self-identification only. In practice, people are asked if they are of Aboriginal or Torres Strait Islander origin. Those who identify themselves as of Aboriginal and/or Torres Strait Islander origin are classified as Indigenous persons.
Timeliness	The Census is conducted every five years, with the most recent Census conducted in 2006. Census data on Occupation are available approximately 14 months after the Census date.
Accuracy	Extensive effort is put into Census form design, collection procedures and processing to minimise potential error. There are four principle sources of error in Census data: respondent error, processing error, partial/non-response and undercount. Information on Indigenous status is captured automatically from check box responses so the risk of processing error is minimal. Sample checks of the data are undertaken to ensure an acceptable level of quality. The overall non-response rate for Indigenous status for 2006 was 5.7 per

cent. Most of this non-response (4.1 per cent) is attributable to persons in dwellings which were occupied on Census Night but which did not return a completed form (i.e. dwelling non-response). Persons are imputed into these dwellings (based on information on the number of persons in the dwelling if available), along with demographic characteristics, however Indigenous status is not imputed and remains 'not stated'. In some States and the Northern Territory, the number of Aboriginal people counted in the Census in some urban areas and regional towns is below what might be expected based on 2001 Census results. Affected areas appear mostly to have been areas where there were issues with the recruitment and retention of Census Collectors. These areas tend to have higher numbers of non-responding dwellings, and evidence suggests that these dwellings may have contained higher than average proportions of persons of Indigenous origin. It may therefore be the case that Indigenous persons in the health workforce may be more likely to not respond to the Census than non-Indigenous persons in the health workforce, which would lead to an underestimation of this indicator value.

Undercounting of Indigenous Australians may also introduce an underestimation bias into the results. The net Census undercount for Indigenous Australians was estimated at 11.5 per cent, higher than the net undercount for non-Indigenous Australians (2.7 per cent).

Occupation is coded with reference to the responses to the two occupation questions as provided by respondents. The quality of information on Occupation is therefore affected by the level of detail provided by respondents and the ease with which responses can be coded.

A principle of occupation coding is to allocate responses to the most descriptive and detailed level possible from the information supplied by respondents. If a response is not detailed enough to allow coding to the most detailed level of the classification, it is coded to the most detailed level possible, and a not further defined (nfd) code is allocated. Standard automatic coding procedures were used to code 62.4 per cent of responses, with remaining responses coded using clerical procedures. All processes are subject to sample checks to ensure an acceptable level of quality.

Census data can be used for the analysis of population characteristics at fine geographic levels and for small sub-groups. However at detailed levels of disaggregation, outliers (unusual results) may become more apparent.

Quality statements for the data items are available, (see Census Data Quality Statement, and data quality statements for Occupation and Indigenous Status).

Coherence

The data items used to construct the measures are consistent and comparable, and support assessment of change between Census years.

The Australian and New Zealand Standard Classification of Occupation (ANZSCO) has been used in all ABS collections with education items since 2006 and allows the occupation items between different collections to be compared. Census responses were also coded to the previous version of the classification, ASCO, to facilitate comparison with previous Censuses.

There are three main sources of data on the health workforce. The five-yearly Census of Population and Housing, the monthly ABS Labour Force survey, and AIHW Health Labour Force surveys.

As a sample survey, the ABS Labour Force survey is subject to sampling error. While sampling error will generally be within acceptable levels for national and State/Territory level information, detailed cross-tabulations (such as Indigenous persons in particular occupations by State) will be subject to high levels of sampling error and be subject to confidentiality concerns. For this reason, the monthly ABS Labour Force survey was not considered as a potential data source for this indicator.

There are a number of differences between the Census and the AIHW Labour Force surveys that might affect their comparability. Reference should be made to the Data Quality Statement for Indicator 64a when comparing the two data sources.

The AIHW surveys use a sample frame of persons registered with the relevant registration boards for that profession, regardless of employment status. Respondents are generally targeted via the registration renewal process for their profession in each jurisdiction and the entire population of registrants is sent a questionnaire. Information is then collected in the survey on labour force status, demographic characteristics (including Indigenous status using the standard identification question), specialist field, and qualifications.

The AIHW surveys are voluntary and have relatively high rates of non-response. Of particular relevance to the quality of estimates for Indigenous Australians, the response rate in 2007 in the Northern Territory was approximately 27 per cent.

To account for non-response to the AIHW surveys, estimates are weighted or benchmarked to registration numbers provided by State and Territory registration boards. This relies on up to date and reliable registration data, which may differ across time and between jurisdictions.

Some Indigenous health workers are likely to be missed through not identifying as Indigenous on the survey form. In addition, among those who do not respond to the survey, some will be Indigenous persons. If the characteristics of those that respond are different from those that do not respond, bias in the distribution of characteristics (including Indigenous status) will be introduced with this non-response adjustment. However it is not known whether the final survey estimates were overestimates or underestimates.

Differences in published numbers may also be as a result of differences between the Census occupation definitions according to ANZSCO, and the definitions used in the AIHW surveys.

The number of Indigenous health workers may change over time due to real changes in the number of Indigenous health professionals, changes in response rates, or changes in Indigenous identification. The number of persons with a characteristic seldom changes rapidly. A good indication of quality of a particular data source is therefore its stability over time. Change in variables over time should be gradual. Large fluctuations over time are indicative of a data quality issue and/or small numbers involved.

Interpretability

For information to aid interpretation of Census data, see Census Reference and Information on the ABS website, www.abs.gov.au.

For more information comparing data sources of Indigenous health labour force statistics, see the AIHW publication Aboriginal and Torres Islander health labour force statistics and data quality assessment.

Accessibility

See Census Products and for standard products available from the Census. Data is also available on request.

Data Quality Statement — Indicator 65: Net growth in health workforce

Key data quality points

- Results of the surveys are estimates because the raw data have undergone imputation and weighting to adjust for non-response. It should be noted that any of these adjustments may have introduced some bias in the final survey data and any bias is likely to become more pronounced as response rates decline.
- Care should be taken when drawing conclusions about the size of the differences between estimates.
- Care is also advised with state and territory comparisons because of low response rates in some jurisdictions.

Target/Outcome	Sustainability
Indicator	Net growth in health workforce (for selected professions)
Measure (computation)	Percentage change in the Full-time Equivalent number of health workers (for selected professions) between two reference years.
Data source/s	AIHW health labour force surveys, state and territory registration board data.
Institutional environment	The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data are estimates from the AIHW National Health Labour Force Survey series which are annual surveys managed by each state and territory health authority, with the questionnaire administered by the relevant registration boards in each jurisdiction as part of the registration renewal process. Under agreement with AHMAC's Health Workforce Principal Committee, the AIHW cleans, manipulates, collates and weights the state and territory survey results to obtain national estimates of the total medical labour force and reports the findings. These data are used for workforce planning, monitoring and reporting. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.
Relevance	This indicator is an interim measure, pending the implementation of the National Registration and Accreditation Scheme (NRAS) in mid-2010. Long term indicators using NRAS data are expected to be available in 2012 and will include a much larger group of health professions. To date, there have been difficulties collecting consistent, quality data on the health workforce and many of these difficulties are expected to be resolved by the shift to NRAS data, particularly that of national consistency. The estimates for this indicator are based on the weighted responses from the AIHW surveys of the Medical Labour Force, the Nursing and Midwifery Labour Force and the Dental Labour Force. The three surveys have been conducted using very similar methods and measure similar concepts. The survey populations have been drawn from the respective professional registers for these occupations, maintained by each state and territory registration board. The registers contain demographic information on all professionals allowed to practise in that state or territory and have been the most suitable framework for surveying the professions. The surveys have been designed to measure employment-related activity for each profession. The states and territories have agreed on the core content of the data collected, but there has been some variation in actual questions asked and in the questionnaire format. Where necessary and possible, the AIHW has mapped responses to provide nationally comparable estimates from each survey. Reference periods differed across jurisdictions but were within a single calendar year. The questionnaires were generally sent out with registration

renewal papers by the respective registration boards for the professions, with survey timing depending on the registration practices for each profession within each jurisdiction.

The indicators are disaggregated by state/territory information primarily sourced from the registration boards. It should be noted that response varied considerably across jurisdictions resulting in some variation in the reliability of the estimates.

Estimates were produced from the survey data, after weighting to adjust for non-response. For this indicator, data are presented as a full-time equivalent (FTE) number of health professionals. FTE = (number of employed professionals in each profession × average hours worked) ÷ the standard working week for each profession. The clinician/non-clinician disaggregation is based on work activity of main job.

For the indicator reporting, the standard working week for medical practitioners is 40 hours and 38 hours for nurses/midwives and dentists. AIHW labour force reports also present FTE data based on 38, 40 and 45 hour working weeks for medical practitioners, 35 and 38 hour weeks for nurses and midwives and 35, 37.5 and 40 hour weeks for dentists.

Postcode information was collected although, for the indicator reporting, its quality does not support disaggregation by variables based on postcode. Data disaggregation by the AGSC Remoteness Areas is to be assessed for possible inclusion in future indicator reporting, pending further investigation into the quality of postcode information available.

The indicator is intended to measure the percentage change in the health workforce. For 2010 reporting, data are available for the health professions of medical practitioner, nurse/midwife and dentist. The medical workforce measure has two components, change between 2006 and 2007 and change between 2005 and 2006, to allow comparisons with the nursing and midwifery workforce measure of change between 2005 and 2007, because there are no nursing data for 2006, and allow comparisons with the most recent dentist workforce data (2005 and 2006).

Timeliness

The reference periods for the indicator data from the Medical Labour Force Survey are the 2005, 2006 and 2007 calendar years. The reference periods for the indicator data from the Nursing and Midwifery Labour Force Survey are the 2005 and 2007 calendar years. The reference periods for the indicator data from the Dental Labour Force Survey are the 2005 and 2006 calendar years.

Accuracy

Data capture and initial processing of the survey data were undertaken by the individual state/territory health authorities and the procedures varied. AIHW conducts independent cleaning, editing and manipulation of the data received in order to produce more nationally consistent data. The cleaning and editing procedures included range and logic checks, clerical scrutiny at unit record level and validation of unit record and aggregate data.

The surveys were conducted in conjunction with the registration renewal process and as a result, people registering in a profession for the first time in the reference year were not sent a questionnaire. The Dental Labour Force Survey was similar except for Western Australia and Tasmania. A direct mail-out to dentists was conducted, separate from the registration process in these two states; and there was one reminder mail-out. For the medical survey, practitioners with conditional registration have not always been included. Overseas trained medical practitioners doing postgraduate or supervised training were not surveyed and interns were surveyed in some jurisdictions, only.

There was no sampling undertaken for the data collection, the entire population of re-registrants was targeted. The national response rate for the medical survey was 71.3 per cent in 2005, 70.2 per cent in 2006 and

69.9 per cent in 2007. The national response rate for the nursing and midwifery survey was 55.0 per cent in 2005 and 49.6 per cent in 2007. The national response rate to the Dental Labour Force Survey was 83.4 per cent in 2005 and 79.6 per cent in 2006. It should be noted that some dental boards did not include all registered practitioners in the survey as some practitioners registering for the first time were not forwarded a questionnaire.

The data have undergone imputation for item non-response and weighting to adjust for population non-response. It should be noted that either of these kinds of non-response is likely to introduce some bias in the final survey data and any bias is likely to become more pronounced as response rates decline. Care should be taken when drawing conclusions about the size of the differences between estimates.

Where possible, benchmark data were the number of registered medical practitioners, nurses/midwives or dentists in each state and territory, supplied to the AIHW by the state and territory registration boards for each profession. Also if possible, benchmarks were broken down by age group and sex and if the data were not available from the boards this way, benchmark figures were obtained from other sources, such as registration board annual reports. Where available, benchmark data relate to the time the survey was conducted. Details of the benchmarks supplied by the states and territories for each survey can be found in the published survey reports on the AIHW website.

It should be noted that in the Medical Labour Force Survey and the Nursing and Midwifery Survey, comparability between jurisdictions is limited by differences between the surveyed population and the available benchmark data. Currently there is no information available about the effect of theses differences on the indicator data.

As a result, the following should be noted when comparing state and territory indicator data from the Medical and Nursing and Midwifery Labour Force Surveys.

The Medical Labour Force Survey:

- In 2007, New South Wales registration numbers were based on financial general registrants, conditionally registered specialists, limited prescribing and non-practising medical practitioners only, resulting in an underestimate of the total number of practitioners in that state.
- In 2007, the Queensland registration numbers did not include all conditionally registered medical practitioners and for 2005 and 2006, registration numbers were based on general registrants (including specialists) and conditionally registered specialists only, resulting in an underestimate of the total number of practitioners in that state.
- In 2005, the Western Australia survey was administered to both general and conditional registrants but benchmark figures were for general registrants only, resulting in an underestimate of the total number of practitioners in that state.
- In 2005, 2006 and 2007, Tasmania registration numbers were based on general registrants, conditionally registered specialists and non-practising practitioners only, resulting in an underestimate of the total number of practitioners in that state.
- The 2007 Northern Territory estimates were based on the 2007 registration total figure which was prorated to the 2008 age by sex distribution of registrations, resulting in some bias in the survey estimates for that territory. In 2006 estimates were based on 2007 survey data weighted to 2006 benchmarks. In 2005 estimates were based on 2004 survey data weighted to 2005 benchmarks.

The Nursing and Midwifery Labour Force Survey:

- For 2007, state and territory estimates should be treated with caution due to low response rates in some jurisdictions, particularly Victoria (39.9 per cent). Queensland (33.9 per cent), Western Australia (36.7 per cent) and the Northern Territory (28.7 per cent).
- For 2005, the nursing and midwifery survey data for Victoria were not available, and in order to produce national estimates, the 2006 Victorian survey responses were weighted to 2005 benchmarks, resulting in some bias in the distribution of workforce data for that state.
- For 2005, estimates for Western Australia should be treated with caution due to the low response rate (26.9 per cent).
- For 2005, estimates for the Northern Territory were not shown separately in the published survey report due to the very low response rate to the survey in that jurisdiction (13.7 per cent).

As a result of the estimation process used for non-response, numbers of medical practitioners, nurses/midwives or dentists may be in fractions, but were rounded to whole numbers for publication. The FTE calculation for medical practitioners and nurses/midwives is based on rounded numbers and the FTE calculation for dentists is based on unrounded numbers.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

Coherence

Comparability of estimates for the medical workforce between 2005, 2006 and 2007 is limited by differences in coverage of the available benchmark across years (see Accuracy, dimension four, above). Care should be taken when drawing conclusions about the size of the differences between estimates across these years.

Currently there is no information available about the effect of theses differences on the indicator data.

Some broad level comparisons of workforce percentage growth have been made between the Medical Labour Force Surveys, the ABS Census of Population and Housing and the Medicare administrative data. All sources showed upward trends although, comparisons have been greatly limited by the significant differences in collection method, scope, coverage and definitions between the data sources.

Accessibility

Published products available on the AIHW website are:

- Medical Labour Force Survey reports with associated Excel tables.
- Nursing and Midwifery Labour Force Survey reports with associated Excel tables.
- Dental Labour Force Survey reports.
- Ad hoc data are available on request (cost recovery charges apply).

Interpretability

Extensive explanatory information for the medical, the nursing and midwifery and the dental surveys is contained in the published reports and supplementary Excel tables for each, including collection method, scope and coverage, survey response, imputation and weighting procedures. These are available via the AIHW web site and readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator.

Data Quality Statement — Indicator 66: Public health program expenditure as a proportion of total health expenditure

Key data quality points

- The AIHW health expenditure database is a comprehensive collection of expenditure data across all jurisdictions, and the private sector, and encompasses all areas of health expenditure from hospitals to medical services to public health activities.
- The indicator excludes small amounts of expenditure by state and territory governments that are funded by non-government sources (in the form of fees-for-service, etc). This amounted in 2007-08 to $30 million out of $2129 million (1.4 per cent).
- The numerator includes only funding from the health departments in the various jurisdictions. It does not include activities undertaken, for example, in education departments that do not receive funding from the health department in a state or territory. It also excludes any expenditure on public health activities undertaken or funded by the Department of Veterans' Affairs.

Target/Outcome	Sustainability
Indicator	Public health expenditure as a proportion of total health expenditure
Measure (computation)	The numerator used in the compilation of this indicator is the estimate of spending on public health from the AIHW's health expenditure database. The denominator is the estimate of total recurrent health expenditure from the AIHW's health expenditure database.
Data source/s	All data are sourced from the Australian Institute of Health and Welfare (AIHW) health expenditure database.
Institutional environment	The AIHW has calculated this indicator. The data that are incorporated into the AIHW health expenditure database were supplied by a variety of data providers, including the DVA and DoHA, state and territory health authorities, PHIAC, ABS and injury compensation insurers. In the case of medical services and benefit-paid pharmaceuticals, they are sourced from the Medicare and the Pharmaceutical Benefits Scheme statistics, respectively. Many of the ultimate sources of these data are the financial reporting systems of the various organisations. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.
Relevance	The AIHW health expenditure database is a comprehensive collection of expenditure data across all jurisdictions, and the private sector, and encompasses all areas of health expenditure from hospitals to medical services to public health activities. This indicator is regarded as a long-term indicator of public health effort and sustainability. Public health activities that are not the subject of funding by state and territory governments or the Australian Government through the major jurisdictional health departments are not included in the estimates on which the indicator is based. Public health expenditure in the indicator for 2007-08 excludes Australian Government expenditure on regulatory bodies such as the Therapeutic Goods Administration, Office of Gene Technology Regulator and National Industrial Chemicals Notification and Assessment Scheme that are largely funded from private revenues. Public health expenditure funded by the states and territories excludes $30 million funding by non-government sources that cannot be allocated to individual activities.

Timeliness	The reference period for this data set is 2007–08.
Accuracy	The AIHW develops, on advice from the National Public Health Expenditure Project's Technical Advisory Committee, comprehensive guidelines to accompany the annual questionnaires that are sent to the Australian government and state and territory health departments. These guidelines assist in ensuring that the data provided are consistent and comprehensive across jurisdictions. The AIHW undertakes checking of the data including comparisons of jurisdictions and over time.
Coherence	The data here are consistent with what are published in *Public health expenditure in Australia 2007-0*8 and *Health expenditure Australia 2007-08.*
Accessibility	The AIHW publishes a number of products that draw upon its health expenditure database. Published products available on the AIHW website are: • *Health expenditure Australia* and associated Excel tables • *Public health expenditure Australia* and associated Excel tables • Interactive data cubes
Interpretability	Supporting information on the quality and use of data from the Institute's health expenditure database are published annually in *Health expenditure Australia* (Chapter 6 & technical appendixes in the edition covering 2007–08) and in Appendices A to C in *Public health expenditure in Australia, 2007-08*.

Data Quality Statement — Indicator 67: Capital expenditure on health and aged care facilities as a proportion of capital consumption expenditure on health and aged care facilities

Key data quality points

- The AIHW health expenditure database is a comprehensive collection of expenditure data across all jurisdictions, and the private sector, and encompasses all areas of health expenditure from hospitals to medical services to public health activities.
- The indicator includes expenditure on publicly owned and/or controlled health and aged care facilities only. A very small amount of capital expenditure for the community aged care sector by State health authorities has been excluded, as it is so small it would be unreliable to report it.
- Expenditure by local government and non-government providers of health and aged care services are excluded.

Target/Outcome	Sustainability
Indicator	Government capital expenditure on publicly owned and/or controlled health and aged care facilities as a proportion of government funded capital consumption expenditure on publicly owned and/or controlled health and aged care facilities
Measure (computation)	Numerator: Estimate of capital expenditure on publicly owned and/or controlled health and aged care facilities (excluding local government facilities). Denominator: Estimate of capital consumption on publicly owned and/or controlled health and aged care facilities (excluding local government facilities) Computation: Numerator ÷ Denominator
Data source/s	Data are sourced from the Australian Institute of Health and Welfare (AIHW) health expenditure database. The underlying data for capital expenditure and capital consumption are sourced from the ABS collection of Government Finance Statistics.
Institutional environment	The AIHW has calculated this indicator. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website. For information on the institutional environment of the ABS, please see the ABS Institutional Environment.
Relevance	The AIHW health expenditure database is a comprehensive collection of expenditure data across all jurisdictions, and the private sector, and encompasses all areas of health expenditure from hospitals to medical services to public health activities. Capital expenditure represents additions to the gross capital stock for the health and aged care sector. Capital consumption (depreciation) represents subtractions from the gross capital stock. The ratio of the two therefore gives an indication of whether the gross capital stock is increasing or decreasing. GFS enables policy makers and users to analyse the financial operations and financial position of the public sector by the level of government, institutional sector or set of transactions.
Timeliness	The reference period for this data set is 2007–08.
Accuracy	National and state/territory estimates of capital expenditure and capital consumption for 2007–08 were derived from the Government Finance Statistics (GFS) series published by the ABS. The system of GFS provides details of revenues, expenses, cash flows and

assets and liabilities of the Australian public sector and comprises units which are owned by the Commonwealth, state and local governments. The Australian system of GFS is designed to provide statistical information on public sector entities in Australia classified in a uniform and systematic way.

The system of GFS is based on international standards set out in the System of National Accounts 1993 (SNA93) and the International Monetary Fund's Government Finance Statistics Manual 2001 (GFSM 2001).

The main influence on the accuracy of the ABS Government Finance Statistics data is non-sampling error. Non-sampling error arises from inaccuracies in collecting, recording and processing the data. The most significant of these errors are misreporting of data and processing errors. Every effort is made by the ABS to minimise error by working closely with data providers, training processing staff and having efficient data processing procedures.

For practical reasons the ABS does not attempt to cover all economic activity of the public sector. Under-coverage can arise because units are omitted or because some activities are not covered. This only occurs when the economic activity of these units is relatively insignificant.

Revisions are made as required as a result of new and updated information available from providers.

Coherence The data here are consistent with what are published in *Health expenditure Australia*

Accessibility The data that are used in the development of this indicator are sourced from the AIHW’s health expenditure database. The AIHW publishes a number of products that draw upon its health expenditure database. Published products available on the AIHW website are:

- Health expenditure Australia and associated Excel tables.
- Interactive data cubes

Interpretability Supporting information on the quality and use of data from the Institute’s health expenditure database are published annually in *Health expenditure Australia* (Chapter 6 and technical appendixes in the edition covering 2007–08).

Data Quality Statement — Indicator 68: Proportion of health expenditure spent on health research and development

Key data quality points

- The AIHW health expenditure database is a comprehensive collection of expenditure data across all jurisdictions, and the private sector, and encompasses all areas of health expenditure from hospitals to medical services to public health activities.
- The estimation of expenditure on health research for 2007-08 is based on an extrapolation of results from the 2004-05 and 2006-07 ABS Research and Experimental Development Surveys. State and territory expenditure data are not collected directly, but are estimated by the AIHW; estimates should be treated with caution.
- Research in higher education organisations is reported on a calendar year basis, and the expenditure for calendar year 2006 is included by the ABS and AIHW in reporting for overall research expenditure for fiscal year 2006-07.
- Expenditure on research, and total health expenditure, reported for each state and territory refers to expenditure occurring within that state or territory, regardless of the source of the funds. Hence, research undertaken in one state could be partly funded by the government of another state.

Target/Outcome	Sustainability
Indicator	Proportion of health expenditure spent on health research and development
Measure (computation)	The numerator used in the compilation of this indicator is the estimate of spending on health research from the AIHW's health expenditure database. The denominator is the estimate of total recurrent health expenditure from the AIHW's health expenditure database. Calculation: 100 × (Numerator ÷ Denominator)
Data source/s	All data are sourced from the Australian Institute of Health and Welfare (AIHW) health expenditure database. The AIHW estimates of research expenditure are derived from unpublished ABS data collected from government, private and non-profit organisation, and higher education institutions, in the biennial *Survey(s) of Research and Experimental Development*.
Institutional environment	The AIHW has calculated this indicator. The data that are incorporated into the AIHW health expenditure database were supplied by a variety of data providers, including the DVA and DoHA, state and territory health authorities, PHIAC, ABS and injury compensation insurers. In the case of medical services and benefit-paid pharmaceuticals, they are sourced from the Medicare and the Pharmaceutical Benefits Scheme statistics, respectively. Many of the ultimate sources of these data are the financial reporting systems of the various organisations. The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.
Relevance	The AIHW health expenditure database is a comprehensive collection of expenditure data across all jurisdictions, and the private sector, and encompasses all areas of health expenditure from hospitals to medical services to public health activities. This indicator is regarded as a long-term indicator of research effort and sustainability in Australia. Research that is funded by commercial business enterprises is not included in the estimates of expenditure on research, because that expenditure is an input to the production of health goods and services and is therefore

implicitly included in the expenditure on health goods and services, such as pharmaceuticals, to which the research relates.

When making comparisons between jurisdictions, it should be borne in mind that the state or territory identified in the numerator is the state or territory in which the research activity, to which the expenditure relates, was undertaken. It is not necessarily the state or territory that provided the funding for that research.

Timeliness The reference period for this data set is 2007–08.

Accuracy National and state/territory estimates of expenditure on health research for 2007-08 have been derived by the AIHW by extrapolating national results from the ABS *Research and Experimental Development Surveys,* 2004-05 and 2006-07 and estimating state and territory expenditures. While the ABS makes every effort to ensure correct and consistent reporting the data collected has been self-classified by respondents and may be affected by non-sampling errors. In particular, many smaller institutions do not maintain records of health research effort by specific field of research or socio-economic objective.

Where possible data for use in constructing the denominator are sought and received using standard data collection instruments with guidelines.

The AIHW develops, with advice from major data providers, comprehensive guidelines to accompany the annual questionnaires that are sent to state and territory health departments. These guidelines assist in ensuring that the data provided are consistent and comprehensive across jurisdictions. The AIHW undertakes checking of the data including comparisons of jurisdictions and over time.

Coherence The data here are consistent with what is published in *Health expenditure Australia*

Accessibility The data that are used in the development of this indicator are sourced from the AIHW's health expenditure database. The AIHW publishes a number of products that draw upon its health expenditure database. Published products available on the AIHW website are:

- Health expenditure Australia and associated Excel tables.
- Interactive data cubes

Interpretability Supporting information on the quality and use of data from the Institute's health expenditure database are published annually in *Health expenditure Australia* (Chapter 6 and technical appendixes in the edition covering 2007-08).

Data Quality Statement — Indicator 69: Cost per casemix adjusted separation

Key data quality points

- The NHMD and NPHED are comprehensive datasets. The NHMD has records for all separations of admitted patients from essentially all public hospitals in Australia. The NPHED contains information on hospital recurrent expenditure for essentially all public hospitals in Australia.
- The calculation of the cost per casemix adjusted separation is sensitive to a number of deficiencies in available data:
  - the proportion of recurrent expenditure that relates to admitted patient care is estimated in different ways in different hospitals and is not always comparable
  - capital costs are not included in the numerator. While depreciation information is provided by most jurisdictions, this may vary across states and territories
  - only cost weights applicable to acute care separations are available, so these have been applied to all separations, including the 3 per cent that were not acute
  - the proportion of patients other than public patients can vary, and the estimation of medical costs for these patients (undertaken to adjust expenditure to resemble what it would be if all patients had been public patients) is subject to error
- Interpretation of the cost per casemix-adjusted separation should also take into account variations in costs that may be beyond the call of jurisdictions. For example, the Northern Territory has high staffing and transport costs and treats a greater proportion of Aboriginal and Torres Strait Islander patients than other jurisdictions.

Target/Outcome	Sustainability
Indicator	Average cost per case mix-adjusted separation for acute and non-acute care in public and private hospitals
Measure (computation)	The average cost per case mix-adjusted separation for acute and non-acute care in public hospitals. The formula used to calculate the cost per casemix adjusted separation is: $\frac{\textit{Recurrent expenditure} \times \textit{IFRAC}}{\textit{Total separations} \times \textit{Average cost weight}}$ Where Recurrent expenditure is as defined by the recurrent expenditure data elements in the National Minimum Data Set for Public Hospital Establishments IFRAC (admitted patient cost proportion) is the estimated proportion of total hospital expenditure that relates to admitted patient care Total separations excludes Newborns without qualified days, and records that do not relate to admitted patients (Hospital boarders and Posthumous organ procurement) Average cost weight is calculated from the National Hospital Morbidity Database, using the 2007-08 Australian Refined Diagnosis Related Group (AR-DRG) version 5.1 cost weights published by the Department of Health and Ageing.
Data source/s	This indicator is calculated using data from the National Public Hospital Establishments Database (NPHED) and the National Hospital Morbidity Database (NHMD). The NPHED contains information on public hospital expenditure and estimates of the proportion of recurrent expenditure attributed to admitted patient care. The NPHED is based on the National Minimum Data Set (NMDS) for Public hospital Establishments. The NHMD is the source of data on casemix adjusted separations for public hospitals. The NHMD is based on the NMDS for Admitted patient care. Casemix

adjusted separations are calculated by the application of cost weights sourced from the Department of Health and Ageing’s National Hospital Cost Data Collection for each separation’s recorded AR-DRG.

Institutional environment

The Australian Institute of Health and Welfare (AIHW) has calculated this indicator. The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public hospitals. States and territories use these data for service planning, monitoring and internal and public reporting.

The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.

States and territories supplied these data under the terms of the National Health Information Agreement (see link).

http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc

Relevance

The purpose of the NMDS for Public hospital establishments is to collect information on the characteristics of public hospitals and summary information on non-admitted services provided by them. The scope is public hospitals in Australia, including public acute hospitals, psychiatric hospitals, drug and alcohol hospitals and dental hospitals in all states and territories. The collection covers hospitals within the jurisdiction of the state and territory health authorities. Hence, public hospitals not administered by the state and territory health authorities (hospitals operated by the Department of Health and Ageing, or correctional authorities for example, and hospitals located in offshore territories) are not included. The collection does not include data for private hospitals.

The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS 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 may also be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

The scope of the analysis includes public hospitals that provide mainly acute care. These are the hospitals in the public hospital peer groups of *Principal referral and specialist womens’ and children’s hospitals*, *Large hospitals*, *Medium hospitals*, and *Small acute hospitals*. Excluded are *Small non-acute hospitals*, *Multi-purpose services*, *Hospices*, *Rehabilitation hospitals*, *Mothercraft hospitals*, *Other non-acute hospitals*, *Psychiatric hospitals*, and hospitals in the *Unpeered and other hospitals* peer group. Also excluded are hospitals for which expenditure or admitted patient care data were incomplete, although most of these were excluded for other reasons (for example they are small non-acute hospitals).

Timeliness

The reference period for this data set is 2007–08.

Accuracy

For 2007–08, coverage of the NPHED was essentially complete.

The data are defined in the NMDS for Public hospital establishments. However, differences in admission practices, counting and classification practices across jurisdictions may affect the comparability of these data.

For 2007–08, almost all public hospitals provided data for the NHMD, with the exception of a mothercraft hospital in the ACT.

Inaccurate responses may occur in all data provided to the AIHW, and the

AIHW does not have direct access to jurisdictional records to determine the accuracy of data provided. However, routine data quality checks are conducted by the states and territories prior to submission to the AIHW. The AIHW then undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. 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.

The calculation of the cost per casemix adjusted separation is sensitive to a number of deficiencies in available data:

The proportion of recurrent expenditure that relates to admitted patient care is estimated in different ways in different hospitals and is not always comparable

Capital costs are not included in the numerator. While depreciation information is provided by most jurisdictions, this may vary across states and territories

Only cost weights applicable to acute care separations are available, so these have been applied to all separations, including the 3 per cent that were not acute.

The proportion of patients other than public patients can vary, and the estimation of medical costs for these patients (undertaken to adjust expenditure to resemble what it would be if all patients had been public patients) is subject to error.

Cells have been suppressed to protect confidentiality (where the numerator would identify a single service provider).

Coherence The information presented for this indicator is calculated using the same methodology as data published in *Australian hospital statistics 2007–08*. This information has been recalculated based on 2007-08 AR-DRG version 5.1 cost weights (DoHA 2009).

Accessibility The AIHW provides a variety of products that draw upon the NHMD and the NPHED. Published products available on the AIHW website include:

Australian hospital statistics with associated Excel tables

On-line interactive data cubes for Public hospital establishments.

Interpretability Supporting information on the quality and use of the NPHED and NHMD are published annually in *Australian hospital statistics* (particularly chapters 3, 4 and technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage, completeness of coding, changes in accounting methodsand changes in service delivery that might affect interpretation of the published data. Metadata information for the NMDS for Public hospital establishments and Admitted patient care are published in the AIHW's online metadata repository —METeOR, and the *National health data dictionary*.

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Acronyms and abbreviations

ABF	activity based funding
ABS	Australian Bureau of Statistics
ACAP	Aged Care Assessment Program
ACAT	Aged Care Assessment Team
ACIR	Australian Childhood Immunisation Register
ACSQHC	Australian Commission on Safety and Quality in Health Care
AIHW	Australian Institute of Health and Welfare
ANZDATA	Australian and New Zealand Dialysis and Transplant Register
AVS	Adult Vaccination Survey
BMI	body mass index
CACP	Community Aged Care Packages
CDMS	Centralised Data Management Service
Census	ABS Census of Population and Housing
COAG	Council of Australian Governments
CRC	COAG Reform Council
DoHA	Department of Health and Ageing
DQS	Data Quality Statement
DRG	Diagnosis Related Group
DVA	Department of Veterans’ Affairs
EACH	Extended Aged Care at Home
ERP	Estimated Resident Population
FTE	full time equivalent
GP	general practitioner
HACC	Home and Community Care
HRS	Health Risk Survey
ICD	International Classification of Diseases
IGA	Intergovernmental Agreement
MBS	Medicare Benefits Schedule

MRSA	Methicillin-resistant *Staphylococcus aureus*
NA	National Agreement
NATSIHS	ABS National Aboriginal and Torres Strait Islander Health Survey
NATSISS	ABS National Aboriginal and Torres Strait Islander Social Survey
NHA	National Healthcare Agreement
NDSS	National Diabetes Services Scheme
NDTIS	National Dental Telephone Interview Survey
NHMRC	National Health and Medical Research Council
NHLFS	National Health Labour Force Survey
NHS	National Health Surveys
NMDS	National Minimum Data Set
NP	National Partnerships
NPDC	National Perinatal Data Collection
PMHA	Private Mental Health Alliance
RSE	relative standard error
SAB	Staphylococcus aureus bacteraemia
SEIFA	Socioeconomic Index for Areas
SES	socioeconomic status
SPP	Special Purpose Payment
STI	sexually transmitted infection
TCP	Transition Care Program
VHC	Veterans' Home Care

Glossary

Acute care	Clinical services provided to admitted or non-admitted patients, including managing labour, curing illness or treating injury, performing surgery, relieving symptoms and/or reducing the severity of illness or injury, and performing diagnostic and therapeutic procedures. Most episodes involve a relatively short hospital stay.
Admitted patient	A patient who has undergone a formal admission process in a public hospital to begin an episode of care. Admitted patients may receive acute, sub-acute or non-acute care services.
Age standardised	Removing the effect of different age distributions (across jurisdictions or over time) when making comparisons, by weighting the age-specific rates for each jurisdiction by the national age distribution.
Allied health (non-admitted)	Occasions of service to non-admitted patients at units/clinics providing treatment/counselling to patients. These include units providing physiotherapy, speech therapy, family planning, dietary advice, optometry and occupational therapy.
Casemix adjusted separations	The number of separations adjusted to account for differences across hospitals in the complexity of episodes of care.
Emergency department waiting times to service delivery	The time elapsed for each patient from presentation to the emergency department (that is, the time at which the patient is clerically registered or triaged, whichever occurs earlier) to the commencement of service by a treating medical officer or nurse.
ICD-10-AM	The Australian modification of the International Standard Classification of Diseases and Related Health Problems. This is the current classification of diagnoses and procedures in Australia.
Non-acute care	Clinical services provided to admitted and non-admitted patients, including planned geriatric respite, palliative care, geriatric evaluation and management and services for nursing home type patients. Clinical services delivery by designated psychiatric or psychogeriatric units, designated rehabilitation units and mothercraft services are also considered non-acute.
Non-admitted patient	A patient who has not undergone a formal admission process, but who may receive care through an emergency department, outpatient or other non-admitted service.
Non-referred attendances	GP services, emergency attendances after hours, other prolonged attendances, group therapy and acupuncture. All attendances for specialist services are excluded because these must be ‘referred’ to receive Medicare reimbursement.
Prevalence	The proportion of the population suffering from a disorder at a given point in time (point prevalence) or during a given period (period prevalence).
Primary and community health services	Primary health care services are health services that provide the first point of contact with the health system, have a particular focus on prevention of illness and/or early intervention and are intended to maintain people’s independence and maximise their quality of life through care and support at home or in local community settings. Community health services are health services for individuals and groups delivered in a community setting, rather than via hospitals or private facilities.

Public hospital	A hospital that provides free treatment and accommodation to eligible admitted persons who elect to be treated as public patients. It also provides free services to eligible non-admitted patients and may provide (and charge for) treatment and accommodation services to private patients. Charges to non-admitted patients and admitted patients on discharge may be levied in accordance with the Australian Health Care Agreements (for example, aids and appliances).
Screening	The performance of tests on apparently well people to detect a medical condition at an earlier stage than would otherwise be possible without the test.
Separation	A total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change in the type of care for an admitted patient (for example, from acute to rehabilitation). Includes admitted patients who receive same day procedures (for example, renal dialysis).
Sub-acute and non-acute care	Clinical services provided to patients suffering from chronic illnesses or recovering from such illnesses. Services include rehabilitation, planned geriatric care, palliative care, geriatric care evaluation and management, and services for nursing home type patients. Clinical services delivered by designated psychogeriatric units, designated rehabilitation units and mothercraft services are considered non-acute.
Triage category	The urgency of the patient’s need for medical and nursing care: • category 1 — resuscitation (immediate within seconds) • category 2 — emergency (within 10 minutes) • category 3 — urgent (within 30 minutes) • category 4 — semi-urgent (within 60 minutes) • category 5 — non-urgent (within 120 minutes).