# National Healthcare Agreement performance reporting

**Framework for National Agreement reporting**

The Council of Australian Governments (COAG) endorsed a new Intergovernmental Agreement on Federal Financial Relations (IGA) in November 2008 (COAG 2009) and reaffirmed its commitment in August 2011 (COAG 2011a). The IGA includes six 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.*

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 (VET), disability services, healthcare and affordable housing. The National Indigenous Reform Agreement (NIRA) is not associated with a SPP, but draws together Indigenous elements from the other NAs and is associated with several National Partnership agreements (NPs).

A COAG endorsed review of the National Healthcare Agreement (NHA) performance reporting framework was completed and recommendations were endorsed by COAG on 25 July 2012 (COAG 2012a). The previous report and this report reflect the outcomes from the review.

### National Agreement reporting roles and responsibilities

The Standing Council for Federal Financial Relations (SCFFR) has general oversight of the operations of the IGA on behalf of COAG. [IGA para. A4(a)]

The COAG Reform Council (CRC) is responsible for monitoring and assessing the performance of all governments in achieving the outcomes and benchmarks specified in each NA. The CRC is required to provide to COAG the NA performance information and a comparative analysis of this information within three months of receipt from the Steering Committee. [IGA paras. C14 15]

The Steering Committee has overall responsibility for collating and preparing the necessary NA performance data [IGA para. C9]. Reports from the Steering Committee to the CRC are required:

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

The CRC has also requested the Steering Committee to collate data on the performance benchmarks for the reward components of selected NP agreements. The Steering Committee’s reports to the CRC can be found on the Review website ([www.pc.gov.au/gsp](http://www.pc.gov.au/gsp)).

### Performance reporting

The Steering Committee is required to collate performance information for the NHA (COAG 2012b) and provide it to the CRC no later than 31 December 2013. The CRC has requested the Steering Committee to provide information on all performance categories in the National Agreements (variously referred to as ‘outputs’, ‘performance indicators’, ‘performance benchmarks’ and ‘targets’).

The NHA includes the performance categories of ‘performance indicators’ and ‘performance benchmarks’. The link between the objective and the outcomes and associated performance categories in the NHA are illustrated in figure 1.

Figure 1 NHA performance reporting**a, b**

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| **Objective**  *Through this Agreement, the Parties commit to improve health outcomes for all Australians and ensure the sustainability of the Australian health system.*  **Outcomes**  *eg Australians are born and remain healthy*  **Performance Indicators**  *eg Proportion of babies born of low birthweight*  **Performance benchmarks**  *eg Halve the mortality gap for Indigenous children under five by 2018.* |

a Shaded boxes indicate reportable categories of performance information included in this report. b The NHA has multiple outcomes, performance benchmarks and performance indicators. Only one example of each is included in this figure for illustrative purposes.

This report includes available current year data for:

* NHA performance benchmarks
* NHA performance indicators.

This is the fifth NHA performance report prepared by the Steering Committee. The first three reports provided performance information for the previous NHA performance indicator framework (COAG 2011b). This report and the previous report provides performance information for the revised NHA (COAG 2012b) with data for new or altered measures provided back to the baseline reporting period where possible (2008-09 or most recent available data at the time of preparing the baseline NHA performance report).

This report contains the original data quality statements (DQSs) completed by relevant data collection agencies. In addition, this report includes comments by the Steering Committee on the quality of reported data based on the DQSs. This report also includes Steering Committee views on areas for development of NHA ‘performance indicators’ and ‘performance benchmarks’. Box 1 identifies the key issues in reporting on the performance categories in the NHA.

A separate *National Agreement Performance Information 2012-13: Appendix* (NA Appendix) (SCRGSP forthcoming) provides general contextual information about each jurisdiction, to assist with interpretation of the performance data. Contextual information is provided on population size and trends, family and household characteristics, geography and socioeconomic status.

Throughout this report, the term ‘Indigenous Australians’ is used to refer to the Aboriginal and Torres Strait Islander population. In most cases, the data on Indigenous status used in this report are based on self-identification, and therefore reflect an individual’s view of their Indigenous status.

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| 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 a ‘NHA’ prefix (for example, table NHA.1.1). |
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| Box 1 Key issues in reporting against the NHA |
| **General comments**   * Following the 2011 Census, the ABS has rebased and recast the Australian population back to 1991. Indicators using population data have been backcast to the baseline reporting period (NHA PIs 2, 7, 8, 9, 16, 17, 18 and 33). Indigenous population projections based on the 2011 Census are not yet available, and data presented by Indigenous status continue to use 2006 Census based ERP and Indigenous population projections. * In 2011, the ABS updated its standard geography from the Australian Standard Geographical Classification (ASGC) to the Australian Statistical Geography Standard (ASGS). It also updated remoteness areas and the Socio-Economic Indices for Areas (SEIFA), based on the 2011 Census. For indicators where the lowest level of coded geography from the ASGC was Statistical Local Area level (NHA PIs 17, 20, 21, 23, 26, 27, 28, 30) the change to the ASGS has resulted in a break in series when reporting SEIFA by remoteness. * Geographic location is generally attributed to the usual residence of the individual. However, at the sub-state level some performance indicators (NHA PIs 17, 18, 20, 21, 23, 25 and 27) are reported using a combination of State and Territory of service and remoteness area of the individual's place of usual residence. The Steering Committee recommends a review of the method used to derive sub-state location for these indicators. * Only limited data on private hospitals are available for some hospital-related indicators. In some 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. * There is currently only one indicator under the NHA outcome that Australians have a sustainable health system. As noted in the COAG endorsed review of the NHA framework, further work is required to identify suitable indicator/s of the financial sustainability of the health system. * Community mental health care data for 2011-12 are not available for Victoria due to service level collection gaps resulting from protected industrial action during this period (NHA indicators 17 and 25). No substitute or proxy data have been included at the jurisdictional level or for national results.   (Continued next page) |
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| Box 1 (continued) |
| * Data are not provided for reporting against measure 20(b) of this indicator The percentage of patients removed from elective surgery waiting lists who received surgery within the clinically recommended time, by urgency category. The specification has yet to be agreed by the Standing Council on Health’s designated health committee (the National Health Information Standards and Statistics Committee (NHIPPC)), due to unresolved health sector views on the comparability of data by urgency category.   Performance benchmarks   * Data for all performance benchmarks can be sourced from related performance indicators. * New data are available for reporting against all seven performance benchmarks, with data available for the first time for the benchmark on diabetes prevalence.   **Performance indicators**   * Of the 33 performance indicators: * two are reported against for the first time (PIs 10 and 15) * one had no new data for this report (PI 24) * two have never been reported against (PIs 29 and 31) * one is reported against partially, as not all measures could be reported (PIs 20(b)) * seven are reported against interim measures (PIs 5, 16, 19, 22, 23, 26 and 32) * two are reported against proxy measures (PIs 17 and 27). * For all reported indicators, prior year data (either published in previous reports, or provided as new or revised data with this report) are available for time series (although the level of comparability varies, as explained in the relevant data quality information). * Of the 30 reported performance indicators: * 13 indicators report current year data (2012 or 2012-13) * 16 indicators report data with a one year lag (2011 or 2011-12) * one indicator reports data with a two year lag. * Assessing and improving the quality of reporting by socioeconomic status (SES) is a priority: * seven of the 30 reported indicators could not be reported by SES. |
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## Changes from the previous National Healthcare Agreement performance report

Table 1 details changes to indicator specifications, measures or data from the previous NHA performance report.

In general, this report only includes new data that were not included in previous reports. However, where there has been a change in indicator, measure or data collection, data for previous years have been reported, where possible, to provide a consistent time series.

### CRC advice to the Steering Committee on data requirements

Under the IGA, the CRC ‘may advise on where changes might be made to the performance reporting framework’ [IGA para C.30]. The CRC recommended changes to indicators in its first four NHA reports (CRC 2010, 2011, 2012, 2013), as well as providing additional advice to the Steering Committee. Where practicable, the Steering Committee has incorporated the CRC recommendations and advice in this report.

Table 1 Changes from the previous NHA performance report

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| Change | Indicator |
| Data have been backcast due to revised Estimated Resident Population (ERP) data | NHA performance indicator 2, 7, 8, 9, 16, 17, 18, 33 |
| Historical data have been revised (details are included in the specifications for each indicator) | NHA performance benchmark (a), (d), (e)  NHA performance indicator 3, 4, 6, 8, 9, 16, 19, 20, 21, 22 |
| Data are provided for the first time for the Indigenous population (not able to be backcast) | NHA performance indicator 12, 13, 14, 32 |
| Data are available for the first time for allied health professionals | NHA performance indicator 33 |
| Data are available for the first time for selected diabetes measures (not able to be backcast) | NHA performance benchmark (c)  NHA performance indicator 10, 15 |
| The CRC has requested additional disaggregation (details are included in the specifications for each indicator) | NHA performance indicator 3, 4, 5, 11, 18, 20 |
| Additional disaggregation provided (details are included in the specifications for each indicator) | NHA performance indicator 6, 25 |
| The CRC advised they no longer require a particular disaggregation. The disaggregation is not included in this report (details are provided in the specifications for each indicator) | NHA performance indicator 1, 13, 17, 18, 19, 23, 26 |
| Following advice from the CRC that it will only report against one supplementary measure, main and other supplementary measures have been removed from the specification | NHA performance benchmark (f)  NHA performance indicator 18 |
| Indicator has additional measure this cycle. Where possible, data have been backcast to the baseline reporting year (details are provided in the specifications for each indicator) | NHA performance indicator 10, 21 |
| Historical have been re-supplied for two jurisdictions to replace previous estimates | NHA performance indicator 2 |
| The method for deriving Indigenous rates has been updated. Data have been backcast to the baseline reporting year (details are provided in the specifications for the indicator) | NHA performance indicator 9 |
| Historical data by Indigenous status re-supplied based on change to indicator in previous cycle | NHA performance indicator 3, 5 |

## Context for National Healthcare Agreement performance reporting

The overarching objective of the NHA is to ‘improve health outcomes for all Australians and ensure the sustainability of the Australian health system’ [NHA para. 12]. There are four outcome areas in the NHA: Better health; Better health services; Social inclusion and Indigenous health; and, Sustainability of the health system. The NHA identifies the outcomes that provide an indication of the standard of service expected or the level of improvement expected in service delivery over a specified period under each outcome area:

* 1. Better health: Australians are born and remain healthy
  2. Better health services: Australians receive appropriate high quality and affordable primary and community health services
  3. Better health services: Australians receive appropriate high quality and affordable hospital and hospital related care
  4. Better health services: Older Australians receive appropriate high quality and affordable health and aged care services
  5. Better health services: Australians have positive health and aged care experiences which take account of individual circumstances and care needs
  6. Social inclusion and Indigenous health: Australians have a health system that promotes social inclusion and reduces disadvantage, especially for Indigenous Australians
  7. Sustainability of the health system: Australians have a sustainable health system. [NHA pages A.4–A.5]

### Overview of the health sector in Australia

Due to the large size and scope of the health sector, the information provided in this section gives only a broad overview of the key factors that should be considered in interpreting the performance information in this report.

The factors that contribute to good health outcomes are complex and have multiple causal links. Health services — such as those delivered by general practitioners (GPs) and hospitals — have a role in preventing illness and improving the health of those who use the services. However, a range of individual factors — such as genetics, diet and exercise — also contribute to health outcomes. Governments and society can influence some of these determinants of health (for example, through vaccinations, which prevent infectious diseases or programs supporting smokers to quit).

A simplified presentation of the interactions between the determinants of health, health services and other factors, such as patient experience and health system sustainability, is shown in figure 2. This figure also identifies the conceptual location of NHA outcomes in the healthcare system.

Figure 2 Interactions in the health system

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| **Social determinants of health**   |  |  | | --- | --- | | *e.g. culture, social inclusion, education, employment, housing, access to services* | *Relevant NHA outcomes:* | | *Australians have a health system that promotes social inclusion and reduces disadvantage, especially for Indigenous Australians* |   **Health and wellbeing over time**  *Life expectancy and mortality*  *Subjective health*  *Functioning, disability*  *Illness, disease, injury*  *Relevant NHA Outcome: Australians are born and remain healthy*  **Health status** *e.g. treatment and care; rehabilitation.*   |  | | --- | | *Relevant NHA outcomes:* | | *Australians receive appropriate high quality and affordable primary and community health services* | | *Australians receive appropriate high quality and affordable hospital and hospital related care* | | *Older Australians receive appropriate high quality and affordable health and aged care services* |   **Health system performance**  *Relevant NHA outcome: Australians have a sustainable health system* |

*Source*: Adapted from AIHW (2012a) *Australia’s Health 2012.*

An overview of health services in Australia can be found in the *Report on Government Services 2013,* Health Sector Overview (SCRGSP 2013) (the 2014 Report, due for release on 31 January 2014, will contain updated information). The Health Sector Overview in the Report on Government Services (RoGS) outlines government roles and responsibilities, funding arrangements, and the size and scope of the health sector. It also provides some contextual information around Indigenous health issues.

#### Responsibility for healthcare — funding and service delivery

The National Health Reform Agreement (NHRA) (COAG 2011c) sets out governments’ commitments in relation to public hospital funding, public and private hospital performance reporting, local governance of elements of the health system, policy and planning for primary health care, and rearrangement of responsibilities for aged care (NHRA para. 10).

Health services are administered through a mixture of private and public service providers in multiple settings. The Australian Institute of Health and Welfare (AIHW) classifies health services into government delivered, mixed private and public services, and private sector services (AIHW 2012a). Health funding is also a mix of private and public monies, with the majority of funding provided by governments (69.1 per cent in 2010-11 and 69.7 per cent in 2011-12) (AIHW 2012b; 2013a; SCRGSP 2013).

Funding and service delivery responsibilities in 2012-13 are summarised in table 2. The table draws on information from the NHRA (COAG 2011c), AIHW publications *Australia’s Health 2012* and *Health Expenditure Australia 2011-12* (AIHW 2012a, 2013a) plus other sources (AIHW 2011a, 2012c; PC 2011; SCRGSP 2013).

Table 2 Responsibility for health services, 2012-13

|  |  |  |
| --- | --- | --- |
| Service | Funding Responsibility | Service Delivery Responsibility |
| Public hospitals | * State and Territory governments * Australian Government * Private sector | * State and Territory governments * Private under contract |
| Private hospitals | * Private sector (services provided to patients are partially or fully subsidised from a variety of public and private sources including private health insurance, Department of Veterans’ Affairs, Medicare, the Pharmaceuticals Benefits Scheme (PBS), third party insurers) * Australian, State and Territory governments | * Private sector |
| Community and public healtha | * State and Territory and local governments * Australian Government (through Medicare and the PBS) * Private sector | * State and Territory and local government * Mixed private and public sectors |
| Dental services | * Private sector   Australian, State and Territory and local governments and private health insurance provide some funding | * Mixed private and public sectors |
| Aged care | * Australian Governmentb: residential care, community packaged care and basic community care (HACC) * Victorian and WA governmentsb: basic community care (HACC) * Private sector | * State and Territory and local governments * Mixed private and public sectors * Not for profit (i.e. religious, community-based and charitable providers) |
| Other (e.g. patient transport and aids, physiotherapists and psychologists) | * Private sector * Australian, State and Territory and local governments | * Mixed private and public sectors |
| Medical servicesc | * Australian Government * Private sector | * Private sector |
| Medications | * Australian Government (through the PBS) * Private sector | * Private sector |
| Administration and research | * Australian Government * State and Territory governments * Private sector | * Mixed private and public (including universities) |

a Community and public health includes community nursing and public health education campaigns. b Following the implementation of the National Health Reform Agreement (NHRA), basic community care (HACC) and residential and community packaged care funding responsibility for the Indigenous population aged 0-49 years and the non-Indigenous population aged 0-64 years is with the states and territories (through the National Disability Agreement (NDA), except for Victoria and WA. In Victoria and WA, basic community care services continues to be delivered under HACC as a joint Commonwealth-State funded program. Australian. State and Territory governments also jointly fund other smaller aged care programs, such as transition care and multipurpose services. c Medical services includes general practice and specialist care as well as pathology and medical imaging.

*Source*: adapted from AIHW 2011a, 2012a, 2012b, 2013a; PC 2011; SCRGSP 2013.

#### Expenditure on healthcare

The healthcare system is a substantial component of Australia’s economic output (9.5 per cent of GDP in 2011-12 [AIHW 2013a]). Of the $140.2 billion in healthcare expenditure in 2011-12, the Australian Government provided $59.5 billion (42.4 per cent), the states, territories and local government provided $38.3 billion (27.3 per cent), and the non-government sector (individuals, private health insurance and other non-government sources) provided $42.4 billion (30.3 per cent) (AIHW 2013a). Funding of health services by expenditure area is summarised in table 3.

Table 3 Total health expenditure, by area of expenditure and source of funds, 2011-12 ($million)**a, b**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Area of expenditure | Government funding | | | Non-government c | Total |
|  | Australian Government | State and local government | Total |  |  |
| Total hospitals | 19 536 | 22 905 | 42 441 | 11 068 | 53 509 |
| Public hospital services d | 16 072 | 22 411 | 38 483 | 3 552 | 42 034 |
| Private hospitals | 3 464 | 494 | 3 958 | 7 517 | 11 475 |
| Medical services | 18 617 | – | 18 617 | 5 283 | 23 900 |
| Dental services | 1 587 | 718 | 2 305 | 6 031 | 8 336 |
| Patient transport, aids and appliances and other health practitioners | 2 459 | 2 092 | 4 551 | 6 598 | 11 150 |
| Community health and other e | 1 122 | 5 703 | 6 825 | 265 | 7 090 |
| Public health | 1 503 | 663 | 2 166 | 66 | 2 232 |
| Medications | 8 980 | – | 8 980 | 9 860 | 18 839 |
| Administration and research | 4 843 | 1 098 | 5 941 | 1 388 | 7 329 |
| **Total recurrent funding** | **58 647** | **33 179** | **91 826** | **40 560** | **132 386** |
| Capital expenditure | 336 | 5 111 | 5 447 | 2 408 | 7 855 |
| **Total health funding** f | **58 983** | **38 290** | **97 274** | **42 968** | **140 241** |
| Medical expenses tax rebate | 541 | – | 541 | –541 | – |
| **Total health funding** | **59 524** | **38 290** | **97 815** | **42 426** | **140 241** |

a This table shows funding provided by the Australian Government, State and Territory governments and local government authorities and by the major non-government sources of funding for health care. It does not show total expenditure on health goods and services by the different service provider sectors. b Totals may not add due to rounding. c Includes expenditure on health goods and services by workers compensation and compulsory third-party motor vehicle insurers, as well as other sources of income (for example, rent, interest earned) for service providers. d Public hospital services exclude certain services undertaken in hospitals. Can include services provided off-site, such as hospital in the home, dialysis or other services. e 'Other' denotes 'other recurrent health services not elsewhere classified'. f Total health funding has not been adjusted to include the medical expenses tax rebate as funding by the Australian Government. – Nil or rounded to zero.

*Source*:AIHW Health expenditure Australia 2011–12; table NHA.C.1.

The 2011-12 Health Expenditure Australia report (AIHW 2013a) for the first time included an analysis of government health expenditure as a proportion of tax revenue. The analysis was included to monitor growth in government health expenditure in relation to government revenues over time. In 2011-12, the Australian Government ratio of health expenditure to taxation revenue was 26.4 per cent, while the state and territory government ratio was 24.5 per cent.

A new report has found that Australia spends at least $28.6 billion per year (excluding capital expenditure) supporting people with mental illness. The majority of expenditure is funded by governments, with the balance funded by insurers, consumers, employers, non-government. This is equivalent to 2.2 per cent of Australia’s GDP (Medibank Private Limited and Nous Group 2013).

Information on government expenditure on aged care services can be found in *Report on Government Services 2013*, Aged Care Services (SCRGSP 2013) (the 2014 Report, due for release on 31 January 2014, will contain updated information).

#### Overview of the health of the Australian population

Australians are generally healthy people. However, some groups experience poorer health outcomes than others and there is room for improvement in multiple areas (AIHW 2012a).

Life expectancy is the average number of years that a person can expect to live if the current age-specific mortality rates persist. Most countries have seen substantial improvements in life expectancy over the past few decades. Australians continue to have one of the highest life expectancies in the world, following Switzerland, Japan, Italy, Iceland, Spain and France. In 2011, life expectancy at birth was 82 years, which is almost two years higher than the Organisation for Economic Cooperation and Development (OECD) average of 80.1 (OECD 2013a). Further data on life expectancy at birth are reported under NHA performance indicator (PI) 6.

A single summary metric of population health that takes into account both illness and death is ‘disability-adjusted life years’ (DALYs). The DALY is the sum of years of life lost due to premature death and the ‘healthy years’ of life lost due to disability. One DALY is considered one lost year of ‘health’. In Australia in 2010, the top three causes of DALYs were ischemic heart disease, low back pain, and chronic obstructive pulmonary disease (IHME 2013).

Another measure is ‘the burden of disease’ — the gap between a person’s current health status and the health status that one could expect with old age, perfect health, and no disability (WHO 2011). In 2003, it was estimated that cancers (19 per cent of total DALYs) were the leading contributor to the total burden of disease in Australia, followed by cardiovascular disease (16 per cent), nervous system disorders (13 per cent), mental disorders (13 per cent), and chronic respiratory diseases (7 per cent) (AIHW 2010).

Self‑assessed health status is a widely used measure of people’s perceptions of their own health. Although this is a subjective measure, studies have found that it is a good predictor of subsequent illness, future health-care use and premature mortality (AIHW 2012a). Most Australians consider themselves to be in good health (around 85 per cent in 2011-12), but this assessment declines with age and socioeconomic status (ABS 2013a).

Quality of life is a broad concept that can be used to summarise the wellbeing of individuals and societies. It is increasingly recognised as a useful way to capture the complex interaction between single measures of health such as the prevalence of disease and health risk factors (AIHW 2012a). One way to measure quality of life is to ask an individual how they feel about life generally. In 2011, 84 per cent of people felt they have more positive experiences in an average day (feelings of rest, pride in accomplishment, enjoyment, etc) than negative ones (pain, worry, sadness, boredom, etc). This figure is higher than the OECD average of 80 per cent (OECD 2013a).

The *World Happiness Report* shows that Australian’s are generally happy people, ranking 10th out of 156 countries. People who are emotionally happier, who have more satisfying lives, and who live in happier communities, are more likely to be healthy both now and later in life (UN 2013).

### NHA outcomes and outcome areas

This section examines elements of health and the healthcare system categorised according to the four outcome areas and seven outcomes of the NHA.

#### Better Health: Australians are born and remain healthy

People’s behaviours, genetics, environment and socioeconomic characteristics can affect their health and the health of others (AIHW 2012a, 2011b). The determinants of health can be analysed from the point of view of ‘risk factors’ and/or ‘protective factors’. Risk factors increase the risk of ill health (for example, tobacco smoking, excessive alcohol consumption), while protective factors decrease the risk of ill health (for example, good nutrition, physical activity) (Giskes et al. 2002). Indicators in the NHA relating to this outcome include measures of some of these risk factors, as well as measures of life cycle health status (such as mortality and health conditions). The indicators that measure risk factors focus on those risks that are modifiable. Only some of the risk factors can be directly influenced by governments, either at an individual or community level — for example, although age is a major risk factor for many health conditions, it is not modifiable, whereas tobacco smoking is.

Socioeconomic circumstances or living environments can affect the ability of some Australians to modify behaviours and make healthy life choices (see, for example, ANHPA 2011; AIHW 2012a). Where possible, data in this report are disaggregated by socioeconomic status (using the ABS Socio-Economic Index for Areas Index of Relative Socio-economic Disadvantage [SEIFA IRSD]) and remoteness (using the remoteness classification in the Australian Standard Geographical Standard [ASGS]). Sections A.3 *Geography* and A.4 *Measuring Socio-economic status* of the *National Agreement Performance Information 2012-13: Appendix* (SCRGSP forthcoming) provide further information on these concepts.

Research shows a social gradient for both ‘risk’ factors and ‘protective’ factors (WHO 2011; AIHW 2012c). Monitoring health and risk factors can help explain and predict trends in health, and provide insight into why some groups have worse health than others. For example, increasing prevalence of obesity among adults foreshadows increases in the occurrence of health problems such as diabetes and cardiovascular disease, and higher healthcare costs in the future (OECD 2011). In contrast, healthy birthweight is positively correlated with long-term health (OECD 2011). NHA PIs 3, 4 and 5 report prevalence rates for specific health risk factors of overweight/obesity, smoking and risky alcohol consumption respectively.

Diabetes mellitus has become one of the most common non-communicable diseases in the world (Tanamas et al. 2012). In 2011–13, the Australian Health Survey (AHS) included the first voluntary biomedical collection the National Health Measures Survey (NHMS). Voluntary blood and urine samples were collected from respondents aged 5 years and over. Diabetes prevalence was derived using a combination of fasting plasma glucose blood test results, self-reported information on diagnosis and medication use. Information on diabetes prevalence and management using these data are available for the first time for this NHA report (NHA PB (c) and NHA PIs 10 and 15).

#### Better health services: Australians receive appropriate high quality and affordable primary and community health services

Preventive and primary health care are integral to an effective and efficient health system. Early intervention and treatment in the community keeps people healthy and out of hospital, and has significant economic benefits.

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 2013). Primary and community healthcare services are delivered by a range of health and allied health professionals in various private, not-for-profit and government service settings. These settings include general practice, community health services, allied health, the Pharmaceutical Benefits Scheme (PBS) and dental services.

Efficiency of the health care system is heavily dependent on primary healthcare to ensure that individuals progress to other parts of the system only when required (Duckett 2007). Access to general services can influence the use of other, more costly services; for example, perceived or actual lack of access to GP services can lead to presentations at emergency departments for conditions better managed in the primary and community health sector (Van Konkelenberg et al. 2003). Dental conditions were responsible for an estimated 60 251 potentially preventable hospital admissions in 2009–10 (AIHW 2013b). NHA PI 13 reports on waiting times for public dentistry, NHA PI 18 reports on selected potentially avoidable GP-type presentations to emergency departments, and NHA PI 19 reports on potential avoidable hospitalisations.

Accessibility of GP care is influenced by factors including affordability and geographic location of medical services. Bulk-billing rates can provide an indication of affordability of GP care (figure 3).

Figure 3 Non-referred attendances that were bulk billed, by year (per cent)**a**

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*Source*: Department of Health and Ageing (DoHA) [[1]](#footnote-1) (2012), Medicare Statistics – June Quarter 2013.

Direct household expenditure on healthcare provides another indication of affordability. In 2009-10, 5.3 per cent of average weekly household expenditure on goods and services went towards health and medical care, up from 5.1 per cent in 2003-04. On average in 2009-10, people in the lowest income quintile spent less in absolute terms on health and medical care ($38) compared to those on higher incomes ($109), but this expenditure represented a greater proportion of low income earners’ household expenditure on goods and services (6.9 per cent) compared to those on higher incomes (5.0 per cent) (ABS 2011). Data on people deferring access to healthcare because of financial barriers are reported under NHA 14.

The geographic location of medical services can provide an indication of accessibility for people living in remote areas. GP services can have added importance for people in remote areas because of the role of local GPs in responding to a diversity of community healthcare needs. GPs in more rural or remote communities are more likely to be regularly engaged in complex care, including critical emergency treatment (Humphreys et al. 2003; ACRRM 2010). Data on the number of GPs by remoteness areas in 2012-13 are provided in table 4.

Table 4 GPs per 100 000 population, by State and Territory, by remoteness, 2012-13**a**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Austb |
| Major cities |  |  |  |  |  |  |  |  |  |
| Number | 123 | 125 | 132 | 106 | 141 | .. | 125 | .. | 124 |
| FTE | 84 | 82 | 85 | 62 | 87 | .. | 66 | .. | 81 |
| Inner regional |  |  |  |  |  |  |  |  |  |
| Number | 156 | 151 | 145 | 154 | 174 | 174 | np | .. | 154 |
| FTE | 87 | 87 | 87 | 92 | 95 | 90 | np | .. | 88 |
| Outer regional |  |  |  |  |  |  |  |  |  |
| Number | 125 | 140 | 174 | 183 | 155 | 118 | .. | 163 | 152 |
| FTE | 67 | 80 | 81 | 77 | 79 | 66 | .. | 62 | 75 |
| Remote |  |  |  |  |  |  |  |  |  |
| Number | np | np | 298 | 189 | 189 | 279 | .. | 354 | 234 |
| FTE | np | np | 63 | 59 | 83 | 74 | .. | 58 | 67 |
| Very remote |  |  |  |  |  |  |  |  |  |
| Number | np | .. | 259 | 215 | np | np | .. | np | 272 |
| FTE | np | .. | 48 | 45 | np | np | .. | np | 49 |
| **Total** |  |  |  |  |  |  |  |  |  |
| Number | 129 | 130 | 145 | 122 | 148 | 158 | 125 | 247 | 135 |
| FTE | 83 | 83 | 84 | 65 | 87 | 82 | 66 | 60 | 81 |

a For quality and confidentiality reasons, data for the following areas have been combined: outer regional, remote and very remote in NSW; outer regional and remote in Victoria; remote and very remote in SA, Tasmania and the NT; and major cities and inner regional in the ACT. b For Australian figures, Inner Regional ACT GPs are reported in the Major City region. .. Not applicable. **np** Not published.

*Source*: Department of Health and Ageing (DoHA) (unpublished) Medicare Statistics; ABS Regional Population Growth, Australia, 2012 (cat. no. 3218.0); table NHA.C.2.

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 2013*, chapter 11, Primary and community health (SCRGSP 2013) (The *Report on Government Services 2014* is due to be released on 31 January 2014).

#### Better health services: Australians receive appropriate high quality and affordable hospital and hospital related care

Hospitals are key health institutions in Australia, accounting for around one third of health expenditure and also contributing to professional education (Duckett 2007). The hospital sector comprised 86 800 beds in 2011-12, 67 per cent of which were in public hospitals and 33 per cent in private hospitals. This equated to 3.9 hospital beds per 1000 people in the population (AIHW 2013c).

* Public hospitals are created under State and Territory legislation, and provide services free of charge to eligible patients. Public hospitals range in size from large metropolitan hospitals with a variety of specialist services to small community hospitals, and may be operated by government or a third party.
* Private hospitals are privately owned and operated, and services are provided on a fee-for-service basis. Private hospitals may be for profit or not for profit entities, and range in size and scope of services available.

The breakdown of hospitals for 2011-12 by hospital type is illustrated in table 5. The number of hospital beds for each jurisdiction is provided in table 6. Information on the limitations of these data can be found in boxes 4.1 and 4.2 of *Australian Hospital Statistics 2011-12* (AIHW 2013c).

Table 5 Number of hospitals, by hospital type, 2011-12 (number)**a**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | NSW | Vicb | Qld | WA | SA | Tas | ACT | NT | Austc |
| Public hospitals |  |  |  |  |  |  |  |  |  |
| Public acute | 218 | 150 | 166 | 94 | 78 | 22 | 3 | 5 | 736 |
| Public psychiatric | 7 | 1 | 4 | 2 | 2 | 1 | – | – | 17 |
| **Total public** | **225** | **151** | **170** | **96** | **80** | **23** | **3** | **5** | **753** |
| Private hospitals |  |  |  |  |  |  |  |  |  |
| Private free-standing day hospital facilities’ | 94 | 85 | 52 | 35 | 26 | np | np | np | 307 |
| Private other | 93 | 81 | 52 | 21 | 29 | np | np | np | 285 |
| **Total private** | **187** | **166** | **104** | **56** | **55** | **np** | **np** | **np** | **592** |
| **Total** | **412** | **317** | **274** | **152** | **135** | **np** | **np** | **np** | **1 345** |

a For NSW, Victoria, Queensland, WA and SA, the numbers of private hospitals were provided by the jurisdiction and relate to the 2011-12 period. For other jurisdictions, the data were sourced from the ABS’ Private Hospital Establishments Collection for 2010-11. b The number of public hospitals in Victoria is reported as a count of the campuses that reported data separately to the National Hospital Morbidity Database in 2011-12. c The total combines counts of private hospitals provided by jurisdictions for 2011-12 or sourced from the ABS’ Private Hospital Establishment Collection, 2010–11. – Nil or rounded to zero. **np** Not published.

*Source*: AIHW (2013) *Australian Hospital Statistics 2011-12*, Cat. no. HSE 134, chapter 4, table 4.3.

Table 6 Public and private hospital average available beds and number of average available beds per 1000 population, by State and Territory, 2011-12**a, b**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unit | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Aust |
| Public hospitals |  |  |  |  |  |  |  |  |  |  |
| Number of beds in public acute hospitals | no. | 19 239 | 13 218 | 10 804 | 5 463 | 5 045 | 1 178 | 939 | 696 | 56 582 |
| Number of beds in public psychiatric hospitals | no. | 834 | 152 | 441 | 214 | 187 | 10 | .. | .. | 1 838 |
| Public acute beds per 1000 population | rate | 2.7 | 2.4 | 2.4 | 2.3 | 3.1 | 2.3 | 2.6 | 3.0 | 2.5 |
| Public psychiatric beds per 1000 population | rate | 0.1 | – | 0.1 | 0.1 | 0.1 | – | .. | .. | 0.1 |
| Private hospitalsc |  |  |  |  |  |  |  |  |  |  |
| Number of beds in private free-standing day hospitals | no. | na | na | na | na | na | na | na | na | 2 957 |
| Number of beds in other private hospitals | no. | 6 704 | 6 629 | 6 000 | na | 1 911 | na | na | na | 25 394 |
| Private free-standing day hospital beds per 1000 population | rate | na | na | na | na | na | na | na | na | 0.1 |
| Other private hospital beds per 1000 population | rate | 0.9 | 1.2 | 1.3 | .. | 1.2 | na | na | na | 1.1 |
| **Total** |  |  |  |  |  |  |  |  |  |  |
| **Number of beds** | **no.** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **86 771** |
| **Beds per 1000 population** | **rate** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **3.9** |

a The number of average available beds presented here may differ from the counts published elsewhere. For example counts based on bed numbers at a specified date such as 30 June may differ from the average available beds over the reporting period. b Average available beds per 1000 population is reported as a crude rate based on the estimated resident population as at 30 June 2011. c Data from ABS (2012) Private hospitals Australia 2010-11 (Cat. no. 4390.0). **–** Nil or rounded to zero**. na** Not available. .. Not applicable.

*Source*: AIHW (2013) *Australian Hospital Statistics 2011-12*, Cat. no. HSE 134, chapter 4, table 4.4.

Hospitals provide different services depending on where they are located, their size, and the way in which they are funded (DoHA 2010). Public hospitals can be broadly categorised into similar groups called peer groups. Examining peer groups allows for more meaningful comparisons (AIHW 2011b). Public hospital peer groups are based on a range of factors, including the range of admitted patient activity and geographical location. Changes to the activities undertaken by a hospital can result in it moving into, or out of, a particular peer group over time.

Most hospital resources are used to provide care for admitted patients — admitted patient care accounted for around 70 per cent of total hospital expenditure in   
2011-12 (AIHW 2013c), similar to 2010-11. In 2011-12, around 25 000 Australians were admitted to hospital each day (up from around 24 000 in 2010-11). Hospitals also provide non-admitted services (such as the provision of emergency department services and outpatient clinic services) (AIHW 2013d).

The *Report on Government Services 2013*, chapter 10, Public hospitals (SCRGSP 2013), contains more information on government roles and responsibilities, funding arrangements, and size and scope of public hospitals (the *Report on Government Services 2014* is due to be released on 31 January 2014). *Australian Hospital Statistics 2011-12* (AIHW 2013c) contains additional descriptive information on Australia’s public and private hospitals.

#### Better health services: Older Australians receive appropriate high quality and affordable health and aged care services

Australia is one of a small few OECD countries that requires all nursing homes as well as home care providers to be formally accredited (OECD 2013b).Three types of formal aged care services are provided under the Australian aged care system:

* Residential aged care homes that provide full time care in purpose-built aged care homes owned by the care provider, which provide permanent high and low level care, and respite high and low level care.
* Community care services that provide home-based care and assistance to help older people remain, or return to, living independently in the community as long as possible. These services include Home and Community Care (HACC) program services, Community Aged Care Packages (CACP), Extended Aged Care at Home (EACH), EACH-Dementia (EACH-D), Veterans’ Home Care (VHC), Community Nursing and community care respite services. HACC, VHC, Community Nursing and community care respite services are not included in this report.
* Flexible care services that provide flexible care or support other than through mainstream residential and community care in mixed delivery settings. These include the Transition Care Program (TCP), Multi-Purpose Service (MPS) Program, the Innovative Care Pool and the National Aboriginal and Torres Strait Islander Flexible Aged Care Program.

For the purposes of this report, places delivered under the MPS, Innovative Care Programs and National Aboriginal and Torres Strait Islander Flexible Aged Care Program in a residential aged care home are considered residential care. TCP and packages delivered under the MPS, Innovative Care Programs and National Aboriginal and Torres Strait Islander Flexible Aged Care Program delivered in the community are considered community care.

These ‘formal’ care services are in addition to the ‘informal’ care and support provided by family and friends. ‘Informal carers’ may provide help with a range of daily living activities, including core activities (self-care, mobility and communication) and non-core activities (for example, transportation, shopping, meal preparation, household chores and paperwork) (AIHW 2013e). Approximately 80 per cent of older Australians rely on informal care and support (PC 2011). Access to formal care is contingent on an Aged Care Assessment Team (ACAT) assessment. NHA PI 27 reports on the number of hospital patient days used by those assessed by an ACAT team and approved for residential aged care, and NHA PI 30 reports on the elapsed time between an Aged Care Assessment Team (ACAT) approval and entry into a residential aged care service or commencement of a CACP, EACH or EACH-D package.

The provision of places for residential and community aged care is aligned with the number of people aged 70 years and over and the Aboriginal and Torres Strait Islander people aged 50-69 years. NHA PI 26 reports on the operational residential and community aged care places for people aged 70 years or over plus Aboriginal and Torres Strait Islander people aged 50–69 years. Consumer demand for higher quality and more diverse care services are also important drivers of demand: for example, older people want to age at home (including people living in regional and remote areas); people from non‑English speaking backgrounds want culturally appropriate care; and people want to have control over choice of services (PC 2011; Ergas and Paolucci 2011). NHA PI 28 provides data on residential aged care services that are three year re-accredited, and NHA PI 29 is intended to report on potentially preventable hospitalisations for residents of aged care homes (although data are not yet available for this PI).

Population ageing has been identified as the first of four long term trends that will have a profound impact on the Australian economy and society (NSC 2013). In 2012 people aged 65 years and over made up 14 per cent of Australia's population. This is projected to increase to 22 per cent in 2061 and to 25 per cent in 2101. There were 420 300 people aged 85 years and over in Australia in 2012, making up 2 per cent of the population. This group is projected to grow rapidly throughout the projection period, to 5 per cent by 2061 and to 6 per cent by 2101 (ABS 2013b).

Other factors that could affect the capacity of ageing people to live independently or within their community, and consequently change the current demographic projections for future needs, include availability of informal care, levels of health, rates of disability and life expectancy. While age-specific rates of disability have been declining slowly over time, the limited available evidence suggests that any effect this has on lowering the demand for care is out-weighed by the longevity effect, as the rate of disability rises with age (PC 2011; Ergas and Paolucci 2011).

The *Report on Government Services 2013*, chapter 13, Aged Care Services (SCRGSP 2013), contains more information on government roles and responsibilities, funding arrangements, and size and scope of the aged care sector (the *Report on Government Services 2014* is due to be released on 31 January 2014). *Residential aged care and aged care packages in the community 2011–12 web pages, associated tables and data cubes* contain additional information on aged care services(AIHW 2013f).

#### Better health services: Australians have positive health and aged care experiences which take account of individual circumstances and care needs

The performance indicator related to this outcome in the NHA refers to patient ‘experience’ and ‘satisfaction’ (NHA PI 32). 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 ABS Patient Experience Survey, 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.

Meeting the healthcare needs and expectations of individuals is complex, and several aspects of care influence patient health and wellbeing outcomes and experience. 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.

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.

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| --- |
| Box 2 Patient experience surveys |
| The annual ABS Patient Experience Survey provides 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. Data were collected for the first time in 2009, with the second, third and fourth collections undertaken in 2010-11, 2011-12, and 2012-13.  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 2011. The current sample size does not support reliable estimates at State and Territory level (n=1500 for 2011), but the estimates will allow for some reporting at the national level.  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 and transition; and coordination of care (NRC Picker 2011).  Use of surveys is currently inconsistent across states and territories and cannot provide nationally comparable data. Over the past year there has been considerable work undertaken to develop a common survey tool that can be used nationally. This work is still under development through the committee structure of the Australian Health Ministers’ Advisory Council (AHMAC). |
|  |
|  |

#### Social Inclusion and Indigenous Health: Australians have a health system that promotes social inclusion and reduces disadvantage, especially for Indigenous Australians

This outcome is concerned with ensuring Australia’s health system promotes social inclusion and reduces disadvantage, especially for Indigenous Australians. Social inclusion can be broadly defined as ‘… Australians hav[ing] the opportunity and support they need to participate fully in the nation’s economic and community life, develop their own potential and be treated with dignity and respect’ (DPMC 2009).

Research regularly observes associations between health determinants and socioeconomic status (WHO 2011). Health inequalities are evident across a range of outcomes, including incidence of illness and injury, life expectancy and mortality rates. 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).

In Australia, there are significant health inequalities across population groups based on gender, geography, ethnicity and socioeconomic status (Duckett 2007). For example, a higher proportion of adults from the lowest income households (31.2 per cent) rated their oral health status as ‘fair’ or ‘poor’ than adults from the highest income households (12.2 per cent) (AIHW 2013b).

While data support the conclusion that health outcomes are related to a social gradient, the causal effects are complex and multi-directional. Poor socioeconomic circumstances, for instance, are associated with higher prevalence of health risk factors (such as smoking and obesity) and lower prevalence of preventative factors (such as consuming fresh fruit and vegetables). Social exclusion — through financial barriers or limited access due to remoteness — can also act as a barrier to accessing appropriate healthcare services (Duckett 2007). Similarly, poor health can also act as a barrier to engaging in paid employment and social interaction, therefore accentuating social exclusion.

Indigenous Australians experience higher rates of physical and mental illness and disability relative to non-Indigenous Australians. Indigenous disadvantage is apparent across many of the dimensions discussed above, such as health risk and preventative factors, access to services, income, and physical access to services (SCRGSP 2011a). The NHA requires that all performance indicators, to the extent it is possible and appropriate, are disaggregated by Indigenous status, disability status, remoteness area and socioeconomic status to assess whether these groups achieve comparable health outcomes and service delivery outcomes to the broader population (COAG 2012b, para 15).

More contextual information on Indigenous health issues can be found in the *Overcoming Indigenous Disadvantage — Key Indicators 2011*, chapter 7, Healthy lives (SCRGSP 2011a), with the next edition of this report anticipated to be available in late 2014. The Steering Committee’s reports on the National Indigenous Reform Agreement (SCRGSP 2009, 2010, 2011b, 2012, forthcoming) also provide additional information on the health of Indigenous Australians.

#### Sustainability of the health system: Australians have a sustainable health system

Good physical and mental health are important in being able to live a full, active and contributing life, while poor physical and mental health can severely impact on people’s access to education, their ability to work and their social relationships. These are all factors that affect future productivity, health costs and wellbeing, and are relevant to any consideration of sustainability (NSC 2013).

In the context of this report, sustainability refers to having adequate resources to meet the needs of the population today and into the future. Sustainability is a difficult concept to measure as it requires an assessment of the capacity of the current health system to be viable in the future, and relies on input measures of human, capital and financial resources.

A range of factors 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 2009; NHHRC 2009). Over the decade to 2011-12, health expenditure increased in real terms by 5.4 per cent per annum (AIHW 2013a). This was well above the rate of inflation, and indicates that health is an increasingly large component of total economic activity in Australia. Total health and residential aged care expenditure is projected to increase by 189 per cent in the period 2003 to 2033, from $85 billion to $246 billion. This is an increase from 9.3 per cent of gross domestic product (GDP) in 2002–03 to 12.4 per cent in 2032–33 (NSC 2013). Collectively, it is projected that Australian governments will face additional pressures on their budgets equivalent to around 6 per cent of national GDP by 2060, principally reflecting the growth of expenditure on health, aged care and the Age Pension (PC 2013).

The estimated increase in health expenditure is expected to be driven by the ageing population, a higher standard of care and technological innovation (Commonwealth of Australia 2010). As people live longer, the chronic disease burden and associated costs may also increase (WHO 2002). Other factors likely to increase health expenditure include increased fertility and migration, shortages of health professionals and higher incomes (PC 2005).

Governments may be able to influence health outcomes directly by changing the level of resources devoted to the health care system. However, the extent to which increases in resources lead to improvements in health outcomes is not certain. There does not appear to be a strong relationship between total health expenditure and health outcomes across OECD countries (Or 2000; Wilkie and Young 2009; Kaplan and Porter 2011). However, these findings typically measure outcomes through high level measures, such as life expectancy, which may mask improvement to other aspects of health, such as reducing the total burden of disease.

The NHA currently only has one sustainability indicator (NHA PI 33) — this indicator reports on the sustainability of the health workforce. Practitioner numbers depend on an adequate supply of suitably trained workers across a range of health domains and the retention of these workers in the health system. Contemporary discussion on the health workforce focuses on two aspects: (a) the extent to which the supply of healthcare professionals is achieved through training, and (b) workforce participation and worker retention, influenced by factors such as burnout, stress and occupational health and safety issues (Carson and Fearnley 2010). Recent research has found that the number of Australia’s medical graduates is projected to increase by almost 50 per cent by 2016 based on current trends, and new approaches will be needed if all of them are to find internship places (Joyce 2012). In 2013, a record number of medical graduates enrolled in the Australian General Practice Training (AGPT) program (1108 in 2013, compared with 600 in 2007), filling all available places. The AGPT program is a postgraduate vocational training program required by medical graduates who want to become general practitioners (Office of the Minister for Health 2013).

Further work is required to conceptualise and develop more comprehensive indicators of the sustainability of the healthcare system over time.

## 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 two areas:

1. Better health
2. close the life expectancy gap for Indigenous Australians within a generation
3. halve the mortality gap for Indigenous children under five by 2018
4. 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) by 2023
5. by 2018, increase by five percentage points the proportion of Australian adults and Australian children at a healthy body weight, over the 2009 baseline
6. by 2018, reduce the national smoking rate to 10 per cent of the population and halve the Indigenous smoking rate, over the 2009 baseline
7. Better health services
8. 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
9. 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. [NHA para. 18]

Outlined below are the performance benchmarks, any associated issues, and data for the current reporting year. Links are provided to the related NHA outcome and, where relevant, to the related performance indicator.

### Performance benchmark (a) — Better health: close the life expectancy gap for Indigenous Australians within a generation

|  |  |
| --- | --- |
| Key amendments from previous cycle of reporting: | Historical data (2005–2007) have been revised and are included in this report. |
| Outcome: | Australians are born and remain healthy |
| 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   * Life expectancy for total population is calculated for a rolling 3-year period and reported annually. * Life expectancy for Indigenous and non-Indigenous populations is calculated for a rolling 3-year period and reported every 5 years   *Calculated by direct estimation of life expectancy at birth for all Australians, Indigenous and non-Indigenous Australians using the average number of deaths in the relevant 3-year period and the estimated resident population at the mid-point of that period.*  Expressed as *number of years*  A generation is defined as 25 years |
| Related performance indicator/s: | Performance indicator 6: Life expectancy |
| Data source: | ABS Experimental Indigenous and Non-Indigenous Life Tables (5-yearly) |
| Data provider: | ABS |
| Data availability: | 2010–2012 (calculated for three year periods) [revised data provided for 2005–2007] |
| 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) |

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| Box 3 Results |
| For this report, new data for this indicator are available for 2010–2012.   * Data by State and Territory are presented in table NHA.6.1 * Data by Indigenous status are presented in table NHA.6.2 and 6.4.   Data by Indigenous status for 2005–2007 have been revised and are presented in table NHA.6.4. |
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#### Attachment tables

|  |  |
| --- | --- |
| **Table NHA.6.2** | Estimated life expectancy at birth, by sex, by Indigenous status, by State and Territory, 2010–2012 (years) |
| **Table NHA.6.4** | Estimated life expectancy at birth, by sex, by Indigenous status, by State and Territory, 2005–2007 (years) |

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| Box 4 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 6. |
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### Performance benchmark (b) — Better health: halve the mortality gap for Indigenous children under five by 2018

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| --- | --- |
| Key amendments from previous cycle of reporting: | This indicator is unchanged from the previous NHA report. |
| Outcome: | Australians are born and remain healthy. |
| 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 persons aged 0–4 years * *denominator* — population aged 0–4 years   and is expressed as a *rate (per 100 000 population)*  *Rate ratios and rate differences are calculated for comparing*  *Indigenous: non-Indigenous Australians.*  *Variability bands are calculated for single-year and aggregate years data by State/Territory (for within jurisdiction comparisons only* |
| Related performance indicator/s: | Performance indicator 7: Infant and young child mortality rate |
| Data source: | *Numerator:* ABS Death Registrations Collection  *Denominator:* ABS Census Post Enumeration Survey (5 yearly), ABS Births Collection, Estimated Resident Population (total population – 2011 Census based), Experimental Indigenous estimates and projections (Indigenous population – 2006 Census based).  Non-Indigenous population estimates are calculated by subtracting Indigenous population projections from the total population estimates (both on 2006 Census basis for this comparison).  Data are available annually |
| Data provider: | ABS |
| Data availability: | Deaths collection — 2012 |
| Baseline: | 2007 (single year data reported disaggregated by Indigenous status at the national level only) |
| Cross tabulations provided: | Nationally, by Indigenous status  *[Data only reported for jurisdictions for which there is evidence of sufficient levels of identification and sufficient numbers of deaths to support mortality analysis]* |

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| Box 5 Results |
| For this report, new data for this indicator are available for 2012.  National data by single year are presented in table NHA.7.2. Variability bands are provided with these data.  Additional data by Indigenous status are available with PI 7 of this report and in the NIRA performance report —NIRA performance indicator 6. |
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#### Attachment tables

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| **Table NHA.7.2** | All causes infant and child mortality, by Indigenous status, 2012 |

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| 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 7. |
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### Performance benchmark (c) — Better health: 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) by 2023

|  |  |
| --- | --- |
| Key amendments from previous cycle of reporting: | A new measure is included in this report and is reported against for the first time. |
| Outcome: | Australians are born and remain healthy |
| Proxy Measure: | Proportion of people with type 2 diabetes  The measure is defined as:   * *numerator* — Number of persons aged 25 years and over with *known diabetes* (Type 2) or *newly diagnosed diabetes* as determined by a fasting plasma glucose test. * *denominator* — number of persons aged 25 years or over   and is expressed *as a percentage (age standardised)*  A respondent to the survey is considered to have *known diabetes* if they had ever been told by a doctor or nurse that they have Type 2 diabetes and:   * They were taking diabetes medication (either insulin or tablets); or * Their blood test result for fasting plasma glucose was greater than or equal to 7.0 mmol/L).   A respondent to the survey is considered to have *newly diagnosed diabetes* if they reported no prior diagnosis of diabetes, but had a fasting plasma glucose value greater than or equal to 7.0 mmol/L.  Note: The type of diabetes for newly diagnosed cases cannot be determined from a fasting plasma glucose test alone. However, it is assumed that the vast majority of newly diagnosed cases would be Type 2.  *Excludes persons who did not fast for 8 hours or more prior to their blood test and women with gestational diabetes.*  *Rates are directly age-standardised to the 2001 Australian population.*  *95 per cent confidence intervals and relative standard errors calculated for rates.* |
| Related performance indicator/s: | Performance indicator 10: Prevalence of type 2 diabetes (supplementary measure) |
| Data source: | (All and non-Indigenous) Australian Health Survey (AHS) (National Health Measures Survey (NHMS)) component.  (Indigenous) Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) NATSIHMS component.  Frequency of the NHMS/ NATSIHMS component of AHS and AATSIHS to be determined. |
| Data provider: | ABS |
| Data availability: | (All) 2011-12 (National Health Measures Survey (NHMS) component of the 2011–13 AHS)  (Indigenous status) No data available. [Data from the 2012-13 NATSIHMS component of the AATSIHS are expected to be available in 2014.] |
| Baseline: | 2000, 7.1 per cent |
| Cross tabulations provided: | State and Territory, by sex |

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| Box 7 Results |
| This is a new indicator. Data are provided for 2011-12 (the most recent available data). Data for this indicator are not able to be backcast.   * Data by State and Territory by sex are presented in table NHA.10.4.   To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment table for this indicator. |
|  |
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#### Attachment tables

|  |  |
| --- | --- |
| **Table NHA.10.4** | *(supplementary measure)* Proportion of people aged 25 years and over with type 2 diabetes (based on fasting glucose test), by State and Territory, by sex, 2011-12 (per cent) |

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| Box 8 Comment on data quality |
| The baseline measure of 7.1 per cent is calculated from the Australian Diabetes, Obesity and Lifestyle (Ausdiab) study conducted in 1999–2000. This number was  age-standardised to the average of the 1999 and 2000 Australian populations, and was based on data from both oral glucose tolerance tests (OGTTs) and fasting plasma glucose tests.  As an OGTT was not conducted as part of the 2011-12 NHMS component of the AHS, the data supplied for this report are not comparable to the baseline measure of 7.1 per cent.  Fasting plasma glucose test data from the AHS is available for this benchmark,  age-standardised to the 2001 Australian population. A proxy baseline level of Type 2 diabetes prevalence of 5.0 per cent for 2000 can be used when comparing diabetes prevalence data from the AHS and the Ausdiab study.  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 10 in the next section on ‘Performance indicators’. |
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### Performance benchmark (d) — Better health: by 2018, increase by five percentage points the proportion of Australian adults and Australian children at a healthy body weight, over the 2009 baseline

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| Key amendments from previous cycle of reporting: | 2011-12 data for the total population (updated for full AHS sample) are resupplied. |
| Outcome: | Australians are born and remain healthy |
| Measure: | Proportion of adults and children who are in the ‘normal’ body mass index (BMI) category  The measure is defined as:   * *numerator* — * Adults: number of persons aged 18 years or over with a healthy body weight (BMI greater or equal to 18.5 and less than 25) * Children: number of persons aged 5–17 years with a healthy body weight as per appropriate age and sex BMI values.   [Steering Committee can provide the source of these values]   * *denominator* — * Adults: number of persons aged 18 years or over * Children: number of persons aged 5–17 years   and is expressed as a *directly age standardised rate (per cent)*  *Excludes pregnant women where identified and people with an unknown BMI*  *95 per cent confidence intervals and relative standard errors calculated for rates.* |
| Related performance indicator/s: | Performance indicator 3: Prevalence of overweight and obesity |
| Data source: | Australian Health Survey (AHS). Data are collected every three years |
| Data provider: | ABS |
| Data availability: | (All) 2011-12 (updated for full AHS sample) resupplied. |
| Baseline: | Baseline data for 2009 are not available. A baseline for 2007-08 was reported in the baseline 2008-09 NHA report to the CRC. |
| Cross tabulations provided: | State and Territory |

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| Box 9 Results |
| Preliminary data from the 2011-12 AHS were reported in the 2012 NHA performance report. For this report data are resupplied to incorporate the full AHS sample for  2011-12.   * Data by BMI category are presented in table NHA.3.7.   To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator.  Data from the 2007-08 National Health Survey (NHS) were included in the baseline 2008-09 NHA performance report ([old] NHA PB 1(c)). |
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#### Attachment tables

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| **Table NHA.3.7** | Proportion of adults and children in BMI categories, by State and Territory, 2011­12 |

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| Box 10 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 3. |
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### Performance benchmark (e) — Better health: by 2018, reduce the national smoking rate to 10 per cent of the population and halve the Indigenous smoking rate, over the 2009 baseline

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| Key amendments from previous cycle of reporting: | 2011-12 data for the total population (updated for full AHS sample) are resupplied. |
| Outcome: | Australians are born and remain healthy |
| Measure: | Proportion of adults who are current daily smokers.  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 *directly age standardised rates (per cent)*  *Daily smoking is defined as: currently smokes cigarettes (manufactured or roll-your-own) or equivalent tobacco product every day*  *95 per cent confidence intervals and relative standard errors calculated for rates.* |
| Related performance indicator/s: | Performance indicator 4: Rates of current daily smokers |
| Data source: | *Numerator and denominator* — (All) Australian Health Survey (AHS). Data are collected every three years. (Indigenous) National Aboriginal and Torres Strait Islander Social Survey (NATSISS) and the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS). Data are collected on an alternating three-yearly cycle |
| Data provider: | ABS |
| Data availability: | (All) 2011-12 (updated for full AHS sample) resupplied  (Indigenous) 2012-13 (NATSIHS component of the AATSIHS) |
| Baseline: | Baseline data for 2009 are not available. A baseline for 2007-08 (total population) and 2008 (Indigenous status) was reported in the baseline 2008-09 NHA report to the CRC |
| Cross tabulations provided: | State and Territory, all adults  State and Territory, Indigenous adults  Data are also reported for this indicator under PI 3 in the NIRA performance report |

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| Box 11 Results |
| Preliminary data from the 2011-12 AHS were reported in the 2012 NHA performance report. For this report data are resupplied to incorporated the full AHS sample for  2011-12.   * Data for all adults are presented in table NHA.4.2 (associated RSEs and confidence intervals in table NHA.4.3) * Data by Indigenous status for 2012-13 are presented in table NHA.4.1.   To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator.  Data from the 2007-08 National Health Survey (NHS) and 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) were included in the 2008-09 baseline NHA performance report ([old] NHA PB 1(b)). |
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#### Attachment tables

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| **Table NHA.4.1** | Proportion of adults who are daily smokers, by State and Territory, by Indigenous status, 2011­13 |
| **Table NHA.4.2** | Proportion of adults who are daily smokers, by State and Territory, by sex by age, 2011­12 |
| **Table NHA.4.3** | RSEs and 95 per cent confidence intervals for the proportion of adults who are daily smokers, by State and Territory, by sex by age, 2011­12 |

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| Box 12 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 4. |
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### Performance benchmark (f) — Better health services: 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

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| Key amendments from previous cycle of reporting: | Following advice from the CRC that it will only report against the supplementary measure (a) – that is, with diabetes as principal diagnoses included – the previous main measure and supplementary measure (b) have been removed from the specification. This is due in part to the main measure not enable time series comparisons to be made. The measure below now refers to what was previously supplementary measure (a). |
| Outcome: | Australians receive appropriate high quality and affordable hospital and hospital related care |
| Interim 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 * acute conditions, excluding dehydration and gastroenteritis * chronic conditions excluding diabetes complications (additional diagnoses only) * all potentially preventable hospitalisations, excluding diabetes complications (additional diagnoses only) and dehydration and gastroenteritis * *denominator* — total hospital separations   and is expressed as a *number and per cent*  *[The Steering Committee has a list of in-scope ICD-10-AM codes for each measure]* |
| Related performance indicator/s: | Performance indicator 18: Selected potentially preventable hospitalisations |
| Data source: | Numerator and denominator — National Hospital Morbidity Database (NHMD). Data are collected annually |
| Data provider: | AIHW |
| Data availability: | 2011-12 |
| Baseline: | 2006-07 |
| Cross tabulations provided: | State and Territory (by three groups and total) |

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| Box 13 Results |
| For this report, new data for this indicator are available for 2011-12.   * Data by State and Territory are presented in tables NHA.B.f.1.   Data for 2010-11, 2009-10 and 2008-09 were included in the 2011-12 NHA performance report. Data for 2007-08 were included in the 2010-11 NHA performance report. |
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#### Attachment tables

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| **Table NHA.B.f.1** | Selected potentially preventable hospitalisations (PPH) excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), as a percentage of total hospital separations, by State and Territory, 2011-12 |

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| Box 14 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 18.  The difference between the measure for this benchmark and the measure for the associated indicator (PI 18) is the denominator (hospital separations for this benchmark; estimated resident population for PI 18).  Interpretation this performance benchmark over time is problematic, as the benchmark is specified as a proportion of separations rather than a population rate, and admission practices vary across jurisdictions and over time. Changes in a jurisdiction’s denominator (separations) can artificially increase or decrease the results of the benchmark. Therefore, the data provided for the target year in 2014–15 (and interim years) may not be directly comparable to the baseline data, on which the target is based. |
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### Performance benchmark (g) — Better health services: 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

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| Key amendments from previous cycle of reporting: | 2011-12 data are revised for some states and territories |
| Outcome: | Australians receive appropriate high quality and affordable hospital and hospital related care |
| Interim measure: | *Staphylococcus aureus* (including Methicillin resistant *Staphylococcus* *aureus* [MRSA]) bacteraemia (SAB) associated with acute care public hospitals (excluding cases associated with private hospital and  non-hospital care)  The measure is defined as:   * *numerator* — SAB patient episodes associated with acute care public hospitals. Cases associated with care provided by private hospitals and non-hospital health care are excluded * *denominator* — number of patient days for public acute care hospitals (under surveillance) (i.e. only for hospitals reporting SAB indicator)   and is expressed as a *rate per 10 000 patient days*  The definition of an acute care public hospital is ‘all public hospitals including those hospitals defined as public psychiatric hospitals in the Public Hospitals Establishment NMDS’. All public hospitals are included, both those focusing on acute care, and those focusing on non-acute or sub-acute care, including psychiatric, rehabilitation and palliative care.  Patient days for unqualified newborns are included. Patient days for hospital boarders and posthumous organ procurement are excluded.  A patient episode of SAB is defined as a positive blood culture for *Staphylococcus* *aureus*. For surveillance purposes, only the first isolate per patient is counted, unless at least 14 days has passed without a positive blood culture, after which an additional episode is recorded  A *Staphylococcus* *aureus* bacteraemia will be considered to be healthcare-associated if: the first positive blood culture is collected more than 48 hours after hospital admission or less than 48 hours after discharge, or, if the first positive blood culture is collected 48 hours or less after admission and one or more of the following key clinical criteria was met for the patient-episode of SAB:  1. SAB is a complication of the presence of an indwelling medical device  2. SAB occurs within 30 days of a surgical procedure where the SAB is related to the surgical site  3. An invasive instrumentation or incision related to the SAB was performed within 48 hours  4. SAB is associated with neutropenia (<1x109/L) contributed to by cytotoxic therapy  Cases where a known previous blood culture has been obtained within the last 14 days are excluded |
| Related performance indicator/s: | Performance indicator 22: Healthcare-associated infections |
| Data source: | *Numerator*: State and Territory infection surveillance data  *Denominator*: State and Territory admitted patient data  Data are available annually |
| Data provider: | AIHW |
| Data availability: | 2012-13, 2011-12 (revised data provided for some states and territories) |
| Baseline: | 2009-10 |
| Cross tabulations provided: | State and Territory by:   * MRSA and Methicillin-sensitive *Staphylococcus aureus* (MSSA) |

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| Box 15 Results |
| For this report, new data are available for 2012-13:   * Data by State and Territory are presented in table NHA.22.1 * Data by MRSA and MSSA are presented in table NHA.22.1.   Data for 2011-12 have been revised and are presented in table NHA.22.2.  2010-11 data are available in the 2011-12 NHA performance report. Data for  2009-10 are available in the 2010-11 NHA performance report but these data are not comparable with later years due to variety of reasons including collection periods and differences in definitions. Limited 2008-09 data are available in the 2008-09 baseline NHA performance report ([old] NHA PB 3 (a), but these data are not comparable with later years due to changes to the measure since the baseline. |
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#### Attachment tables

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| **Table NHA.22.1** | Episodes of Staphylococcus aureus (including MRSA) bacteraemia (SAB) in acute care hospitals, by State and Territory, by MRSA and MSSA, 2012-13 |
| **Table NHA.22.2** | Episodes of Staphylococcus aureus (including MRSA) bacteraemia (SAB) in acute care hospitals, by State and Territory, by MRSA and MSSA, 2011-12 |

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| Box 16 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 22. |
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## Performance indicators

The NHA has 7 outcomes, which are reported against using 33 performance indicators (table 7).

For performance indicators where data quality and/or completeness is an issue, a number of supplementary measures are provided and are identified as such in the text.

Data for the performance indicators in this report are presented in attachments identified in references throughout this report by an ‘NHA’ prefix.

Table 7 Performance indicators in the National Healthcare Agreement

|  |  |  |
| --- | --- | --- |
| Outcome | Performance Indicator | Page no. in this report |
| Better Health | | |
| Australians are born and remain healthy | 1. Proportion of babies born of low birth weight | 48 |
|  | 1. Incidence of selected cancers | 51 |
|  | 1. Prevalence of overweight and obesity | 55 |
|  | 1. Rates of current daily smokers | 59 |
|  | 1. Levels of risky alcohol consumption | 62 |
|  | 1. Life expectancy | 66 |
|  | 1. Infant and young child mortality rate | 69 |
|  | 1. Major causes of death | 73 |
|  | 1. Incidence of heart attacks | 77 |
|  | 1. Prevalence of type 2 diabetes | 80 |
|  | 1. Proportion of adults with very high levels of psychological distress | 83 |
| Better Health Services | | |
| Australians receive appropriate high quality and affordable primary and community health services | 1. Waiting times for GPs | 86 |
|  | 1. Waiting times for public dentistry | 89 |
|  | 1. People deferring access to selected health care due to financial barriers | 91 |
|  | 1. Effective management of diabetes | 96 |
|  | 1. Potentially avoidable deaths | 100 |
|  | 1. Treatment rates for mental illness | 104 |
|  | 1. Selected potentially preventable hospitalisations | 108 |
|  | 1. Selected potentially avoidable GP-type presentations to emergency departments | 113 |

(Continued next page)

Table 7 (continued)

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| Outcome | Performance Indicator | Page no. in this report |
| Australians receive appropriate high quality and affordable hospital and hospital related care | 1. Waiting times for elective surgery | 116 |
|  | 1. Waiting times for emergency hospital care | 121 |
|  | 1. Healthcare associated infections | 126 |
|  | 1. Unplanned hospital readmission rates | 129 |
|  | 1. Survival of people diagnosed with notifiable cancers | 132 |
|  | 1. Rate of community follow up within first seven days of discharge from a psychiatric admission | 133 |
| Older Australians receive appropriate high quality and affordable health and aged care services | 1. Residential and community aged care places per 1,000 population aged 70+ years | 136 |
|  | 1. Number of hospital patient days used by those eligible and waiting for residential aged care | 139 |
|  | 1. Proportion of residential aged care services that are three year reaccredited | 142 |
|  | 1. Proportion of residential aged care days on hospital leave due to selected preventable causes | 144 |
|  | 1. Elapsed times for aged care services | 145 |
|  | 1. Proportion of aged care residents who are full pensioners relative to the proportion of full pensioners in the general population | 148 |
| Australians have positive health and aged care experiences which take account of individual circumstances and care needs | 1. Patient satisfaction/experience | 149 |
| Australians have a health system that promotes social inclusion and reduces disadvantage, especially for Indigenous Australians | All performance indicators, where it is possible and appropriate to do so, to be disaggregated by Indigenous status, disability status, remoteness area and socio-economic status to assess whether these social inclusion groups achieve comparable health outcomes and service delivery outcomes to the broader population | .. |
| Australians have a sustainable health system | 1. Full time equivalent employed health practitioners per 1,000 population (by age group and profession type) | 154 |

### Indicator 1 — Proportion of babies born of low birthweight

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| Key amendments from previous cycle of reporting: | The CRC no longer require this indicator disaggregated by SEIFA quintiles. This disaggregation is not included in this report. |
| Outcome: | Australians are born and remain healthy. |
| Measure: | The incidence of low birthweight among live-born singleton babies, of Aboriginal and Torres Strait Islander mothers and other mothers  The measure is defined as:   * *numerator* — number of low birthweight liveborn singleton infants * *denominator* — total number of liveborn singleton infants   and is expressed as a *number* and *per cent*  *Low birthweight is defined as less than 2500 grams*  *Excludes multiple births and stillbirths*  *Indigenous status of infants is currently only available based on the Indigenous status of the mother*  *Variability bands are calculated for single-year and aggregate years data by State/Territory (for within jurisdiction comparisons only – cannot be used to make comparisons across jurisdictions).* |
| Data source: | *Numerator and denominator* — AIHW National Perinatal Data Collection (NPDC). Data are collected annually |
| Data provider: | AIHW |
| Data availability: | 2011 (calendar year data) |
| Cross tabulations provided: | Single year data (2011):  State and Territory, by   * Indigenous status (of the mother)   Nationally, by   * remoteness (ASGS) * SEIFA IRSD deciles (2011 based SEIFA IRSD with ASGC)   Aggregate data (2009-2011):  State and Territory, by   * Indigenous status (of the mother)   Further cross tabulations are available in the NIRA performance report — PI 7 |

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| Box 17 Results |
| For this report, new data for this indicator are available for 2011.   * Data by State and Territory are presented in tables NHA.1.1 and NHA.1.3 * Data by Indigenous status are presented in table NHA.1.1 and NHA.1.3 * Data by socioeconomic status and remoteness are presented in table NHA.1.2.   Data for 2010, 2009, 2008 and 2007 are available in the 2011-12 NHA performance report. |
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#### Attachment tables

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| **Table NHA.1.1** | Proportion of live­born singleton babies of low birthweight, by maternal Indigenous status, by State and Territory, 2011 |
| **Table NHA.1.2** | Proportion of live­born singleton babies of low birthweight, by remoteness, by SEIFA IRSD quintiles, by SEIFA IRSD deciles, National, 2011 |
| **Table NHA.1.3** | Proportion of live­born singleton babies of low birthweight, by maternal Indigenous status, by State and Territory, 2009–2011 |

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| Box 18 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 of 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 of the mother by State and Territory, and by socioeconomic status (SES) nationally. * Data are collected and published annually. The most recent available data are for 2011. Data in this report are comparable with data provided in previous reports. * Data are of acceptable accuracy. Latest results are provided as an average of the most recent three years of data due to volatility of the small numbers involved. * Single year data are provided for time series. * The National Perinatal Data Collection (NPDC) provides information on the Indigenous status of the mother only. Changing levels of Indigenous identification over time and across jurisdictions affect the accuracy of Indigenous status time series data.   (Continued next page) |
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| Box 18 (continued) |
| * In 2011, the ABS updated the remoteness areas (RA) and SEIFA from a 2006 Census base to a 2011 Census base. The AIHW considers that this results in a series break when applied to this indicator and that RA and SEIFA data for 2010 and previous years are not directly comparable to 2011 data. * Detailed explanatory notes are publicly available to assist in the interpretation of results. Additional data from the data source are available online, 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. * As of 1 July 2012, the Perinatal National Minimum Dataset (NMDS) includes a data element on the Indigenous status of the baby. This enables babies born to  non-Indigenous mothers and Indigenous fathers to be identified in the collection. Data for 2011 on the Indigenous status of the baby are available in the 2012-13 NIRA report (tables NIRA.7.3 and NIRA.7.4). * A formal assessment of the extent of under-identification of Indigenous status in the NPDC is required. This will identify whether the data require adjustment, and contribute to improved time series reporting. |
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### Indicator 2 — Incidence of selected cancers

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| Key amendments from previous cycle of reporting: | * Data have been backcast due to revised Estimated Resident Population (ERP) data. * Data for 2009 have also been re-supplied for NSW and the ACT to replace previous estimates. |
| Outcome: | Australians are born and remain healthy. |
| 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 is expressed as a *directly age standardised rate (per 100 000 population)*  For breast and cervical cancer in females, the measure is defined as:   * *numerator* — number of new cases in women in the reported year * *denominator* — total female population   and is expressed as *directly age standardised rates (per 100 000 population)*  *Variability bands are calculated for data by State/Territory (for within jurisdiction comparisons only – cannot be used to compare across jurisdictions).*  *Calculated separately for each type of cancer* |
| Data source: | *Numerator* — Australian Cancer Database  *Denominator* — ABS Estimated Resident Population (total population – 2011 Census base) and ABS Indigenous experimental estimates and projections (Indigenous population – 2006 Census base). For comparisons of Indigenous and non-Indigenous populations, all data will be 2006 Census based.  Data are available annually |
| Data provider: | AIHW |
| Data availability: | 2010 and (2009, 2008, 2007 and 2006 backcast for revised ERP — except for Indigenous status for which revised data are not available until 2014, and therefore only backcast for 2009 for re-supply of ACT and NSW) |
| Cross tabulations provided: | State and Territory (for each cancer type), by:   * Indigenous status * remoteness (ASGC) * SEIFA IRSD quintiles (based on 2006 SEIFA)   Nationally (for each cancer type), by SEIFA IRSD deciles |

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| Box 19 Results |
| For this report new data are available for 2010.   * Data by State and Territory are presented in tables NHA.2.1 * Data by Indigenous status are presented in table NHA.2.2 * Data by remoteness are presented in table NHA.2.3 * Data by socioeconomic status are presented in tables NHA.2.4–5. * Revised data (excluding disaggregations by Indigenous status for 2006, 2007 and 2008) are provided in this report: * for 2009 in tables NHA.2.6–2.10 * for 2008 in tables NHA.2.11–2.14 * for 2007 in tables NHA.2.15–2.18 * for 2006 in tables NHA.2.19–2.22.   Disaggregations by Indigenous status for 2006, 2007 and 2008 are available in the 2010-11 NHA performance report ([old] NHA PI 4).  To assist in interpretation, variability bands are provided in the attachment tables for this indicator. |
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#### Attachment tables

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| **Table NHA.2.1** | Incidence of selected cancers, by State and Territory, 2010 |
| **Table NHA.2.2** | Incidence of selected cancers by Indigenous status, by State and Territory, 2010 |
| **Table NHA.2.3** | Incidence of selected cancers by remoteness, by State and Territory, 2010 |
| **Table NHA.2.4** | Incidence of selected cancers, by State and Territory, by SEIFA IRSD quintiles, 2010 |
| **Table NHA.2.5** | Incidence of selected cancers by SES based on SEIFA IRSD deciles, National, 2010 |
| **Table NHA.2.6** | Incidence of selected cancers, by State and Territory, 2009 |
| **Table NHA.2.7** | Incidence of selected cancers by Indigenous status, by State and Territory, 2009 |
| **Table NHA.2.8** | Incidence of selected cancers by remoteness, by State and Territory, 2009 |
| **Table NHA.2.9** | Incidence of selected cancers, by State and Territory, by SEIFA IRSD quintiles, 2009 |
| **Table NHA.2.10** | Incidence of selected cancers by SES based on SEIFA IRSD deciles, National, 2009 |
| **Table NHA.2.11** | Incidence of selected cancers, by State and Territory, 2008 |
| **Table NHA.2.12** | Incidence of selected cancers by remoteness, by State and Territory, 2008 |
| **Table NHA.2.13** | Incidence of selected cancers, by State and Territory, by SEIFA IRSD quintiles, 2008 |
| **Table NHA.2.14** | Incidence of selected cancers by SES based on SEIFA IRSD deciles, National, 2008 |
| **Table NHA.2.15** | Incidence of selected cancers, by State and Territory, 2007 |
| **Table NHA.2.16** | Incidence of selected cancers by remoteness, by State and Territory, 2007 |
| **Table NHA.2.17** | Incidence of selected cancers, by State and Territory, by SEIFA IRSD quintiles, 2007 |
| **Table NHA.2.18** | Incidence of selected cancers by SES based on SEIFA IRSD deciles, National, 2007 |
| **Table NHA.2.19** | Incidence of selected cancers, by State and Territory, 2006 |
| **Table NHA.2.20** | Incidence of selected cancers by remoteness, by State and Territory, 2006 |
| **Table NHA.2.21** | Incidence of selected cancers, by State and Territory, by SEIFA IRSD quintiles, 2006 |
| **Table NHA.2.22** | Incidence of selected cancers by SES based on SEIFA IRSD deciles, National, 2006 |

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| Box 20 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 of 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.   (Continued next page) |
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| Box 20 (continued) |
| * Annual data are available. The most recent available data are for 2010. * Following the 2011 Census, the ABS rebased the Australian population back to 1991 and data have been resupplied for previous years using the rebased ERP. Rebased Indigenous population projections are not yet available, and data presented by Indigenous status continue to use 2006 Census based ERP and Indigenous population projections. * Cancer incidence data for 2010 were not available from the cancer registries in NSW and the ACT. Instead, estimates of overall 2010 cancer incidence are provided for these jurisdictions. For these jurisdictions, data were not available by socioeconomic status or Indigenous status. Totals do not include these jurisdictions. Until actual 2010 cancer data are available from these jurisdictions, comparisons with other year’s data, including totals, are not recommended. * Incidence rates that are calculated using small numbers can be highly variable, resulting in wide variability bands (variability bands are presented in the attachment tables). * The quality of Indigenous identification in cancer registry data varies across jurisdictions. Data by Indigenous status are reported for Victoria, Queensland, WA, SA, Tasmania and the NT. However, the variability bands for incidence rates by Indigenous status are wide and the data should be interpreted with caution. For 2010, national disaggregation by Indigenous status is based on jurisdictions with acceptable data quality — Queensland, WA and the NT. For 2009, the national disaggregation by Indigenous status also includes NSW. Totals should not be compared to previous years. * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request (including on other types of cancer).   The Steering Committee also note 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. * The development of the new NSW Cancer Registries system has resulted in a delay in processing NSW and ACT incidence data for the previous and current cycle of reporting. It is anticipated that there will be no further delays once the new system has been fully implemented (date to be determined). * Improvement of Indigenous identification in cancer registries in several jurisdictions is a priority. |
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### Indicator 3 — Prevalence of overweight and obesity

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| Key amendments from previous cycle of reporting: | * 2011-12 data for the total population (updated for full AHS sample) are resupplied * 2004-05 data by Indigenous status re-supplied based on change to indicator in previous cycle to include overweight * The CRC has requested an additional data disaggregation for this indicator —remoteness by socioeconomic status (SES) (national level data, most recent year only) * An additional disaggregation is provided — sex by socioeconomic status (SES) (national level data, most recent year only) |
| Outcome: | Australians are born and remain healthy |
| Measure: | Prevalence of overweight and obesity in adults and children  For adults, the measure is defined as:   * *numerator* — number of persons aged 18 years or over who are overweight or obese * *denominator* — population aged 18 years or over for whom height and weight measures were taken   and is expressed as a *directly age standardised rate (per cent)*  For children, the measure is defined as:   * *numerator* — number of persons aged 5–17 years who are overweight or obese * *denominator* — population aged 5–17 years   and is expressed as a *directly age standardised rate (per cent)*  *BMI calculated as weight (in kilograms) divided by the square of height (in metres). For adults, obesity is defined as a BMI of greater than or equal to 30 and overweight is defined as a BMI of 25.00–29.99. For children, obesity is defined as a BMI (appropriate for age and sex) that is likely to be 30 or more at age 18 years, based on centile curves and overweight is defined as a BMI (appropriate for age and sex) that is likely to be  25.00–29.99 at age 18 years, based on centile curves.*  *Excludes pregnant women and people with unknown BMI*  *95 per cent confidence intervals and relative standard errors calculated for rates.* |
| Data source: | *Numerator and denominator* — (All) Australian Health Survey (AHS). Data are collected every three years. (Indigenous) Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS). Data are collected every six years. |
| Data provider: | ABS |
| Data availability: | (All) 2011-12 (updated for full AHS sample) resupplied.  (Indigenous status) Indigenous: 2012-13 (NATSIHS component of the AATSIHS)/ Non-Indigenous 2011-12 (full AHS sample) [2004-05 data re-supplied as indicator revised in previous cycle]  Data are also reported for this indicator under PI 5 in the NIRA performance report |
| Cross tabulations provided: | For each of adult and children:  State and territory, by   * Indigenous status * sex by age (adult only) * disability status * remoteness (ASGS) * SEIFA IRSD quintiles (2011 SEIFA IRSD with ASGS) * BMI category (underweight, normal, overweight, obese)   Nationally, by   * SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS) * remoteness, by SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS) * sex, by SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS)   Data are also reported for this indicator under PI 5 in the NIRA performance report |

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| Box 21 Results |
| For this report data are resupplied to incorporate the full AHS sample for 2011-12.   * Data by State and Territory are presented in table NHA.3.1–3.7. * Data by sex, by age are presented in tables NHA.3.2–3.3 * Data by remoteness are presented in table NHA.3.4 and NHA.3.10 * Data by socioeconomic status are presented in table NHA.3.5, NHA.3.8–10 * Data by disability status are presented in table NHA.3.6 * Data by BMI category are presented in table NHA.3.7.   Data by Indigenous status for 2012-13 are available for the first time and are presented in table NHA.3.1.  Data by Indigenous status for 2004-05 have been recompiled for the new measure (measure included for the first time in last year’s report) and these data are provided for the first time in this report in table NHA.3.11.  Data for 2007-08 are provided in the 2011-12 NHA performance report.  To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator. |
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#### Attachment tables

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| **Table NHA.3.1** | Rates of overweight and obesity, by State and Territory, by Indigenous status, 2011­13 |
| **Table NHA.3.2** | Rates of overweight and obesity for adults, by State and Territory, by sex and age, 2011­12 |
| **Table NHA.3.3** | RSEs and 95 per cent confidence intervals for rates of overweight and obesity for adults, by State and Territory, by sex and age, 2011­12 |
| **Table NHA.3.4** | Rates of overweight and obesity for adults and children, by State and Territory, by remoteness, 2011­12 |
| **Table NHA.3.5** | Rates of overweight and obesity for adults and children, by State and Territory, by SEIFA IRSD quintiles, 2011­12 |
| **Table NHA.3.6** | Rates of overweight and obesity, by State and Territory, by disability status, 2011­12 |
| **Table NHA.3.7** | Proportion of adults and children in BMI categories, by State and Territory, 2011­12 |
| **Table NHA.3.8** | Rates of overweight and obesity for adults, by SEIFA IRSD deciles, National, 2011­12 |
| **Table NHA.3.9** | Rates of overweight and obesity for adults, by SEX, by SEIFA IRSD deciles, 2011­12 |
| **Table NHA.3.10** | Rates of overweight and obesity for adults, by remoteness, by SEIFA IRSD deciles, 2011­12 |
| **Table NHA.3.11** | Rates of overweight and obesity, by State and Territory, by Indigenous status, 2004-05 |

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| Box 22 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 of 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 overweight and obese. * State and Territory data are available by Indigenous status and SES. * Total population and non-Indigenous data for the current reporting cycle are sourced from the full sample of the general population component of the ABS Australian Health Survey (AHS). This information replaces data supplied for the previous report which was based on the NHS subset of the full AHS sample. Preliminary Indigenous population data sourced from the National Aboriginal and Torres Strait Islander Health Survey component of the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) are included in this report, with final data from the full sample anticipated to be available for the next cycle of reporting. * Data for the total and non-Indigenous populations in the AHS do not include people living in very remote areas, which affects the comparability of the NT results.   (Continued next page) |
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| Box 22 (continued) |
| * Data by Indigenous status are not directly comparable over time as data for 2004‑05 were based on *self-reported* height and weight and data for 2011–13 are based on *measured* height and weight. * Data are of acceptable accuracy. Some relative standard errors for 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 online, and on request.   The Steering Committee also notes the following issues:   * AATSIHS 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. Subject to cost-benefit analysis, it is recommended that relevant questions be included in both the AATSIHS and the NATSISS, to provide data on a rotating three yearly cycle across the two collections. * 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. |
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### Indicator 4 — Rates of current daily smokers

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| Key amendments from previous cycle of reporting: | * 2011-12 data for the total population (updated for full AHS sample) are re-supplied. * The CRC has requested an additional data disaggregation for this indicator —remoteness by socioeconomic status (SES) (national level data, most recent year only) * An additional disaggregation is provided — sex by socioeconomic status (SES) (national level data, most recent year only) |
| Outcome: | Australians are born and remain healthy |
| Measure: | Proportion of adults who are current daily smokers  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 *directly age standardised rates (per cent)*  *Daily smoking is defined as: currently smokes cigarettes (manufactured or roll-your-own) or equivalent tobacco product every day*  *95 per cent confidence intervals and relative standard errors calculated for rates.* |
| Data source: | *Numerator and denominator* —  (All) Australian Health Survey (AHS). Data are collected every three years.  (Indigenous) National Aboriginal and Torres Strait Islander Social Survey (NATSISS) and the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS). Data are collected on an alternating three-yearly cycle |
| Data provider: | ABS |
| Data availability: | (All) 2011-12 (updated for full AHS sample) resupplied  (Indigenous status) Indigenous: 2012-13 (NATSIHS component of the AATSIHS)/ 2011-12 (full AHS sample) |
| Cross tabulations provided: | State and territory, by   * Indigenous status * sex by age * disability status * remoteness (ASGS) * SEIFA IRSD quintiles (2011 SEIFA IRSD with ASGS)   Nationally, by   * SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS) * sex, by SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS) * remoteness, by SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS)   Data are also reported for this indicator under PI 3 in the NIRA performance report |

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| Box 23 Results |
| For this report data are resupplied to incorporate the full AHS sample for 2011-12.   * Data by Indigenous status are presented in table NHA.4.1 * Data by sex, by age are presented in tables NHA.4.2–3 and NHA.4.8 * Data by disability status are presented in table NHA.4.4 * Data by remoteness are presented in tables NHA.4.5 and NHA.4.9 * Data by socioeconomic status are presented in tables NHA.4.6–9.   Data by Indigenous status for 2012-13 are presented in table NHA.4.1.  To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator.  Data from the 2007-08 National Health Survey (NHS) and 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) were included in the 2008-09 baseline NHA performance report ([old] NHA PI 6). Additional disaggregations for 2007-08 were included in the 2011-12 NHA performance report. |
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#### Attachment tables

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| **Table NHA.4.1** | Proportion of adults who are daily smokers, by State and Territory, by Indigenous status, 2011­13 |
| **Table NHA.4.2** | Proportion of adults who are daily smokers, by State and Territory, by sex by age, 2011­12 |
| **Table NHA.4.3** | RSEs and 95 per cent confidence intervals for the proportion of adults who are daily smokers, by State and Territory, by sex by age, 2011­12 |
| **Table NHA.4.4** | Proportion of adults who are daily smokers, by State and Territory, by disability status, 2011­12 |
| **Table NHA.4.5** | Proportion of adults who are daily smokers, by State and Territory, by remoteness, 2011­12 |
| **Table NHA.4.6** | Proportion of adults who are daily smokers, by State and Territory, by SEIFA IRSD quintiles, 2011­12 |
| **Table NHA.4.7** | Proportion of adults who are daily smokers, by SEIFA IRSD deciles, 2011­12 |
| **Table NHA.4.8** | Proportion of adults who are daily smokers, by sex, by SEIFA IRSD deciles, 2011­12 |
| **Table NHA.4.9** | Proportion of adults who are daily smokers, by remoteness, by SEIFA IRSD deciles, 2011­12 |

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| 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 of 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 reported that they are daily smokers. * State and Territory data are available by Indigenous status and SES. * Total population and non-Indigenous data for the current reporting cycle are sourced from the full sample of the general population component of the ABS Australian Health Survey (AHS). This information replaces data supplied for the previous report which was based on the NHS subset of the full AHS sample. Preliminary Indigenous population data sourced from the National Aboriginal and Torres Strait Islander Health Survey component of the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) are included in this report, with final data anticipated to be available for the next cycle of reporting. * Data for the total and non-Indigenous populations in the AHS do not include people living in very remote areas, which affects the comparability of the NT results. * Data are of acceptable accuracy. Some relative standard errors for age, Indigenous, SES and remoteness 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 online, and on request.   The Steering Committee also notes the following issue:   * 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. |
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### Indicator 5 — Levels of risky alcohol consumption

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| Key amendments from previous cycle of reporting: | * The CRC has requested an additional data disaggregation for this indicator —remoteness by socioeconomic status (SES) (national level data, most recent year only) * An additional disaggregation is provided — sex by socioeconomic status (SES) (national level data, most recent year only) * Data by Indigenous status re-supplied for 2004-05 based on 2009 NHMRC guidelines to provide a comparable time series with the latest available data |
| Outcome: | Australians are born and remain healthy |
| 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 expressed as a *directly age standardised rate (per cent)*  *‘Lifetime risk of alcohol related harm’ is defined according to the 2009 National Health and Medical Research Council guidelines: for males and females, no more than two standard drinks on any day. This has been operationalised as: for both males and females, an average of more than 2 standard drinks per day in the last week.*  *95 per cent confidence intervals and relative standard errors calculated for rates.* |
| Data source: | *Numerator and denominator* — (All) Australian Health Survey (AHS). Data are collected every three years. (Indigenous) Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS). Data are collected every six years |
| Data provider: | ABS |
| Data availability: | (All) 2011-12 (NHS component of the 2011–13 AHS) data provided for  2011-12 report [No new data available]  (Indigenous status) Indigenous: 2012-13 (NATSIHS component of the AATSIHS) / non-indigenous: 2011-12 (NHS component of the AHS) [2004-05 data re-supplied to provide comparable time series] |
| Cross tabulations provided: | State and Territory, by:   * Indigenous status (including re-supplied 2004-05 data)   Nationally, by   * sex, by SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS) * remoteness, by SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS)   Data are also reported for this indicator under PI 4 in the NIRA performance report |

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| Box 25 Results |
| For this report new data are available for Indigenous status (2011–13).   * Data by State and Territory are presented in table NHA.5.1. * Additional data by Indigenous status for 2004-05 are provided based on 2009 NHMRC alcohol guidelines for minimising lifetime risk (table NHA.5.4) to provide a comparable time series with the 2011–13 data.   Additional disaggregations for the total population (2011-12) are also provided.   * Data by sex and SEIFA IRSD deciles are presented in table NHA.5.2 * Data by remoteness by SEIFA IRSD deciles are presented in table NHA.5.3.   To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator.  Total population data for 2011-12 were provided in the 2011-12 NHA performance report. Data from the 2007-08 National Health Survey (NHS) and 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) w*e*re included in the 2008-09 baseline NHA performance report ([old] NHA PI 7). |
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#### Attachment tables

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| **Table NHA.5.1** | Proportion of adults at risk of long term harm from alcohol, by State and Territory, by Indigenous status, 2011­13 |
| **Table NHA.5.2** | Proportion of adults at risk of long term harm from alcohol, by sex, by SEIFA IRSD deciles, 2011­12 |
| **Table NHA.5.3** | Proportion of adults at risk of long term harm from alcohol, by remoteness, by SEIFA IRSD deciles, 2011­12 |
| **Table NHA.5.4** | Proportion of adults at risk of long term harm from alcohol (2009 guidelines), by State and Territory, by Indigenous status, 2004-05 |

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| Box 26 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 SES. * Data for the total and non-Indigenous populations in the Australian Health Survey (AHS) do not include people living in very remote areas, which affects the comparability of the NT results. * Data are of acceptable accuracy. Some relative standard errors for Indigenous status, SES and remoteness 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 online, and on request.   The Steering Committee also notes the following issues:   * 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. * Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) 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. Subject to cost–benefit analysis, it is recommended that relevant questions be included in both the AATSIHS and the NATSISS, to provide data on a rotating three yearly cycle across the two collections. |
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### Indicator 6 — Life expectancy

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| Key amendments from previous cycle of reporting: | * Historical life expectancy estimates for Aboriginal and Torres Strait Islander people have been revised and are included in this report * Additional disaggregation now provided for this indicator —nationally, by remoteness. |
| Outcome: | Australians are born and remain healthy |
| Measure: | 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   * Life expectancy for total population is calculated for a 3-year period and reported annually. * Life expectancy for Indigenous and non-Indigenous populations is calculated for a 3-year period and reported every 5 years   *Calculated by direct estimation of life expectancy at birth for all Australians, Indigenous and non-Indigenous Australians using the average number of deaths in the relevant 3-year period and the estimated resident population at the mid-point of that period*  *Direct estimation of the life expectancy gap between Indigenous and non-Indigenous Australians using the average number of deaths in the relevant three–year period and the estimated resident population at the mid-point of that three-year period, with adjustments for incomplete identification by Indigenous status.*  Expressed as *number of years* |
| Data source: | ABS Life Tables (annual)  ABS Experimental Indigenous and Non-Indigenous Life Tables (5-yearly) |
| Data provider: | ABS |
| Data availability: | (All) 2010–2012 (calculated for a three-year period — reported annually for total population)  (Indigenous status) 2010–2012 [revised data provided for 2005–2007] |
| Cross tabulations provided: | (All) Aggregate data (2010–2012)  State and Territory, by:   * sex   Nationally, by;   * remoteness area (Major Cities and Inner Regional; Outer Regional, Remote and Very Remote)   (Indigenous status) 2010–2012  State and Territory, by:   * sex   Data are also reported for this indicator under the PI 1 in the NIRA performance report |

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| Box 27 Results |
| For this report, new data for this indicator are available for 2010–2012.   * Data by State and Territory are presented in table NHA.6.1-2 * Data by Indigenous status are presented in table NHA.6.2 * Data by remoteness areas status are presented in table NHA.6.3.   Data by Indigenous status for 2005–2007 have been revised and are presented in table NHA.6.4.  Data from the 2006 Census for the total population were included in the 2008-09 baseline NHA performance report ([old] NHA PB 4(a)). |
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#### Attachment tables

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| **Table NHA.6.1** | Estimated life expectancy at birth, by sex, by State and Territory, 2010–2012 (years) |
| **Table NHA.6.2** | Estimated life expectancy at birth, by sex, by Indigenous status, by State and Territory, 2010–2012 (years) |
| **Table NHA.6.3** | Estimated life expectancy at birth, by sex, by remoteness, 2010–2012 (years) |
| **Table NHA.6.4** | Estimated life expectancy at birth, by sex, by Indigenous status, by State and Territory, 2005–2007 (years) |

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| Box 28 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 of 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 for the total population are available for all states and territories. * Total population data are available annually. The most recent available data (for 2012) were published in November 2013. The data are calculated as a three year average (with the most recent data for 2010–2012). * A large number of unregistered deaths in Queensland dating back to 1992 were identified and registered in 2010. Care should be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010. * Data for the total population are of acceptable accuracy. * Data in this report are comparable with data in previous reports for the total population. * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request.   The Steering Committee also notes the following issues:   * Data by Indigenous status are not available for Victoria, SA, Tasmania or the ACT due to the small number of Indigenous deaths reported in these jurisdictions (although data are included in national totals). * Data by Indigenous status are available every five years. The most recent available data (for 2012) were published in November 2013. The data are calculated as a three year average (with the most recent data for 2010–2012). * Data are not available by socioeconomic status (SES).Disaggregation of this indicator by SES is a priority. * The measure for this indicator is based on a three year average. 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. |
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### Indicator 7 — Infant and young child mortality rate

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| Key amendments from previous cycle of reporting: | * Single year data for children and infants have been backcast due to revised Estimated Resident Population (ERP) data and revised births data respectively (2007, 2008, 2009, 2010 and 2011). * National data by remoteness are available for the first time (for 2011 only not able to be backcast) |
| Outcome: | Australians are born and remain healthy |
| Measure: | Mortality rates for infants and children aged less than five years  For infants, the measure is defined as:   * *numerator* — number of deaths among persons aged less than a year * *denominator* — live births   and is expressed as a *rate (per 1000 live births)*  For infants and children, the measure is defined as:   * *numerator* — number of deaths among persons aged 0–4 years * *denominator* — population aged 0–4 years   and is expressed as a *rate (per 100 000 population)*  *Rate ratios and rate differences are calculated for comparing*  *Indigenous: non-Indigenous Australians.*  *Variability bands are calculated for single-year and aggregate years data by State/Territory (for within jurisdiction comparisons only – cannot be used to make comparisons across jurisdictions).* |
| Data source: | *Numerator* — ABS Death Registrations Collection  *Denominator* — ABS Census Post Enumeration Survey (5 yearly), ABS Births Collection, ABS Estimated Resident Population (total population – 2011 Census based) and ABS Indigenous experimental estimates and projections (Indigenous population – 2006 Census based).  For comparisons of Indigenous and non-Indigenous populations, all data will be 2006 Census based.  Data are available annually |
| Data provider: | ABS |
| Data availability: | Deaths collection — 2012  Births collection — 2012  Population data (for total population) — 30 June 2012 (based on 2011 Census)  Population data (for Indigenous status only) — 30 June 2012 (based on 2006 Census) |
| Cross tabulations provided: | Single year data:  2012 [backcast for 2011, 2010, 2009, 2008 and 2007]  Nationally for infants aged <1 year and children aged 0–4 years, by Indigenous status  2011  Nationally for children aged 0–4 years, by remoteness  Aggregate data:  2010–2012 (three year aggregate data for total population)  State and Territory, by selected age group (<1; 0–4 years)  2008–2012 (five year aggregate data for disaggregation by Indigenous status) State and Territory, by Indigenous status, by selected age group (<1; 0–4 years).  *[Data only reported for jurisdictions for which there is evidence of sufficient levels of identification and sufficient numbers of deaths to support mortality analysis]*  Further cross tabulations are available in the NIRA performance report — PI 6 |

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| Box 29 Results |
| For this report, new data for this indicator are available for 2012.   * National data by single year are presented in table NHA.7.1 * National data by single year by Indigenous status are presented in table 7.2 * Data by State and Territory (three year aggregate) are presented in table NHA.7.3 * Data by Indigenous status (five year aggregate) by selected jurisdictions are presented in tables NHA.7.4–5.   National data for 2011 by remoteness are available for the first time (not able to be backcast) and are presented in table NHA.7.6  Data for 2011, 2010, 2009, 2008 and 2007 (single year data only) have been revised and are presented in table NHA.7.1.  Additional data by Indigenous status are available in the NIRA performance report —NIRA performance indicator 6. |
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#### Attachment tables

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| **Table NHA.7.1** | All causes, infant (less than one year) and child (0-4 years) mortality, 2007 to 2012 |
| **Table NHA.7.2** | All causes infant and child mortality, by Indigenous status, 2012 |
| **Table NHA.7.3** | All causes infant and child mortality, by age group, by State and Territory, 2010–2012 |
| **Table NHA.7.4** | All causes infant (<1 year) mortality, by Indigenous status, NSW, Qld, WA, SA, NT, 2008–2012 |
| **Table NHA.7.5** | All causes child (0–4 years) mortality, by Indigenous status, NSW, Qld, WA, SA, NT, 2008–2012 |
| **Table NHA.7.6** | All causes, child (0-4 years) mortality, by remoteness, 2011 |

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| Box 30 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on infant (0<1 year) and child (0–4 years) mortality rates. * Data are available by State and Territory, and by Indigenous status for selected states and territories. Data are not available by socioeconomic status (SES). * Annual data are available. Single year data are reported for infant (infants aged less than one year) and child (aged 0–4 years) mortality at the national level for total population and by Indigenous status. Multiple year data are reported for disaggregation by State and Territory, and State and Territory by Indigenous status. * Single year data for child mortality have been backcast to the baseline reporting year of 2007 due to revised ERP data. * Single year data for infant mortality have been backcast to the baseline reporting year of 2007 due to revised births data for NSW and Australia. * Data are of acceptable accuracy. Although most deaths of Indigenous Australians are registered, it is likely that some are not identified as Indigenous. Therefore data are likely to underestimate the Indigenous mortality rate. * A large number of unregistered deaths in Queensland dating back to 1992 were identified and registered in 2010. Care should be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010. * Data by Indigenous status are reported for NSW, Queensland, WA, SA and the NT only. Only these jurisdictions have evidence of a sufficient level of Indigenous identification, have sufficient numbers of Indigenous deaths and do not have significant data quality issues. * Variability bands provided with rates describe the range of potential results for mortality rates. Variability bands are calculated for single-year and aggregate years data by State and Territory (for within jurisdiction comparisons only — they cannot be used to make comparisons across jurisdictions). * Detailed explanatory notes are publicly available to assist in the interpretation of results.   (Continued next page) |
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| Box 30 (continued) |
| * Additional data from the data source are available online, and on request.   The Steering Committee also notes the following issues:   * While rates should be used with caution, data are comparable across jurisdictions and over time (although rates have not been adjusted for differences in Indigenous identification across jurisdictions). However, whilst the rates for all-cause infant mortality were revised to account for the revised births data in the denominator (table NHA.7.1), these data were not able to be revised in time for the equivalent data disaggregated by Indigenous status (table NHA.7.2). It is anticipated that these data will be revised for the next cycle of reporting. * Further work is required to improve the completeness of Indigenous identification for registered deaths. * Disaggregation of this indicator by SES is a priority. |
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### Indicator 8 — Major causes of death

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| Key amendments from previous cycle of reporting: | Single year data have been backcast due to:   * (for cause of death) revised ABS Causes of Death data (2009 and 2010) and revised Estimated Resident Population (ERP) data (2007, 2008, 2009 and 2010) * (for all cause totals only) revised ERP data (2007, 2008, 2009, 2010 and 2011)   National data by remoteness are available for the first time (for 2011 only not able to be backcast) |
| Outcome: | Australians are born and remain healthy |
| Measure: | Age-standardised mortality rate by major cause of death  The measure is defined as:   * *numerator* — number of deaths * *denominator* — total population   and is expressed as a *directly age standardised rate (per 100 000 people in the relevant population)*  Calculated overall and for major causes of death  *[The Steering Committee has a list of categories for major causes of death by all persons and by Indigenous status].*  *Rate ratios and rate differences calculated for comparing Indigenous:  non-Indigenous Australians are available in the NIRA performance report — PI 2.*  *Variability bands are calculated for single-year and aggregate years data by State/Territory (for within jurisdiction comparisons only – cannot be used to make comparisons across jurisdictions).* |
| Data source: | *Numerator* — ABS Causes of Death Collection (causes of death) and ABS Deaths Collection (all causes total only)  *Denominator* — ABS Estimated Resident Population (total population – 2011 Census based) and ABS Indigenous experimental estimates and projections (Indigenous population – 2006 Census based ). For comparisons of Indigenous and non-Indigenous populations, all data will be 2006 Census based.  Data are available annually |
| Data provider: | ABS |
| Data availability: | Single year data:  2012 (all causes total only) and revised for total population only for 2011, Re-supplied for 2010 and 2009 (revised for cause of death and revised ERP) and 2008 and 2007 (revised ERP – excluding disaggregations by Indigenous status)  Aggregate data (Indigenous status):  2007–2011 (by cause of death) |
| Cross tabulations provided: | Disaggregation by Indigenous status will be based on data only from jurisdictions for which the quality of Indigenous identification is considered acceptable - NSW, Qld, WA, SA and NT.   * 1. Single year   2012 — State and Territory, by all causes of death (re-supplied for 2007, 2008, 2009, 2010 and 2011 for revised ERP)  2011 (re-supplied for 2007, 2008, 2009 and 2010) — State and Territory, by major causes of death  2011— Nationally by all causes of death, by remoteness  Aggregate year  (2007–2011) — State and Territory, by major cause of death and total for five jurisdictions, by   * Indigenous status   Further cross tabulations are available in the NIRA performance report — PI 2 |

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| Box 31 Results |
| For this report, new data for this indicator are available for 2012 (all causes) and 2011 (by cause of death).   * 2012 data by State and Territory (all-cause totals only) are presented in table NHA.8.1 (this table also includes revised time series data back to the baseline reporting year of 2007) * 2011 data by State and Territory by cause of death are presented in table NHA.8.2 (revised data back to the baseline reporting year of 2007 are included in tables NHA.8.4–7) * 2007–2011 data by Indigenous status are presented in table NHA.8.3.   Additional data by Indigenous status are available in the NIRA performance report —NIRA performance indicator 2.  National data for 2011 by remoteness are available for the first time (not able to be backcast) and are presented in table NHA.8.8. |
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#### Attachment tables

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| **Table NHA.8.1** | Age standardised mortality rate (all causes), by State and Territory (with variability bands), 2007 to 2012 |
| **Table NHA.8.2** | Age standardised mortality rates by cause of death (with variability bands), by State and Territory, 2011 |
| **Table NHA.8.3** | Age standardised mortality rates by major cause of death, by Indigenous status, 2007–2011 |
| **Table NHA.8.4** | Age standardised mortality rates by cause of death (with variability bands), by State and Territory, 2010 |
| **Table NHA.8.5** | Age standardised mortality rates by cause of death (with variability bands), by State and Territory, 2009 |
| **Table NHA.8.6** | Age standardised mortality rates by cause of death (with variability bands), by State and Territory, 2008 |
| **Table NHA.8.7** | Age standardised mortality rates by cause of death (with variability bands), by State and Territory, 2007 |
| **Table NHA.8.8** | Age standardised mortality rate (all causes), by remoteness, 2011 |

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| Box 32 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on major causes of death. Data are available for all states and territories, and by Indigenous status for selected jurisdictions. Data are not available by socioeconomic status (SES). * Data are available annually. The most recent available data are for 2011 by cause of death, and 2012 for all cause totals (not disaggregated by cause of death). * Single year data have been backcast due to revised ERP data (2007, 2008, 2009, 2010 and 2011) and revised ABS Causes of Death data (2009 and 2010). * A large number of unregistered deaths in Queensland dating back to 1992 were identified and registered in 2010. Care should be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010. * Data by Indigenous status are reported for NSW, Queensland, WA, SA and the NT. Only these jurisdictions have evidence of a sufficient level of Indigenous identification, have sufficient numbers of Indigenous deaths and do not have significant data quality issues. * Data are of acceptable accuracy. Although most deaths of Indigenous Australians are registered, it is likely that some are not identified as Indigenous. Therefore data are likely to underestimate the Indigenous mortality rate. Rates should be used with caution.   (Continued next page) |
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| Box 32 (continued) |
| * Variability bands provided with rates describe the range of potential results for mortality rates. Variability bands are calculated for single-year and aggregate years data by State and Territory (for within jurisdiction comparisons only — they cannot be used to make comparisons across jurisdictions). * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request   The Steering Committee also notes the following issues:   * While rates should be used with caution, data are comparable across jurisdictions and over time (although rates have not been adjusted for differences in Indigenous identification across jurisdictions). * Further work is required to improve the completeness of Indigenous identification for registered deaths. * Disaggregation of this indicator by SES is a priority. |
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### Indicator 9 — Incidence of heart attacks

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| Key amendments from previous cycle of reporting: | Data for the total population have been backcast due to revised Estimated Resident Population (ERP) data. Data by Indigenous status are backcast due to updated causes of deaths data for 2009 and 2010 and changes to the calculation of age standardised rates. |
| Outcome: | Australians are born and remain healthy. |
| Measure: | Incidence of acute coronary events (acute myocardial infarction (AMI) and unstable angina (UA)). Also known as heart attacks for the purposes of this indicator.  The measure is defined as:   * *numerator* — Number of deaths recorded with an underlying cause of acute coronary heart disease (ICD-10-AM codes I20-I24) plus the number of non-fatal hospitalisations with a principal diagnosis of acute myocardial infarction (ICD-10-AM I21) or unstable angina (ICD-10-AM I20.0) that do not end in a transfer to another acute hospital. * *denominator* — Total population aged 25 years and over.   and is expressed as a *rate per 100 000 population* for the population aged 25 years and over  *Rates directly age-standardised to the 2001 Australian population.* |
| Data source: | *Numerator* — AIHW National Hospital Morbidity Database and AIHW National Mortality Database  *Denominator* — (All) ABS Estimated Resident Population (2011 Census based) and (Indigenous) ABS Indigenous experimental estimates and projections (2006 Census based). For comparisons of Indigenous and ’Other Australians’, all data will be 2006 Census based.  Data are available annually. |
| Data provider: | AIHW |
| Data availability: | 2011, (current year) and backcast for 2010, 2009, 2008, 2007 (backcast for total population due to revised ERP and updated causes of deaths data and for Indigenous status due to changes to the calculation of age standardised rates). |
| Cross tabulations provided: | Nationally by:   * Indigenous status * age (25–34; 35–44; 45–54; 55–64; 65–74; 75+) and sex.   *Disaggregation by Indigenous status will be based on data only from jurisdictions for which the quality of Indigenous identification is considered acceptable. Some disaggregations may result in numbers too small for publication* |

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| Box 33 Results |
| Data are provided for 2011 (the most recent available data), and revised back to the baseline reporting year of 2007.   * National data for all years, by age and sex are presented in table NHA.9.1 * National data for all years, by Indigenous status are presented in table NHA.9.2. |
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#### Attachment tables

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| **Table NHA.9.1** | Rate of heart attacks, by age and sex, people aged 25 years and over, 2007 to 2011 |
| **Table NHA.9.2** | Age standardised rate of heart attacks, by State and Territory, people 25 years and over, by Indigenous status, 2007 to 2011 |

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| Box 34 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide an estimate of the incidence of heart attacks. * National data by Indigenous status are available. Data are not available by State and Territory or by socioeconomic status (SES). * Data are an estimate of ‘events’, not individuals. Individuals may have multiple events in the one year or in different years, and each event would be counted. * Variations in key variables (particularly in transfer rates in hospitals) across jurisdictions indicate that the method of estimation may lead to an underestimate of incidence in some jurisdictions and an overestimate in others. The extent of this cannot be measured until the method of estimation is validated. As a result, State and Territory estimates are not provided. * The accuracy of the estimates is reliant on the accuracy and consistency of coding of the principal diagnosis and underlying cause of death in each jurisdiction. It also relies on the accuracy of coding of transfers to another acute hospital and of death in hospital.   (Continued next page) |
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| Box 34 (continued) |
| * National disaggregation by Indigenous status is derived using only data from the five jurisdictions where the quality of identification is considered reasonable in both data collections (NSW, 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 online, and on request.   The Steering Committee also notes the following issue:   * The AIHW are currently undertaking work to validate the method used to calculate this indicator. This work will inform reporting at a jurisdictional level for the 2013-14 NHA performance report. |
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### Indicator 10 — Prevalence of Type 2 diabetes

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| Key amendments from previous cycle of reporting: | Data are reported against this indicator for the first time (not able to be backcast). |
| Outcome: | Australians are born and remain healthy. |
| Measure(s): | There are two measures for this indicator:   * *Main measure:* proportion of people aged 18 years and over with *known diabetes* (Type 2) or *newly diagnosed diabetes* as determined by a fasting plasma glucose test. * *Supplementary measure:* proportion of people aged 25 years and over with *known diabetes* (Type 2) or *newly diagnosed diabetes* as determined by a fasting plasma glucose test |
| Main measure: | The proportion of people aged 18 years and over who have Type 2 diabetes  The measure is defined as:   * *numerator* — Number of persons aged 18 years and over with *known diabetes* (Type 2) or *newly diagnosed diabetes* as determined by a fasting plasma glucose test. * *denominator* — number of persons aged 18 years or over   and is expressed as a *percentage* (age standardised) |
| Supplementary measure: | The proportion of people aged 25 years and over who have Type 2 diabetes  The measure is defined as:   * *numerator* — number of persons aged 25 years and over with *known diabetes* (Type 2) or *newly diagnosed diabetes* as determined by a fasting plasma glucose test. * *denominator* — number of persons aged 25 years or over   and is expressed as a *percentage* (age standardised) |
| Both measures: | A respondent to the survey is considered to have *known diabetes* if they had ever been told by a doctor or nurse that they have Type 2 diabetes and:   * They were taking diabetes medication (either insulin or tablets); or * Their blood test result for fasting plasma glucose was greater than or equal to 7.0 mmol/L.   A respondent to the survey is considered to have *newly diagnosed diabetes* if they reported no prior diagnosis of diabetes, but had a fasting plasma glucose value greater than or equal to 7.0 mmol/L.  Note: The type of diabetes for newly diagnosed cases cannot be determined from a fasting plasma glucose test alone. However, it is assumed that the vast majority of cases would be Type 2  *Excludes persons who did not fast for 8 hours or more prior to their blood test. Excludes women with gestational diabetes.*  *Rates are directly age-standardised to the 2001 Australian population.*  *95 per cent confidence intervals and relative standard errors calculated for rates.*  *Analysis by remoteness and Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-Economic Disadvantage (IRSD) is based on usual residence of person (subject to data availability).* |
| Data source (both measures): | (All) Australian Health Survey (AHS) (National Health Measures Survey (NHMS)) component.  (Indigenous) Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) NATSIHMS component.  Frequency of the NHMS/ NATSIHMS component of AHS and AATSIHS to be determined. |
| Data provider (both measures):: | ABS |
| Data availability(both measures) | (All) 2011-12 (National Health Measures Survey (NHMS) component of the 2011–13 AHS)  (Indigenous status) Data not yet available for the Indigenous population. [2012-13 AATSIHS data (NATSIHMS component) anticipated to be available in 2014.] |
| Cross tabulations provided (both measures): | State and Territory, by sex  Nationally, by:   * Remoteness (ASGS) * SEIFA IRSD quintiles (2011 SEIFA IRSD with ASGS) |

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| Box 35 Results |
| Data are available for the first time for reporting against this indicator (2011-12 data, not able to be backcast).   * Data by State and Territory by sex are presented in table NHA.10.1 * Data by socioeconomic status are presented in table NHA.10.2 * Data by remoteness are presented in table NHA.10.3.   Data for the supplementary measure are presented in tables 10.4–6.  To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator. |
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#### Attachment tables

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| **Table NHA.10.1** | Proportion of people aged 18 years and over with type 2 diabetes (based on fasting glucose test), by State and Territory, by sex, 2011-12 (per cent) |
| **Table NHA.10.2** | Proportion of people aged 18 years and over with type 2 diabetes (based on fasting glucose test), by SEIFA IRSD quintile, 2011-12 (per cent) |
| **Table NHA.10.3** | Proportion of people aged 18 years and over with type 2 diabetes (based on fasting glucose test), by remoteness, 2011-12 (per cent) |
| **Table NHA.10.4** | *(supplementary measure)* Proportion of people aged 25 years and over with type 2 diabetes (based on fasting glucose test), by State and Territory, by sex, 2011-12 (per cent) |
| **Table NHA.10.5** | *(supplementary measure)* Proportion of people aged 25 years and over with type 2 diabetes (based on fasting glucose test), by SEIFA IRSD quintile, 2011-12 (per cent) |
| **Table NHA.10.6** | *(supplementary measure)* Proportion of people aged 25 years and over with type 2 diabetes (based on fasting glucose test), by remoteness, 2011-12 (per cent) |

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| 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on the prevalence of Type 2 diabetes. The main measure is for people aged 18 years and over. A supplementary measure for people aged 25 years and over has been provided for reporting against the associated benchmark, to align with the age group specified in the NHA. * State and Territory data are available. National data are available by socioeconomic status (SES) and remoteness. * The 2011-12 National Health Measures Survey (NHMS) was conducted for the first time as part of the 2011–13 Australian Health Survey (AHS), with participation voluntary in the NHMS. Of those who took part in the AHS, 38 per cent took part in the NHMS. The NHMS sample was found to be representative of the AHS population. * The NHMS does not include people living in very remote areas, which affects the comparability of the NT results. * Data are of acceptable accuracy. Some relative standard errors for 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 online, and on request.   The Steering Committee also notes the following issue:   * State and Territory data by Indigenous status are anticipated to be available for the 2013-14 report. |
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### Indicator 11 — Proportion of adults with very high levels of psychological distress

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| Key amendments from previous cycle of reporting: | * The CRC has requested an additional data disaggregation for this indicator — remoteness by socioeconomic status (SES) (national level data, most recent year only) * An additional disaggregation is provided — sex by socioeconomic status (SES) (national level data, most recent year only) |
| Outcome: | Australians are born and remain healthy |
| Measure: | Proportion of adults with very high levels of psychological distress.  The measure is defined as:   * *numerator* — Number of people aged 18 years or over with a very high distress score as measured by the Kessler Psychological Distress Scale. * *denominator* — Population aged 18 years or over   and is expressed as a *directly age standardised rate (per cent)*  A ten item scale is currently employed by ABS in general population collections (ie. K10), while a five item scale is included in Aboriginal and Torres Strait Islander collections (ie. K5).  Total scores from the K10 scale can be grouped as follows:   * Low (10–15); * Moderate (16–21); * High (22–29); * Very high (30–50);.   Total scores from the K5 scale can be grouped as follows:   * Low/moderate (5–11); * High/ very high (12–25)   *Rates directly age-standardised to the 2001 Australian population (for data disaggregated by State and Territory, Indigenous status, SEIFA and remoteness).*  *95 per cent confidence intervals and relative standard errors calculated for rates.* |
| Data source: | *Numerator and denominator* — (All) Australian Health Survey (AHS). Data are collected every three years. (Indigenous) Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS)/ National Aboriginal and Torres Strait Islander Social Survey (NATSISS). Data are collected on an alternating three-yearly cycle. |
| Data provider: | ABS |
| Data availability: | (All) 2011-12 (NHS component of the 2011–13 AHS) data provided for  2011-12 report [No new data available]  (Indigenous status) Indigenous: 2012-13 (NATSIHS component of the AATSIHS) / non-Indigenous: 2011-12 (NHS component of the AHS) |
| Cross tabulations provided: | State and Territory (high/ very high levels) by:   * Indigenous status   Nationally, by   * sex, by SEIFA IRSD quintiles (2011 SEIFA IRSD with ASGS) * remoteness, by SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS)   *Some disaggregations may result in numbers too small for publication.* |

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| Box 37 Results |
| For this report, new data disaggregated by Indigenous status are available for  2011–13.   * Data by State and Territory are presented in table NHA.11.1.   Additional data for 2011-12 by sex by remoteness and remoteness by SES are presented in tables NHA.11.2–3.  Data for 2011-12 and 2007-08, and by Indigenous status for 2008, are provided in the 2011-12 NHA performance report.  To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator. |
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#### Attachment tables

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| **Table NHA.11.1** | Age standardised rate of adults with high/ very high levels of psychological distress, by State and Territory, by Indigenous status, 2011–13 |
| **Table NHA.11.2** | Age standardised rate of adults with very high levels of psychological distress, by sex, by SEIFA IRSD quintiles, 2011­12 |
| **Table NHA.11.3** | Age standardised rate of adults with very high levels of psychological distress, by remoteness, by SEIFA IRSD deciles, 2011­12 |

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| 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on the proportion of adults with very high levels of psychological distress (high/very high levels combined where data are presented by Indigenous status).State and Territory data by Indigenous status are available. National data by SES were included in the 2011-12 NHA report.   (continued next page) |
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| Box 38 (continued) |
| * Data for the current reporting cycle are sourced from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) component of the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) for the Indigenous population, and the National Health Survey (NHS) component of the ABS Australian Health Survey (AHS) for the non-Indigenous and total population. * Data for the total and non-Indigenous populations in the AHS do not include people living in very remote areas, which affects the comparability of the NT results. * Data are of acceptable accuracy. Some relative standard errors for sex, SES and remoteness 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 online, and on request.   The Steering Committee al so notes the following issue:   * Disaggregation of this indicator by SES at the State and Territory level is a priority. |
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### Indicator 12 — Waiting times for GPs

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| Key amendments from previous cycle of reporting: | * Data are provided for the first time for the Indigenous population (not able to be backcast). * National data are now provided disaggregated * by sex, and * by waiting time category by remoteness (all categories) |
| Outcome: | Australians receive appropriate high quality and affordable primary and community health services |
| 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 persons aged 15 years or over who reported seeing a GP for urgent medical care (for their own health) within specified waiting time categories * *denominator* — total number of persons aged 15 years or over who saw a GP for urgent medical care (for their own health) in the last 12 months   and is expressed as a *directly age standardised rate [per cent calculated separately for each waiting time category* (within four hours; more than four hours but within 24 hours; and 24 hours or more)]  *The interpretation of ‘urgent medical care’ was left to the respondent.*  *95 per cent confidence intervals and relative standard errors calculated for rates* |
| Data source: | (All) ABS Patient Experience Survey (PExS). Data are available annually.  (Indigenous) ABS National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) component of the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) – *non-remote areas only* |
| Data provider: | ABS |
| Data availability: | 2012-13 |
| Cross tabulations provided: | State and Territory, by waiting time category by:   * remoteness (ASGS) (collapsed categories)   Nationally, by waiting time category by:   * remoteness (ASGS) (all categories) * SEIFA IRSD deciles (2011 based SEIFA ISRD with ASGS) * sex   (Indigenous population only) National by remoteness (non-remote areas only) |

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| Box 39 Results |
| For this report, data are available for 2012-13.   * Data by State and Territory are presented in tables NHA.12.1 * Data by sex are presented in tables NHA.12.2 * Data by remoteness are presented in tables NHA.12.1 and 12.3 * Data by socioeconomic status are presented in table NHA.12.4 * Data for Indigenous persons only are presented in table 12.5.   Apparent differences in results between years may not be statistically significant. To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator.  Data for 2011-12 are provided in the 2011-12 NHA performance report.  Data for 2010-11 are provided in the 2010-11 NHA performance report ([old] NHA PI 14), and 2009 data are provided in the 2008-09 NHA performance report ([old] NHA PI 14), but these data are not directly comparable with data included in this report. |
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#### Attachment tables

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| **Table NHA.12.1** | Reported waiting time to see a GP for an urgent appointment, by State and Territory, by remoteness, 2012-13 |
| **Table NHA.12.2** | Reported waiting time to see a GP for an urgent appointment, by sex, 2012-13 |
| **Table NHA.12.3** | Reported waiting time to see a GP for an urgent appointment, by remoteness, 2012-13 |
| **Table NHA.12.4** | Waiting time for GPs for an urgent appointment, by SEIFA IRSD deciles, 2012-13 (per cent) |
| **Table NHA.12.5** | Reported waiting time to see a GP for an urgent appointment, Indigenous persons only, by remoteness areas, 2012-13 (per cent) |

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| Box 40 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on waiting times for GPs for urgent medical care. The data are based on waiting times for self-defined urgent medical care.   (continued next page) |
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| Box 40 (continued) |
| * The most recent data are for 2012-13 from the Patient Experience Survey (PExS): * Data are available by State and Territory, and nationally by socioeconomic status (SES). * Data are comparable between 2012-13 and 2011-12. There was a significant change in the question wording and coding method in the 2011-12 PExS, which means that data from 2011-12 onwards are not comparable with prior year’s data. * Data are available for the first time for the Indigenous population from the 2012-13 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) component of the 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS). Data are available nationally, by remoteness. * Data from the PExS are not directly comparable with data from the NATSIHS. * The 2011-12 PExS was the first to include households in very remote areas, (although it still excluded discrete Indigenous communities). Small differences evident in the NT estimates between 2010-11 and 2011-12 may in part be due to the inclusion of households in very remote areas. Data from the NATSIHS are available for non-remote areas only for this indicator (major cities, inner regional and outer regional). * Data are of acceptable accuracy. Some relative standard errors for remoteness disaggregations (remote/ very remote categories) 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 online, and on request.   The Steering Committee also notes the following issues:   * Comparable time series data and comparable data by Indigenous status are both priorities for this indicator. * Where RSEs are large (greater than 25 per cent) caution should be used when interpreting results. Small year to year movements may be difficult to detect if the size of the RSEs is large compared to the size of the difference between estimates. * Data limitations mean that:   –disaggregation at the substate level for remoteness areas is only available for major cities (with other remoteness categories combined)  – disaggregation by SES is only available at the national level. |
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### Indicator 13 — Waiting times for public dentistry

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| Key amendments from previous cycle of reporting: | * The CRC no longer require this indicator disaggregated by all waiting time categories (ie only require ‘reduced categories’ as reported last year – less than one month, one month or more). * Data are provided for the first time for the Indigenous population (not able to be backcast). |
| Outcome: | Australians receive appropriate high quality and affordable primary and community health services |
| Measure: | Waiting time between being placed on a public dentistry waiting list and being seen by a dental professional.  The measure is defined as:   * *Numerator (for total population)* — number of persons aged 15 years and over who reported being on a public dental waiting list and who reported seeing a dental professional at a government dental clinic (for their own health) within specified waiting time categories.   *Numerator (for Indigenous population)* — number of persons aged 15 years and over who reported seeing a dental professional at a government dental clinic within specified waiting time categories   * *Denominator (for total population)* — Number of persons aged 15 years and over who needed to see a dental professional and who reported being on a public dental waiting list (for their own health) in the last 12 months * *Denominator (for Indigenous population)* — total number of persons aged 15 years and over who reported seeing a dental professional at a government dental clinic in the last 12 months.   expressed as a *directly age standardised rate [per cent calculated separately for each waiting time category* (less than 1 month; 1 month or more)]  *95 per cent confidence intervals and relative standard errors are calculated for rates* |
| Data source: | (All) ABS Patient Experience Survey (PExS). Data are available annually.  (Indigenous) ABS National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) component of the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) *– non-remote areas only* |
| Data provider: | ABS |
| Data availability: | 2012-13 |
| Cross tabulations provided: | State and territory, by waiting time category  Nationally, by waiting time category, by:   * remoteness (ASGS) * SEIFA IRSD quintiles (2011 SEIFA IRSD with ASGS)   (Indigenous population only) remoteness (ASGS non-remote areas only) |

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| Box 41 Results |
| For this report, data are available for 2012-13.   * Data by State and Territory are presented in table NHA.13.1 * Data by remoteness are presented in table NHA.13.2 * Data by socioeconomic status are presented in table NHA.13.3 * Data for Indigenous persons only are presented in table 13.4.   Apparent differences in results between years may not be statistically significant. To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator.  Data for 2011-12 are provided in the 2011-12 NHA performance report, but are not directly comparable with data included in this report. |
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#### Attachment tables

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| **Table NHA.13.1** | Reported waiting time to see a dental professional at a public government dental clinic, by State and Territory, 2012-13 (per cent) |
| **Table NHA.13.2** | Reported waiting time to see a dental professional at a government dental clinic, by remoteness, 2012-13 |
| **Table NHA.13.3** | Reported waiting time of less than, or more than one month to see a dental professional at a government dental clinic, by SEIFA IRSD quintiles, 2012-13 |
| **Table NHA.13.4** | Reported waiting time to see a dental professional at a government dental clinic, Indigenous persons only, by remoteness, 2012-13 (per cent) |

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| Box 42 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 of this report titled ‘Data Quality Statements’. Key points form the DQS are summarised below.   * The data provide relevant information on waiting times for public dentistry. The data are based on waiting times for self-defined urgent dental care. * The most recent data are for 2012-13 from the Patient Experience Survey (PExS): * Data are available by State and Territory, and nationally by socioeconomic status (SES).   (Continued next page) |
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| Box 42 (continued) |
| * Data for 2012-13 are not comparable with data for prior years due to changes in question wording and sequencing in the 2012-13 PExS. * Data are available for the first time for the Indigenous population from the 2012-13 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). Data from the NATSIHS are available for non-remote areas only for this indicator (major cities, inner regional and outer regional). * Data are of acceptable accuracy. Some relative standard errors for remoteness 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 online, and on request.   The Steering Committee also notes the following issues:   * Comparable time series data and comparable data by Indigenous status are both priorities for this indicator. * Due to the very low prevalence rate for this measure (2 per cent), the current sample size does not support reliable estimates at the State and Territory level for data disaggregated by waiting time category, by remoteness. Some variables (such as waiting times and remoteness categories) have been aggregated up to provide more reliable estimates. * Where RSEs are large (greater than 25 per cent) caution should be used when interpreting results. Small year to year movements may be difficult to detect if the size of the RSEs is large compared to the size of the difference between estimates. |
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### Indicator 14 — People deferring access to selected healthcare due to financial barriers

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| Key amendments from previous cycle of reporting: | * Data are provided for the first time for the Indigenous population (not able to be backcast). * National data are now provided disaggregated by sex. |
| Outcome: | Australians receive appropriate high quality and affordable primary and community health services |
| Measure: | Proportion of people who required treatment but deferred that treatment due to cost, by type of health service  There are five measures for this indicator:  Measure 14a: Proportion of people who delayed or didn’t see a GP because of cost  Measure 14b: Proportion of people who delayed or didn’t see a medical specialist because of cost  Measure 14c: Proportion of people who delayed or didn’t get a medical prescription filled because of cost  Measure 14d: Proportion of people who delayed or didn’t see a dental practitioner because of cost  Measure 14e: Proportion of people who delayed or didn’t get pathology or imaging tests because of cost  Measure 14a is defined as:   * *numerator* — number of persons aged 15 years or over who reported delaying or not seeing a GP in the last 12 months because of cost * *[numerator for Indigenous]* — number of Indigenous persons aged 15 years or over who reported needing to see a GP in the last 12 months, but did not because of cost * *denominator* — total number of persons aged 15 years or over who saw a GP, or needed to see a GP but didn’t, in the last 12 months * *[denominator for Indigenous]* — total number of Indigenous persons aged 15 years or over who needed to see a GP in the last 12 months, but did not   and is expressed as a *directly age standardised rate (per cent)*  Measure 14b is defined as:   * *numerator* — number of persons aged 15 years or over who reported delaying or not seeing a medical specialist in the last 12 months because of cost * *denominator* — total number of persons aged 15 years or over who received a written referral to a specialist from a GP in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  Measure 14c is defined as:   * *numerator* — number of persons who reported delaying or not getting a prescription filled for medication in the last 12 months because of cost * *[numerator for Indigenous]* — number of Indigenous persons aged 15 years or over who did not fill a prescription in the last 12 months because of cost * *denominator* — total number of persons aged 15 years or over who received a prescription for medication from a GP in the last 12 months * *[denominator for Indigenous]* — total number of Indigenous persons aged 15 years or over who had prescriptions that were not filled in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  Measure 14d is defined as:   * *numerator* — number of persons aged 15 years or over who reported delaying or not seeing a dental practitioner in the last 12 months because of cost * *[numerator for Indigenous]* — number of Indigenous persons aged 15 years or over who reported needing to see a dental practitioner in the last 12 months, but did not because of cost * *denominator* — total number of persons aged 15 years or over who saw a dental practitioner, or needed to see a dental practitioner but didn’t, in the last 12 months * *[denominator for Indigenous]* — total number of Indigenous persons aged 15 years or over who needed to see a dental practitioner in the last 12 months, but did not.   and is expressed as a *directly age standardised rate (per cent)*  Measure 14e is defined as:   * *numerator* — number of persons aged 15 years or over who reported delaying or not getting pathology or imaging tests in the last 12 months because of cost * *denominator* — total number of persons aged 15 years or over who had a pathology or imaging test, or who needed a pathology or imaging test, but didn’t get one, in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  *Dental practitioner includes dentist, dental hygienist or dental specialist.*  *Pathology and imaging tests exclude those had while in hospital. Imaging tests also exclude those for dental work.*  *Some survey respondents may report pathology and imaging as a referral to a medical specialist.*  *All measures in this indicator are limited to persons aged 15 years and over.*  *95 per cent confidence intervals and relative standard errors calculated for rates.* |
| Data source: | (All) ABS Patient Experience Survey (PExS). Data are available annually.  (Indigenous) ABS National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) component of the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) – *Measures (a), (c) and (d) only* and *non-remote areas only for measure (c)* |
| Data provider: | ABS |
| Data availability: | 2012-13 |
| Cross tabulations provided: | State and Territory by type of healthcare:   * remoteness (ASGS) (collapsed categories)   (Indigenous population– Measures (a), (c) and (d) only. Non-remote areas only for measure (c))  Nationally, by type of healthcare by:   * remoteness (ASGS) (all categories) * SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS) * sex   (Indigenous population—Measures (a), (c) and (d) only. Non-remote areas only for measure (c)) |

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| Box 43 Results |
| For this report, data are available for 2012-13.   * Data by State and Territory are presented in tables NHA.14.1–5 * Data by remoteness are presented in tables NHA.14.1–6 * Data by socioeconomic status are presented in table NHA.14.7 * Data by sex are presented in table NHA.14.8 * Data for Indigenous persons only (measures (a), (c) and (d)) are presented in tables 14.9-11.   Apparent differences in results between years may not be statistically significant. To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator.  Data for 2011-12 are provided in the 2011-12 NHA performance report, but are not directly comparable with data included in this report for measures (a), (d), and (e).  Data for 2010-11 are provided in the 2010-11 NHA performance report ([old] NHA PI 16) and 2009 data are provided in the 2008-09 NHA performance report ([old] NHA PI 16), but these data are not directly comparable with data included in this report. |
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#### Attachment tables

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| **Table NHA.14.1** | Proportion of people who reported delaying or not seeing a GP in the last 12 months because of cost, by State and Territory and remoteness, 2012-13 |
| **Table NHA.14.2** | Proportion of people who reported delaying or not seeing a medical specialist in the last 12 months because of cost, by State and Territory and remoteness, 2012-13 |
| **Table NHA.14.3** | Proportion of people who reported delaying or not getting a prescription filled in the last 12 months because of cost, by State and Territory and remoteness, 2012-13 |
| **Table NHA.14.4** | Proportion of people who reported delaying or not seeing a dental professional in the last 12 months because of cost, by State and Territory, by remoteness, 2012-13 |
| **Table NHA.14.5** | Proportion of people who reported delaying or not having a pathology or imaging test in the last 12 months because of cost, by State and Territory and remoteness, 2012-13 |
| **Table NHA 14.6** | Proportion of people who reported delaying or not accessing selected healthcare in the last 12 months due to cost, by type of health service, by remoteness, 2012-13 |
| **Table NHA.14.7** | Proportion of people who reported delaying or not accessing selected healthcare in the last 12 months due to cost, by type of health service, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.14.8** | Proportion of people who reported delaying or not accessing selected healthcare in the last 12 months due to cost, by type of health service, by sex, 2012-13 |
| **Table NHA.14.9** | Proportion of people who reported delaying or not seeing a GP in the last 12 months because of cost, Indigenous persons only, by State and Territory, by remoteness, 2012-13 |
| **Table NHA.14.10** | Proportion of people who reported delaying or not seeing a dental professional in the last 12 months because of cost, Indigenous persons only, by State and Territory, by remoteness, 2012-13 |
| **Table NHA.14.11** | Proportion of people who reported delaying or not getting a medical prescription filled because of cost, Indigenous persons only, by State and Territory, by remoteness, 2012-13 |

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| Box 44 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on people deferring access to selected health care (GPs, medical specialists, dentists, prescribed medications and pathology and imaging) due to cost (GPs, dentists and prescribed medications only for the Indigenous population). * The most data recent are for 2012-13 from the Patient Experience Survey (PExS): * Data are available by State and Territory and nationally by socioeconomic status (SES). * Data are not comparable over time for measures (a), (d) and (e). Data for measures (b), (c) are comparable between 2012-13 and 2011-12 (data are not comparable with prior years due to changes in question wording and/or sequencing). * Data are available for the first time for the Indigenous population from the 2012-13 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) for measures (a), (c) and (d) only. * Data from the PExS are not directly comparable with data from the NATSIHS.   (Continued next page) |
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| Box 44 (continued) |
| * The 2011-12 PExS was the first to include households in very remote areas, (although it still excluded discrete Indigenous communities). Small differences evident in the NT estimates between 2010-11 and 2011-12 may in part be due to the inclusion of households in very remote areas. Data from the NATSIHS are available for all areas for measures (a) and (d), but for non-remote areas only for measure (c) (major cities, inner regional and outer regional). * Data are of acceptable accuracy. Some relative standard errors for remoteness disaggregations (remote/ very remote categories) 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 online, and on request.   The Steering Committee also notes the following issues:   * Comparable time series data and comparable data by Indigenous status are both priorities for this indicator. * Where RSEs are large (greater than 25 per cent) caution should be used when interpreting results. Small year to year movements may be difficult to detect if the size of the RSEs is large compared to the size of the difference between estimates * Data limitations mean that:   – disaggregation at the substate level by remoteness areas is only available for major cities (with other remoteness categories combined)  – disaggregation by SES is only available at the national level. |
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### Indicator 15 — Effective management of diabetes

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| Key amendments from previous cycle of reporting: | Data are reported for the first time for this indicator (not able to be backcast). |
| Outcome: | Australians receive appropriate high quality and affordable primary and community health services |
| Measure: | Proportion of people with *known* diabetes who have a HbA1c (glycated haemoglobin) level less than or equal to 7.0 per cent  The measure is defined as:   * *numerator* — Number of persons aged between 18 and 69 years with *known diabetes*, as determined by a fasting plasma glucose test, who have an HbA1c level of less than or equal to 7.0 per cent * *denominator* — Number of persons aged between 18 and 69 years with *known diabetes*, as determined by a fasting plasma glucose test   and is expressed as a *percentage*  For this indicator, the fasting plasma glucose test is used in the determination of people with *known diabetes* and the HbA1c test is used in the determination of effective management of diabetes. Persons with *known diabetes* who have an HbA1c result of less than or equal to 7.0 per cent are considered to be managing their diabetes effectively.  *Known diabetes* is defined as persons self-reporting that they had ever been told by a doctor or nurse that they have diabetes and:   * They were taking diabetes medication (either insulin or tablets); or * Their blood test result for fasting plasma glucose was greater than or equal to 7.0 mmol/L.   *Excludes persons who did not fast for 8 hours or more prior to their blood test and women with gestational diabetes.*  *Analysis by remoteness and Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-Economic Disadvantage (IRSD) is based on usual residence of person (subject to data availability).*  *95 per cent confidence intervals and relative standard errors calculated for rates.* |
| Data source: | (All) Australian Health Survey (AHS) (National Health Measures Survey (NHMS)) component.  (Indigenous) Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) NATSIHMS component. |
| Data provider: | ABS |
| Data availability: | (All) 2011-12 (National Health Measures Survey (NHMS) component of the 2011–13 AHS)  (Indigenous) Data not yet available [2012-13 AATSIHS data (NATSIHMS component) anticipated to be available in 2014]. |
| Cross tabulations provided: | State and territory, by sex  National, by   * Remoteness (ASGS) * SEIFA IRSD quintiles (2011 SEIFA IRSD with ASGS) * Age-specific rates |

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| Box 45 Results |
| Data are available for the first time for reporting against this indicator (2011-12 data, not able to be backcast).   * Data by State and Territory by sex are presented in table NHA.15.1. * Data by socioeconomic status are presented in table NHA.15.2. * Data by remoteness are presented in table NHA.15.3. * Data by age are presented in table NHA.15.4.   To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator. |
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#### Attachment tables

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| **Table NHA.15.1** | Proportion of people aged 18 to 69 years with known diabetes who have a HbA1c (glycated haemoglobin) level less than or equal to 7.0 per cent , by State and Territory, by sex, 2011-12 (per cent) |
| **Table NHA.15.2** | Proportion of people aged 18 to 69 years with known diabetes who have a HbA1c (glycated haemoglobin) level less than or equal to 7.0 per cent , by SEIFA IRSD quintile, 2011-12 (per cent) |
| **Table NHA.15.3** | Proportion of people aged 18 to 69 years with known diabetes who have a HbA1c (glycated haemoglobin) level less than or equal to 7.0 per cent , by remoteness, 2011-12 (per cent) |
| **Table NHA.15.4** | Proportion of people aged 18 years and over with known diabetes who have a HbA1c (glycated haemoglobin) level less than or equal to 7.0 per cent, 2011-12 (per cent) |

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| Box 46 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on the effective management of diabetes. * State and Territory data are available. National data are available by socioeconomic status (SES). * The 2011-12 National Health Measures Survey (NHMS) was conducted for the first time as part of the 2011–13 Australian Health Survey (AHS), with participation voluntary in the NHMS. Of those who took part in the AHS, 38 per cent took part in the NHMS. The NHMS sample was found to be representative of the AHS population. * The NHMS does not include people living in very remote areas, which affects the comparability of the NT results. * Data are of acceptable accuracy. Some relative standard errors for disaggregations are greater than 25 per cent and these data should be used with caution. Some relative standard errors are above 50 per cent and are not considered reliable for general use. * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request.   The Steering Committee also notes the following issue:   * State and Territory data by Indigenous status are anticipated to be available for the 2013-14 report. |
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### Indicator 16 — Potentially avoidable deaths

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| Key amendments from previous cycle of reporting: | Single year data have been backcast due to revised ABS Causes of Death data (2009 and 2010) and revised Estimated Resident Population (ERP) data (2007, 2008, 2009 and 2010). |
| Outcome: | Australians receive appropriate high quality and affordable primary and community health services |
| 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) * deaths from potentially treatable conditions (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 *number of deaths* and a *directly age standardised rate (per 100 000 people in the relevant population)*  *Calculated separately for preventable and treatable categories and as a total*  *Variability bands are calculated for single-year and aggregate years data by State/Territory (for within jurisdiction comparisons only – cannot be used to make comparisons across jurisdictions).*  *\*The Steering Committee has a list of in-scope ICD-10 codes* |
| Data source: | *Numerator* — ABS Causes of Death collection  *Denominator* — ABS Estimated Resident Population (total population – 2011 Census based) and ABS Indigenous experimental estimates and projections (Indigenous population – 2006 Census based). For comparisons of Indigenous and non-Indigenous populations, all data will be 2006 Census based.  Data are available annually |
| Data provider: | ABS |
| Data availability: | Single year data (for total population):  2011 (current year)  Re-supplied for 2010 and 2009 (revised for cause of death and revised ERP) and 2008 and 2007 (revised ERP – excluding disaggregations by Indigenous status)  Aggregate data (for disaggregation by Indigenous status):  2007–2011 |
| Cross tabulations provided: | *Disaggregation by Indigenous status will be based on data only from jurisdictions for which the quality of Indigenous identification is considered acceptable - NSW, Qld, WA, SA and NT.*  Single year data  State and Territory, by preventable and treatable categories  National, by preventable and treatable categories, by:   * Indigenous status   Five-year aggregate data  State and Territory, by preventable and treatable categories, by:   * Indigenous status |

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| Box 47 Results |
| For this report, new data for this indicator are available for 2011.   * Data by State and Territory are presented in table NHA.16.1 * Data by Indigenous status are presented in tables NHA.16.2–3. * Data for 2010, 2009, 2008 and 2007 (single year data only) have been revised and are included in this report. * 2010 data are presented in tables NHA.16.4 and NHA.16.8 * 2009 data are presented in tables NHA.16.5 and NHA.16.9 * 2008 data are presented in tables NHA.16.6 * 2007 data are presented in tables NHA.16.7   Five-year aggregate data for 2006-2010 available in the 2011-12 NHA performance report. Five-year aggregate data for 2005–2009 are available in the 2010-11 NHA performance report ([old] NHA PI 20). Five-year aggregate data for 2004–2008 and 2003–2007 are available in the 2009-10 NHA performance report. |
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#### Attachment tables

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| **Table NHA.16.1** | Age­standardised mortality rates of potentially avoidable deaths, under 75 years, by State and Territory, 2011 |
| **Table NHA.16.2** | Age­standardised mortality rates of potentially avoidable deaths, under 75 years, by Indigenous status, 2011 |
| **Table NHA.16.3** | Age­standardised mortality rates of potentially avoidable deaths, under 75 years, by Indigenous status, NSW, Queensland, WA, SA, NT, 2007–2011 |
| **Table NHA.16.4** | Age­standardised mortality rates of potentially avoidable deaths, under 75 years, by State and Territory, 2010 |
| **Table NHA.16.5** | Age­standardised mortality rates of potentially avoidable deaths, under 75 years, by State and Territory, 2009 |
| **Table NHA.16.6** | Age­standardised mortality rates of potentially avoidable deaths, under 75 years, by State and Territory, 2008 |
| **Table NHA.16.7** | Age­standardised mortality rates of potentially avoidable deaths, under 75 years, by State and Territory, 2007 |
| **Table NHA.16.8** | Age­standardised mortality rates of potentially avoidable deaths, under 75 years, by Indigenous status, 2010 |
| **Table NHA.16.9** | Age­standardised mortality rates of potentially avoidable deaths, under 75 years, by Indigenous status, 2009 |

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| Box 48 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on potentially avoidable deaths. Data are available for all states and territories, and by Indigenous status for selected jurisdictions. Data are not available by socioeconomic status (SES). * Annual data are available. The most recent available data are for 2011. * Single year data have been backcast due to revised ERP data (2007, 2008, 2009 and 2010) and revised Causes of Death data (2009 and 2010). * Following the 2011 Census, the ABS rebased the Australian population back to 1991 and data have been resupplied for previous years using the rebased ERP. Rebased Indigenous population projections are not yet available, and data presented by Indigenous status continue to use 2006 Census based ERP and Indigenous population projections. * A large number of unregistered deaths in Queensland dating back to 1992 were identified and registered in 2010. Care should be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010. * Data by Indigenous status are reported for NSW, Queensland, WA, SA and the NT. Only these jurisdictions have evidence of a sufficient level of Indigenous identification, have sufficient numbers of Indigenous deaths and do not have significant data quality issues. * Data are of acceptable accuracy. Although most deaths of Indigenous Australians are registered, it is likely that some are not identified as Indigenous. Therefore data are likely to underestimate the Indigenous mortality rate. Rates should be used with caution.   (Continued next page) |
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| Box 48 (continued) |
| * Variability bands provided with rates describe the range of potential results for mortality rates. Variability bands are calculated for single-year and aggregate years data by State and Territory (for within jurisdiction comparisons only — they cannot be used to make comparisons across jurisdictions). * Detailed explanatory notes are publicly available to assist in the interpretation of results. Additional data from the data source are available online, and on request.   The Steering Committee also notes the following issues:   * Work is underway to align this indicator with the related Australian Commission on Safety and Quality in Healthcare (ACSQHC) performance indicator. However, specifications for the ACSQHC indicator were not finalised at the time of preparation of this report, and the specifications in this report are unchanged from the previous reporting cycle. It is anticipated that revised ACSQHC specifications will be finalised in time for the 2013-14 reporting cycle. * While rates should be used with caution, data are comparable across jurisdictions and over time (although rates have not been adjusted for differences in Indigenous identification across jurisdictions). |
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### Indicator 17 — Treatment rates for mental illness

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| Key amendments from previous cycle of reporting: | * The CRC has advised it no longer requires this indicator disaggregated at the State/Territory level by 10-year age groups or SEIFA IRSD quintiles. These disaggregations have been removed from this report. * Data have been backcast due to revised Estimated Resident Population (ERP). * The AIHW has revised MBS/DVA data for 2008-09 and these data are included in this report. |
| Outcome: | Australians receive appropriate high quality and affordable primary and community health services |
| Proxy measure: | Proportion of population receiving clinical mental health services  The measure is defined as:   * *numerator* — the number of persons receiving clinical mental health services * *denominator* — total population   and is expressed as a *directly age standardised rate (per cent)*  *Calculated separately for public, private and Medicare Benefits Scheme / Department of Veterans Affairs (DVA) - funded services (cannot aggregate services)*  *MBS Statistics presented by Indigenous status are adjusted for under-identification in the Department of Human Services, Medicare’ Voluntary Indigenous Identifier (VII) database* |
| Data source: | *Numerator* — State and Territory community mental health care data; Private Mental Health Alliance Centralised Data Management Service (PMHA CDMS); MBS Statistics and Department of Veterans’ Affairs (DVA) data  *Denominator* — ABS Estimated Resident Population (total population – 2011 Census based) and ABS Indigenous experimental estimates and projections (Indigenous population – 2006 Census based). For comparisons of Indigenous and non-Indigenous populations, all data will be 2006 Census based.  Data are available annually |
| Data provider: | AIHW on behalf of State and Territory Health authorities, DoH and DVA and Private Mental Health Alliance |
| Data availability: | 2011-12 (current year)  2010-11, 2009-10, 2008-09 and 2007-08 (backcast for revised ERP excluding Indigenous status) |
| Cross tabulations provided: | State and Territory, by service type, by:   * Indigenous status (public and MBS Statistics data only) * remoteness (ASGS)   Nationally, by service type:   * by SEIFA IRSD deciles (2011 SEIFA IRSD with ASGC) |

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| Box 49 Results |
| For this report, new data for this indicator are available for 2011-12.   * Data by State and Territory, by service type are presented in tables NHA.17.1–3 * Data by Indigenous status are presented in table NHA.17.2 * Data by remoteness area are presented in table NHA.17.3 * Data by socioeconomic status are presented in table NHA.17.4. * Revised data are provided in this report: * for 2010-11 in tables NHA.17.5–7 * for 2009-10 in tables NHA.17.8–10 * for 2008-09 in tables NHA.2.11–13 * for 2007-08 in tables NHA.2.13–16. |
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#### Attachment tables

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| **Table NHA.17.1** | Proportion of people receiving clinical mental health services, by State and Territory, by service type 2011-12 |
| **Table NHA.17.2** | Proportion of people receiving clinical mental health services, by State and Territory, by service type and Indigenous status, 2011-12 |
| **Table NHA.17.3** | Proportion of people receiving clinical mental health services, by State and Territory, by service type and remoteness area, 2011­12 |
| **Table NHA.17.4** | Proportion of people receiving clinical mental health services, by service type and SEIFA IRSD deciles, 2011­12 (age­standardised rate) |
| **Table NHA.17.5** | Proportion of people receiving clinical mental health services, by State and Territory, by service type 2010-11 |
| **Table NHA.17.6** | Proportion of people receiving clinical mental health services, by State and Territory, by service type and remoteness area, 2010-11 |
| **Table NHA.17.7** | Proportion of people receiving clinical mental health services, by service type and SEIFA IRSD deciles, 2010-11 (age­standardised rate) |
| **Table NHA.17.8** | Proportion of people receiving clinical mental health services, by State and Territory, by service type 2009-10 |
| **Table NHA.17.9** | Proportion of people receiving clinical mental health services, by State and Territory, by service type and remoteness area, 2009-10 |
| **Table NHA.17.10** | Proportion of people receiving clinical mental health services, by service type and SEIFA IRSD deciles, 2009-10 (age­standardised rate) |
| **Table NHA.17.11** | Proportion of people receiving clinical mental health services, by State and Territory, by service type, 2008-09 |
| **Table NHA.17.12** | Proportion of people receiving clinical mental health services, by State and Territory, by service type and remoteness area, 2008-09 |
| **Table NHA.17.13** | Proportion of people receiving clinical mental health services, by service type and SEIFA IRSD deciles, 2008-09 (age­standardised rate) |
| **Table NHA.17.14** | Proportion of people receiving clinical mental health services, by State and Territory, by service type 2007-08 |
| **Table NHA.17.15** | Proportion of people receiving clinical mental health services, by State and Territory, by service type and remoteness area, 2007-08 |
| **Table NHA.17.16** | Proportion of people receiving clinical mental health services, by service type and SEIFA IRSD deciles, 2007-08 (age­standardised rate) |

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| Box 50 Comment on data quality |
| The DQS for this indicator was initially drafted by the AIHW, and finalised by the AIHW following input from State and Territory health authorities, the Private Mental Health Alliance, DoH and the DVA. The DQS is included in its original form in the section of 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 and DVA-funded services. * State and Territory data are available by socioeconomic status (SES), and for public and MBS-funded services by Indigenous status. Data for private services and DVA services are not available by Indigenous status. * Annual data are available. The most recent available data are for 2011-12. * Following the 2011 Census, the ABS rebased the Australian population back to 1991 and data have been resupplied for previous years using the rebased ERP. Rebased Indigenous population projections are not yet available, and data presented by Indigenous status continue to use 2006 Census based ERP and Indigenous population projections. * In 2011, the ABS updated the remoteness areas (RA) and SEIFA from a 2006 Census base to a 2011 Census base. The AIHW considers that this change results in a series break when applied to this indicator. Therefore, RA and SEIFA data for 2010-11 and previous years are not directly comparable to 2011-12 data. * Australian totals for public mental health services for 2011-12 should be interpreted with caution due to data not being available from Victoria and data quality issues for SA and Tasmania. * Data are of acceptable accuracy. However, comparisons across states and territories should be made with caution, due to differences in rules for counting clients under care and reporting processes (for example, people who are assessed by 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).   (Continued next page) |
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| Box 50 (continued) |
| * The quality of Indigenous identification for public services varies across states and territories. Indigenous identification in the MBS data set is voluntary, and the data have been subject to an adjustment factor to correct for Indigenous under-identification. * Individuals using private services are likely also to be counted in MBS data, as most private patients access MBS items associated with the private hospital service. No estimates are available on the extent of duplication across these categories. * Detailed explanatory notes are publicly available to assist in the interpretation of results. Additional data from the data source are available online, and on request   The Steering Committee also notes the following issues:   * This is a proxy measure of access to appropriate care. * Community mental health care data for 2011-12 are not available for Victoria due to service level collection gaps resulting from protected industrial action during this period. This affects all data collected in community-based ambulatory settings and the National Outcomes Casemix Collection in inpatient settings. No substitute or proxy data have been included at the jurisdictional level or to fill the gap in calculation of the national results. * Data have been provided according to the State or Territory of service, but at the sub-state level (remoteness area) have been classified by the client’s place of usual residence. For example, a person who usually resides in a very remote area of the Northern Territory and is treated by a service in a major city in Victoria would be classified at the sub-state level as a very remote area of Victoria (even though Victoria itself has no very remote areas under the ABS remoteness classification). Further work is required to determine whether geographic location for this indicator should be based on usual residence of the client (used for most indicators) or location of the service. * Disaggregation of this indicator by Indigenous status for private patients and those recorded in DVA data is a priority. * Data linkage work is underway to obtain comprehensive and consistent data on people with mental illness across the full scope of service types. |
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### Indicator 18 — Selected potentially preventable hospitalisations

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| Key amendments from previous cycle of reporting: | * The CRC no longer require data for the main measure or supplementary measure (b) for this indicator. The measure below refers to what was previously supplementary measure (a). * The CRC has requested an additional disaggregation by sex for this indicator (national level data, most recent year only). * Data have been backcast due to revised Estimated Resident Population (ERP) data (excluding Indigenous status). * Historical data by Indigenous status (2011-12 NHA performance report tables NHA.18.8, 18.20, 18.32 and 18.38) have been resupplied are included in this report. |
| Outcome: | Australians receive appropriate high quality and affordable hospital and hospital related care |
| 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 * acute conditions, excluding dehydration and gastroenteritis * chronic conditions, excluding diabetes complications (additional diagnoses only) * all potentially preventable hospitalisations, excluding diabetes complications (additional diagnoses only) and dehydration and gastroenteritis * *denominator* — total population   and expressed as a *directly age standardised rate (per 100 000 people in the relevant population)*  *[The Steering Committee has a list of in-scope ICD–10–AM codes for each measure]* |
| Data source: | *Numerator* — AIHW National Hospital Morbidity Database  *Denominator* — ABS Estimated Resident Population (total population – 2011 Census based) and ABS Indigenous experimental estimates and projections (Indigenous population – 2006 Census based). For comparisons of Indigenous and non-Indigenous populations, all data will be 2006 Census based.  Data are available annually |
| Data provider: | AIHW |
| Data availability: | 2011-12 (current year)  2010-11, 2009-10, 2008-09 , 2007-08 (revised excluding Indigenous status) |
| Cross tabulations provided: | State and Territory (by three groups and total) by:   * Indigenous status (current year only) * remoteness (ASGC) * SEIFA IRSD quintiles (2011 SEIFA with ASGC)   Nationally (by three groups and total) by:   * SEIFA IRSD deciles (2011 SEIFA with ASGC) * sex * Indigenous status, by remoteness (ASGC) (current year only) |

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| Box 51 Results |
| For this report, new data for this indicator are available for 2011-12.   * Data by State and Territory are presented in tables NHA.18.1–2. * Data by socioeconomic status are presented in tables NHA.18.2–3. * Data by State and Territory by Indigenous status and State and Territory by remoteness are presented in table NHA.18.2. * Data by Indigenous status by remoteness are presented in table NHA.18.3. * Revised data are provided in this report: * for 2010-11 in tables NHA.18.4–6 and 18.16 * for 2009-10 in tables NHA.18.7–9 and 18.17 * for 2008-09 in tables NHA.18.10–12 and 18.18 * for 2007-08 in tables NHA.18.13–15 and 18.19. |
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#### Attachment tables

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| **Table NHA.18.1** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by State and Territory, 2011-12 |
| **Table NHA.18.2** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by State and Territory, by Indigenous status, remoteness and SEIFA IRSD quintiles, 2011-12 |
| **Table NHA.18.3** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by SEIFA IRSD deciles, sex, Indigenous status by remoteness, 2011-12 |
| **Table NHA.18.4** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by State and Territory, 2010-11 |
| **Table NHA.18.5** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by State and Territory, by remoteness and SEIFA IRSD quintiles, 2010-11 |
| **Table NHA.18.6** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by SEIFA IRSD deciles, 2010-11 |
| **Table NHA.18.7** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by State and Territory, 2009-10 |
| **Table NHA.18.8** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by State and Territory, by remoteness and SEIFA IRSD quintiles, 2009-10 |
| **Table NHA.18.9** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by SEIFA IRSD deciles, 2009-10 |
| **Table NHA.18.10** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by State and Territory, 2008-09 |
| **Table NHA.18.11** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by State and Territory, by remoteness and SEIFA IRSD quintiles, 2008-09 |
| **Table NHA.18.12** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by SEIFA IRSD deciles, 2008-09 |
| **Table NHA.18.13** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by State and Territory, 2007-08 |
| **Table NHA.18.14** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by State and Territory, by remoteness and SEIFA IRSD quintiles, 2007-08 |
| **Table NHA.18.15** | Selected potentially preventable hospitalisations excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only), by SEIFA IRSD deciles, 2007-08 |
| **Table NHA.18.16** | Selected potentially preventable hospitalisations, excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only) by Indigenous status, by remoteness, 2010-11 (rate per 100 000) |
| **Table NHA.18.17** | Selected potentially preventable hospitalisations, excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only) by Indigenous status, by remoteness, 2009-10 (rate per 100 000) |
| **Table NHA.18.18** | Selected potentially preventable hospitalisations, excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only) by Indigenous status, by remoteness, 2008-09 (rate per 100 000) |
| **Table NHA.18.19** | Selected potentially preventable hospitalisations, excluding dehydration and gastroenteritis and diabetes complications (additional diagnoses only) by Indigenous status, by remoteness, 2007-08 (rate per 100 000) |

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| 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.  (Continued next page) |
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| Box 52 (continued) |
| * The data provide relevant information on selected potentially preventable hospitalisations. State and Territory data are available by Indigenous status and socioeconomic status (SES). * Annual data are available. The most recent available data are for 2011-12. * Following the 2011 Census, the ABS rebased the Australian population back to 1991 and data have been resupplied for previous years using the rebased ERP. Rebased Indigenous population projections are not yet available, and data presented by Indigenous status continue to use 2006 Census based ERP and Indigenous population projections. * Data are of acceptable accuracy. * The hospital separations data do not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments. * All public hospitals, except a mothercraft hospital in the ACT, provided data. Most private hospitals also provided data (exceptions were private day hospital facilities in the ACT and the single private free-standing day hospital facility in the NT). * Caution should be used in comparing data across years, as changes in International and Australian coding classifications through the reporting cycles has resulted in decreased reporting of additional diagnoses for diabetes, and increased reporting of gastroenteritis (affecting the chronic and acute categories, respectively). To provide the most comparable data over time, the data presented for 2011-12 exclude from the total: * diabetes complications (additional diagnoses only) from the chronic conditions category * dehydration and gastroenteritis from the acute conditions category * diabetes complications (additional diagnoses only) and dehydration and gastroenteritis.   However, it should be acknowledged that these data are not consistent with the original intent of the indicator.   * About 88 per cent of Indigenous Australians were identified correctly in hospital admissions data in 2011-12. However, these data should be interpreted with caution as there is variation across jurisdictions in the quality of the Indigenous status data. * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request.   (Continued next page) |
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| Box 52 (continued) |
| The Steering Committee also notes the following issues:   * Work is underway to align this indicator with the related Australian Commission on Safety and Quality in Healthcare (ACSQHC) performance indicator. However, specifications for the ACSQHC indicator were not finalised at the time of preparation of this report, and the specifications in this report are unchanged from the previous reporting cycle. It is anticipated that revised ACSQHC specifications will be finalised in time for the 2013-14 reporting cycle. * Data have been provided according to the State or Territory of hospital, but at the sub-state level (remoteness area) have been classified by the patient’s place of usual residence. For example, a patient who usually resides in a very remote area of the Northern Territory and is treated by a hospital in a major city in Victoria would be classified at the sub-state level as a very remote area of Victoria (even though Victoria itself has no very remote areas under the ABS remoteness classification). Further work is required to determine whether geographic location for this indicator should be based on usual residence of the patient (used for most indicators) or location of the service. * Further work is required to improve the comparability of data across editions of the ICD-10-AM. |
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### Indicator 19 — Selected potentially avoidable GP-type presentations to emergency departments

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| Key amendments from previous cycle of reporting: | * The CRC has advised that it does not require the main measure for this indicator disaggregated by Indigenous status, remoteness, SEIFA IRSD, peer group and triage category. These disaggregations have been removed from this report. * Data for previous year revised for movements in peer group. * A new supplementary measure and data on patient perception is included (backcast for 2011-12, 2010-11 and 2009 (national data only). |
| Outcome: | Australians receive appropriate high quality and affordable primary and community health services. |
| 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 (for 2008-09 and 2009-10 data for SA, only type of visit can be 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, or did not die   and is *expressed as a number*  *Measure is limited to public hospitals in peer groups A and B as this is the scope of the collection. To ensure comparability over time, emergency department activity at the Mersey Community Hospital is reported with Peer Group B hospitals in Tasmania for NHA purposes. Whilst it is currently not a Peer Group A or B hospital, in the baseline year (2007-08) Mersey was a campus of the Peer Group B North West Regional Hospital and its emergency department activity was included in the baseline.* |
| Interim supplementary measure: | Proportion of people who reported attending a hospital emergency department and thought the care could have been provided at a GP.  The measure is defined as:   * *numerator* — total number of persons aged 15 years or over who reported going to a hospital emergency department for their own health in the last 12 months and reported that at the time, they thought the care could have been provided at a GP. * *denominator* — total number of persons aged 15 years or over who reported going to a hospital emergency department for their own health in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  *95 per cent confidence intervals and relative standard errors are calculated for rates.*  *Population is limited to persons aged 15 years or over* |
| Data source (interim measure): | AIHW National Non-admitted Patient Emergency Department Care Database. Data are available annually |
| Data source (interim supplementary measure): | ABS Patient Experience Survey (PExS). Data are available annually. |
| Data provider (interim measure): | AIHW |
| Data provider (interim supplementary measure): | ABS |
| Data availability (interim measure): | 2012-13 (revised for peer group movements for 2011-12) |
| Data availability (interim supplementary measure): | 2012-13 (backcast for 2011-12, 2010-11 and 2009) |
| Cross tabulations provided (interim and interim supplementary measure): | State and Territory  National data only for 2009 |

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| Box 53 Results |
| For this report, new data for the main measure for this indicator are available for 2012‑13.   * Data by State and Territory are presented in table NHA.19.1 * Revised data are provided in this report for 2011-12 in table NHA.19.2.   Data for the supplementary measure are available for 2012-13 and backcast for  2011-12 and 2010-11 (tables NHA.19.3).  Data for the main measure for 2010-11, 2009-10 and 2008-09 are available in the 2011-12 NHA performance report (by remoteness, Indigenous status socioeconomic status and hospital peer group). Data for 2007-08 (State and Territory by remoteness and SES) are available in the 2009-10 NHA performance report ([old] NHA PI 25). Data for 2007-08 (disaggregated by State and Territory by Indigenous status) are available in the 2008-09 baseline NHA performance report ([old] NHA PI 25). |
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#### Attachment tables

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| **Table NHA.19.1** | Selected potentially avoidable GP-type presentations to emergency departments, by State and Territory, 2012-13 |
| **Table NHA.19.2** | Selected potentially avoidable GP-type presentations to emergency departments, by State and Territory, 2011-12 |
| **Table NHA.19.3** | Proportion of persons aged 15 years or over who went to the hospital emergency department for their own health and at the time, felt they thought the care could have been provided at a GP, by State and Territory (various years) |

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| Box 54 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data for the main measure provide relevant information on selected potentially avoidable GP-type presentations to emergency departments. * Annual State and Territory data are available. The most recent available data are for 2012-13. * Data are of acceptable accuracy. Coverage of the data collection is complete for public hospitals in peer groups A (principal referral and specialist women’s and children’s hospitals) and B (large hospitals). Peer group A and B hospitals provide approximately 80 per cent of all public hospital accident and emergency occasions of service. * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request.   The Steering Committee also notes the following issues:   * Only 80 per cent of public hospital emergency occasions of service are in scope. Further development work is required to expand the scope to all hospitals, or to construct an appropriate method to ensure data are representative of all hospitals. * The number of potentially avoidable GP-type presentations to emergency departments does not allow comparisons across states and territories, remoteness or SES. The Steering Committee recommends examining the possibility of reporting this indicator as a rate against the relevant population. * The AIHW is currently leading a review of this measure’s definition due to concerns over the measure’s validity. * A supplementary measure of patient perception has been included for the first time in this report, which reflects patients’ perceptions of care provided at an emergency department that they thought could have been provided by a GP. |
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### Indicator 20 — Waiting times for elective surgery

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| Key amendments from previous cycle of reporting: | * Prior year data (2011-12) have been revised (for peer group and linkage purposes) and are included in this report. * The CRC has requested an additional data disaggregation for this indicator — national data by SEIFA IRSD quintiles for selected procedures. |
| Outcome: | Australians receive appropriate high quality and affordable hospital and hospital related care |
| Measure: 20 (a): | 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 the patient was waiting with a less urgent clinical urgency category than their clinical urgency category at removal, and excluding days where the patient was not ready for care   and is expressed as *number of days by percentile (at the 50th and 90th percentile)*  Waiting times are calculated for patients whose reason for removal was:   * Admitted as elective patient for awaited procedure by or on behalf of this hospital or the state/territory * Admitted as emergency patient for awaited procedure by or on behalf of this hospital or the state/territory   *Calculated overall and for each indicator procedure.*  *Analysis by State and Territory based on location of service.*  *Analysis by remoteness and SEIFA IRSD is based on usual residence of person.*  *Waiting times are calculated for patients whose reason for removal from an elective surgery waiting list was admitted as an elective patient or emergency patient. Includes the proportion of removals for elective admission that waited more than 365 days* |
| Measure: 20 (b): | The percentage of patients removed from elective surgery waiting lists who received surgery within the clinically recommended time, by urgency category    The measure is calculated as in 20 (a). The measure is defined as:   * *numerator* — number of patients in each urgency category removed from elective surgery waiting lists who received elective surgery within the clinically recommended time * *denominator* — number of patients who received elective surgery   and is expressed as a *percentage* (by urgency category)  *The number of patients seen within the clinically recommended time includes patients admitted as an emergency patient for their awaited procedure.*  *Analysis by state and territory based on location of service.*  *Waiting times are calculated for patients whose reason for removal was as in 20 (a).* |
| Data source 20(a) and 20 (b): | National Elective Surgery Waiting Times Data Collection.  For disaggregation by remoteness and SEIFA IRSD, and for some Indigenous status data, the Collection is linked to the National Hospital Morbidity Database. Data are available annually. |
| Data provider 20(a) and 20 (b): | AIHW |
| Data availability 20(a): | 2012-13 (2011-12 revised for peer group and data linkage) |
| Data availability 20(b): | Data of sufficient quality are not available to report against this measure. |
| Cross tabulations provided 20(a): | 2012-13, 2011-12 – State and Territory (by indicator procedure), by:   * peer group (unlinked data) * Indigenous status (linked or unlinked data, depending data availability)   2011-12 — State and Territory by:   * remoteness (ASGC) (linked data) * SEIFA IRSD quintiles (2011 based SEIFA with ASGC) (linked data)   2011-12—Nationally (by indicator procedure), by peer group, by Indigenous status, by remoteness (linked data)  2011-12 — Nationally, by:   * SEIFA IRSD deciles (2011 SEIFA with ASGC) (linked data) * By selected indicator procedure (cataract extraction, cholecystectomy, coronary artery bypass graft, cystoscopy) by 2011 SEIFA IRSD quintiles (2011 SEIFA with ASGC) (linked data) |
| Cross tabulations provided 20(b): | Nil |

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| Box 55 Results |
| For this report, new data for this indicator (measure (a) only) are available for 2012-13.   * Data by State and Territory are presented in tables NHA.20.1–2 * Data by hospital peer group are presented table NHA.20.1 * Data by Indigenous status are presented in table NHA.20.2.   Additional and revised data (updated for peer group) for 2011-12 are presented in this report in tables NHA.20.3–9.  Data for 2010-11 and some data for 2009-10 and 2008-09 are available in the 2011-12 NHA performance report. Other data for 2009-10 are available in the 2010-11 NHA performance report ([old] NHA PI 34). Other data for 2008-09 are available in the second cycle 2009-10 NHA performance report ([old] NHA PI 34). Other data for  2007-08 are available in the 2008-09 baseline NHA performance report ([old] NHA PI 34). |
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#### Attachment tables

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| **Table NHA.20.1** | Waiting times for elective surgery in public hospitals, by State and Territory, by procedure and hospital peer group, 2012-13 (days) |
| **Table NHA.20.2** | Waiting times for elective surgery in public hospitals, by State and Territory, by Indigenous status and procedure, 2012-13 (days) |
| **Table NHA.20.3** | Waiting times for elective surgery in public hospitals, by State and Territory, by procedure and hospital peer group, 2011-12 (days) |
| **Table NHA.20.4** | Waiting times for elective surgery in public hospitals, by State and Territory, by Indigenous status and procedure, 2011-12 (days) |
| **Table NHA.20.5** | Waiting times for elective surgery in public hospitals, Indigenous status, by remoteness, by procedure and hospital peer group, 2011-12 (days) |
| **Table NHA.20.6** | Waiting times for elective surgery in public hospitals, by State and Territory, by remoteness area, 2011-12 (days) |
| **Table NHA.20.7** | Waiting times for elective surgery in public hospitals, by State and Territory, by SEIFA IRSD quintiles, 2011-12 (days) |
| **Table NHA.20.8** | Waiting times for elective surgery in public hospitals, by SEIFA IRSD deciles, 2011-12 (days) |
| **Table NHA.20.9** | Waiting times for elective surgery in public hospitals for selected procedures, by SEIFA IRSD quintiles, 2011-12 (days) |

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| Box 56 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on waiting times for elective surgery (measure (a)). * State and Territory data are available by Indigenous status and socioeconomic status (SES). * Annual data are available. The most recent available data are for 2012-13 (State and Territory disaggregated by Indigenous status) and 2011-12 (State and Territory disaggregated by remoteness and SES). * Data on Indigenous status should be interpreted with caution as these data have not been assessed for completeness. * For 2012-13, coverage of the National Elective Surgery Waiting Times Data Collection was about 93 per cent (preliminary estimate) of elective surgery in Australian public hospitals. * Caution should be used when comparing waiting times data across and within jurisdictions, due to apparent variations in: * recording practices for waiting times in some public hospitals, which may result in statistics that are not meaningful or comparable across or within jurisdictions * the assignment of clinical urgency categories, both across and within jurisdictions, for individual surgical specialties and indicator procedures, influencing the overall total. * In 2011, the ABS updated the remoteness areas (RA) and SEIFA from a 2006 Census base to a 2011 Census base, though only SEIFA data have been updated for this report. The AIHW considers that this results in a series break when applied to this indicator and that SEIFA data for 2010-11 and previous years are not directly comparable to 2011-12 data. * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request.   The Steering Committee notes also notes the following issues:   * The calculation of waiting times has varied across states and territories and over time (for example, treatment of inter-hospital transfers and patients not ready for care). Further work is required to understand the differences and their effect on the data.   (Continued next page) |
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| Box 56 (continued) |
| * Data have been provided according to the State or Territory of hospitalisation, but at the sub-state level (remoteness area) have been classified by the patients place of usual residence. For example, a person who usually resides in a very remote area of the Northern Territory and is treated in a hospital in a major city of Victoria would be classified at the sub-state level as a very remote area of Victoria (even though Victoria itself has no very remote areas under the ABS remoteness classification). Further work is required to determine whether geographic location for this indicator should be based on usual residence of the patient (used for most indicators) or location of the hospital. * Data are not provided for reporting against measure 20(b) of this indicator The percentage of patients removed from elective surgery waiting lists who received surgery within the clinically recommended time, by urgency category. The specification has yet to be agreed by the Standing Council on Health’s designated health committee (the National Health Information Standards and Statistics Committee (NHIPPC)), due to unresolved health sector views on the comparability of data by urgency category. |
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### Indicator 21 — Waiting times for emergency hospital care

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| Key amendments from previous cycle of reporting: | Prior year data (2011-12) have been revised for peer group for measure (a) and are included in this report. |
| Outcome: | Australians receive appropriate high quality and affordable hospital and hospital related care |
| Measure 21 (a): | 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’*  *Excludes where episode end status is either ‘Did not wait to be attended by a health professional’ or ‘Dead on arrival, not treated in emergency department’ or if the waiting time to service is missing or invalid*  *Limited to public hospitals in peer groups A and B, as this is the scope of this collection. To ensure comparability over time, emergency department activity at the Mersey Community Hospital is reported with Peer Group B hospitals in Tasmania for NHA purposes. Whilst it is currently not a Peer Group A or B hospital, in the baseline year (2007-08) Mersey was a campus of the Peer Group B North West Regional Hospital and its emergency department activity was included in the baseline.* |
| Measure 21 (b) | For all patients presenting to a public hospital emergency department (including publicly funded emergency departments), the percentage of presentations where the time from presentation to physical departure, i.e. the length of the emergency department stay, is ≤4 hours (i.e. ≤ 240 minutes).  The measure is defined as:   * *numerator* — number of ED presentations where ED Stay is less than or equal to four hours (i.e. ≤ 240 minutes). * *denominator* — number of ED presentations   and is expressed as a *percentage*  The scope for calculation of the National Emergency Access Target (NEAT) is all hospitals reporting to the National Non-admitted Patient Emergency Department Care Database (NAPEDC) NMDS (Peer Groups A, B and other) as at August 2011 (when the National Health Reform Agreement NPA IPHS was signed). For the duration of the agreement, hospitals that have not previously reported to the NAPEDC NMDS can come into scope, subject to agreement between the jurisdiction and the Commonwealth.  Calculation includes all presentations with an ED stay completed in the reporting period, including records where the presentation date/time is prior to the reporting period. Invalid records are excluded from the numerator and denominator. Invalid records are records for which:   * Length of stay < 0 * Presentation date or time missing * Physical departure date or time missing   Calculation includes presentations with any Type of visit to Emergency Department.  ED Stay length is calculated by subtracting Presentation time/date from Physical departure time/date, which is recorded as per the business rules included in the NAPEDC NMDS 2012-2013:   * If the patient is subsequently admitted to this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward), then record the time the patient leaves the emergency department to go to the admitted patient facility. * Patients admitted to any other ward or bed within the emergency department have not physically departed the emergency department until they leave the emergency department. * If the patient is admitted and subsequently dies before leaving the emergency department, then record the time the body was removed from the emergency department. * If the service episode is completed without the patient being admitted, then record the time the patient's emergency department non-admitted clinical care ended. * If the service episode is completed and the patient is referred to another hospital for admission, then record the time the patient leaves the emergency department. * If the patient did not wait, then record the time the patient leaves the emergency department or was first noticed as having left. * If the patient leaves at their own risk, then record the time the patient leaves the emergency department or was first noticed as having left. * If the patient died in the emergency department, then record the time the body was removed from the emergency department. * If the patient was dead on arrival, then record the time the body was removed from the emergency department. If an emergency department physician certified the death of the patient outside the emergency department, then record the time the patient was certified dead.   Presentation time/date is the time of first recorded contact with an emergency department staff member. The first recorded contact can be the commencement of the clerical registration or triage process, whichever happens first. |
| Data source 21 (a) and (b): | AIHW National Non-admitted Patient Emergency Department Care Database. Data are available annually |
| Data provider 21 (a) and (b): | AIHW |
| Data availability 21 (a): | 2011-12 (revised for peer group)  2012-13 |
| Data availability 21 (b): | 2012-13 |
| Cross tabulations provided 21 (a): | State and Territory, by Triage category, by:   * peer group * Indigenous status * remoteness (ASGS) * SEIFA IRSD quintiles (2011 based SEIFA with ASGC)   Nationally, by Triage category, by:   * SEIFA IRSD deciles (2011 based SEIFA with ASGC) |
| Cross tabulations provided 21 (b): | State and Territory. |

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| Box 57 Results |
| For this report, new data for this indicator (measure (a)) are available for 2012-13.   * Data by State and Territory are presented in tables NHA.21.1–5 * Data by hospital peer group are presented table NHA.21.2 * Data by Indigenous status are presented in table NHA.21.3 * Data by remoteness are presented in table NHA.21.4 * Data by socioeconomic status are presented in tables NHA.21.5–6.   Data for 2011-12 have been updated for peer group and are presented in this report in tables NHA.21.7–12.  For this report, new data for this indicator (measure (b)) are available for 2012-13.   * Data by State and Territory are presented in table NHA.21.13. |
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#### Attachment tables

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| **Table NHA.21.1** | Patients treated within national benchmarks for emergency department waiting time, by State and Territory, 2012-13 |
| **Table NHA.21.2** | Patients treated within national benchmarks for emergency department waiting time, by peer group, by State and Territory, 2012-13 |
| **Table NHA.21.3** | Patients treated within national benchmarks for emergency department waiting time, by State and Territory, by Indigenous status, 2012-13 |
| **Table NHA.21.4** | Patients treated within national benchmarks for emergency department waiting time, by State and Territory, by remoteness area, 2012-13 |
| **Table NHA.21.5** | Patients treated within national benchmarks for emergency department waiting time, by State and Territory, by SEIFA IRSD quintiles, 2012-13 |
| **Table NHA.21.6** | Patients treated within national benchmarks for emergency department waiting time, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.21.7** | Patients treated within national benchmarks for emergency department waiting time, by State and Territory, 2011-12 |
| **Table NHA.21.8** | Patients treated within national benchmarks for emergency department waiting time, by peer group, by State and Territory, 2011-12 |
| **Table NHA.21.9** | Patients treated within national benchmarks for emergency department waiting time, by State and Territory, by Indigenous status, 2011-12 |
| **Table NHA.21.10** | Patients treated within national benchmarks for emergency department waiting time, by State and Territory, by remoteness area, 2011-12 |
| **Table NHA.21.11** | Patients treated within national benchmarks for emergency department waiting time, by State and Territory, by SEIFA IRSD quintiles, 2011-12 |
| **Table NHA.21.12** | Patients treated within national benchmarks for emergency department waiting time, by SEIFA IRSD deciles, 2011-12 |
| **Table NHA.21.13** | Percentage of presentations where the time from presentation to physical departure (Emergency Department (ED) Stay length) is within four hours, by State and Territory, 2012-13 |

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| Box 58 Comment on data quality |
| The DQSs for this indicator (measures (a) and (b)) have been prepared by the AIHW and are included in their original form in the section of this report titled ‘Data Quality Statements’. Key points from the DQSs are summarised below.   * The data provide relevant information on the proportion of patients who were treated within specified waiting times for different triage categories in emergency departments in peer group A and B hospitals (measure (a)) and the proportion of presentations where the time from presentation to physical departure (Emergency Department (ED) Stay length) is within four hours (all reporting hospitals) (measure (b)). * Annual State and Territory data are available for both measures. The most recent available data are 2012-13. * Data disaggregated by Indigenous status and socioeconomic status (SES) are only available for measure (a).   (Continued next page) |
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| Box 58 (continued) |
| * In 2011, the ABS updated the remoteness areas (RA) and SEIFA from a 2006 Census base to a 2011 Census base, though only the SEIFA data have been updated for this report. The AIHW considers that this results in a series break when applied to this indicator and that SEIFA data for 2010-11 and previous years are not directly comparable to 2011-12 data, which in turn are not directly comparable to 2012-13 data. * Data are of acceptable accuracy for both measures. Data are complete for hospitals in peer group A (principal referral and specialist women’s and children’s hospitals) and B (large hospitals). * Caution is advised when interpreting data for by Indigenous status (measure (a)), as the quality of Indigenous identification has not been formally assessed. As peer group A and B hospitals are generally located in major cities, the data might not include hospitals in regional and rural areas where the representation of Indigenous patients is higher than in capital cities. Similarly, disaggregations by SES and remoteness should be used with caution. * Caution should be used when comparing data over time (measure (a)) as numbers of hospitals classified in a peer group, or the peer group for a hospital, may vary over time. * Detailed explanatory notes are publicly available to assist in interpretation of results. * Additional data from the data source are available online, and on request.   The Steering Committee also notes the following issues:   * Data have been provided according to the State or Territory of hospitalisation, but at the sub-state level (remoteness area) have been classified by the patients place of usual residence. For example, a person who usually resides in a very remote area of the Northern Territory and is treated in a hospital in a major city of Victoria would be classified for remoteness purposes as very remote area of Victoria (even though Victoria itself has no very remote areas under the ABS remoteness classification). Further work is required to determine whether geographic location for this indicator should be based on usual residence of the patient (used for most indicators) or location of the hospital. * Assessing and improving the quality of Indigenous data for measure (a) is a priority. * Reporting of measure (b) by Indigenous status and SES is a priority. |
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### Indicator 22 — Healthcare associated infections

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| Key amendments from previous cycle of reporting: | 2011-12 data are revised for some states and territories |
| Outcome: | Australians receive appropriate high quality and affordable hospital and hospital related care |
| Interim measure: | *Staphylococcus aureus* (including Methicillin resistant *Staphylococcus aureus* [MRSA]) bacteraemia (SAB) associated with acute care public hospitals (excluding cases associated with private hospital and non-hospital care)  The measure is defined as:   * *numerator* — SAB patient episodes associated with acute care public hospitals. Cases associated with care provided by private hospitals and non-hospital health care are excluded * *denominator* — number of patient days for public acute care hospitals under surveillance (ie only for hospitals reporting SAB indicator)   and is expressed as a *rate per 10 000 patient days*  *The definition of an acute care public hospital is ‘all public hospitals including those hospitals defined as public psychiatric hospitals in the Public Hospitals Establishment NMDS’. All public hospitals are included, both those focusing on acute care, and those focusing on non-acute or sub-acute care, including psychiatric, rehabilitation and palliative care.*  *Patient days for unqualified newborns are included. Patient days for hospital boarders and posthumous organ procurement are excluded.*  *A patient episode of SAB is defined as a positive blood culture for Staphylococcus aureus. For surveillance purposes, only the first isolate per patient is counted, unless at least 14 days has passed without a positive blood culture, after which an additional episode is recorded*  *A Staphylococcus aureus bacteraemia will be considered to be healthcare-associated if: the first positive blood culture is collected more than 48 hours after hospital admission or less than 48 hours after discharge, or if the first positive blood culture is collected 48 hours or less after admission and one or more of the following key clinical criteria was met for the patient-episode of SAB:*  *1. SAB is a complication of the presence of an indwelling medical device*  *2. SAB occurs within 30 days of a surgical procedure where the SAB is related to the surgical site*  *3. An invasive instrumentation or incision related to the SAB was performed within 48 hours*  *4. SAB is associated with neutropenia (<1x109/L) contributed to by cytotoxic therapy*  *Cases where a known previous blood culture has been obtained within the last 14 days are excluded*  *Denominator includes unqualified newborns, and excludes posthumous organ procurement and hospital boarders.* |
| Data source: | *Numerator*: State and Territory infection surveillance data  *Denominator*: State and Territory admitted patient data  Data are available annually |
| Data provider: | AIHW |
| Data availability: | 2012-13, 2011-12 (revised data provided for some states and territories) |
| Cross tabulations provided: | State and Territory by:   * type of bacteraemia: Methicillin-resistant *Staphylococcus aureus* (MRSA) and Methicillin-sensitive *Staphylococcus aureus* (MSSA) |

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| Box 59 Results |
| For this report, new data are available for 2012-13.   * Data by State and Territory are presented in table NHA.22.1 * Data by MRSA and MSSA are presented in table NHA.22.1.   Data for 2011-12 have been revised and are presented in table NHA.22.2.  2010-11 data are available in the 2011-12 NHA performance report. Data for  2009-10 are available in the 2010-11 NHA performance report but these data are not comparable with later years due to variety of reasons including collection periods and differences in definitions. Limited 2008-09 data are available in the 2008-09 baseline NHA performance report ([old] NHA PB 3 (a), but these data are not comparable with later years due to changes to the measure since the baseline. |
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#### Attachment tables

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| **Table NHA.22.1** | Episodes of Staphylococcus aureus (including MRSA) bacteraemia (SAB) in acute care hospitals, by State and Territory, by MRSA and MSSA, 2012-13 |
| **Table NHA.22.2** | Episodes of Staphylococcus aureus (including MRSA) bacteraemia (SAB) in acute care hospitals, by State and Territory, by MRSA and MSSA, 2011-12 |

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| 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on the rate of healthcare-associated *Staphylococcus aureus* (Methicillin-resistant (MRSA) and Methicillin-sensitive (MSSA)) bacteraemia (SAB) in public acute care hospitals. * Data are available by State and Territory. Data are not currently available by Indigenous status or socioeconomic status (SES). * Annual data are available. The most recent available data are for 2012-13. * The data used to calculate the indicator were collected by states and territories through their healthcare-associated infections surveillance programs. * The data for 2012-13 are comparable with those from 2011-12, except for WA. The data for 2011-12 are comparable with those from 2010-11 except for Queensland. WA data for 2010-11 and 2011-12 are not comparable with data from other jurisdictions. Data are not comparable with data for earlier years provided in previous reports, due to changes to the measure since the baseline. * Data are of acceptable accuracy, but the comparability of the rates of SAB across jurisdictions is limited, because: * the count of patient days (denominator) reflects admitted patient activity, while the incidence of SAB (numerator) includes non-admitted and admitted patient activity * for some states and territories, there is incomplete coverage of public acute care hospitals * the data have not been adjusted for any differences in casemix across jurisdictions (or over time). * Detailed explanatory notes are publicly available to assist in the interpretation of results. Additional data from the data source are available online, and on request, for some jurisdictions.   The Steering Committee also notes the following issues:   * Improved 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. * Work is underway to align this indicator with the related Australian Commission on Safety and Quality in Healthcare (ACSQHC) performance indicator. However, specifications for the ACSQHC indicator were not finalised at the time of preparation of this report, and the specifications in this report are unchanged from the previous reporting cycle. It is anticipated that revised ACSQHC specifications will be finalised in time for the 2013-14 reporting cycle. |
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### Indicator 23 — Unplanned hospital readmission rates

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| Key amendments from previous cycle of reporting: | * The CRC has advised it no longer requires national data disaggregated by SEIFA IRSD deciles. This disaggregation has been removed from this report. * The CRC has advised that it only requires national level data for disaggregations by Indigenous status, hospital peer group, remoteness and SEIFA IRSD quintiles. Therefore, state and territory level data for these disaggregations have been removed from this report. |
| Outcome: | Australians receive appropriate high quality and affordable hospital and hospital related care |
| Interim measure: | Unplanned and unexpected hospital readmissions to the same public hospital 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; appendicectomy) * the readmission occurs within 28 days of the previous date of separation * a principal diagnosis for the readmission has one of the following ICD-10-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; appendicectomy   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*  *Both the numerator and denominator are 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: | National Hospital Morbidity Database (NHMD)  Data are available annually |
| Data provider: | AIHW |
| Data availability: | 2011-12 |
| Cross tabulations provided: | State and Territory, by specified procedure  Nationally, by specified procedure, by:   * peer group * Indigenous status * Remoteness (ASGC) * 2011 SEIFA IRSD quintiles |

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| Box 61 Results |
| For this report, new data for this indicator are available for 2011-12.   * Data for by State and Territory are presented in table NHA.23.1 * Data by Indigenous status are presented in table NHA.23.2 * Data by remoteness are presented in table NHA.23.2 * Data by socioeconomic status are presented in table NHA.23.2.   Data for 2010-11 are available in the 2011-12 NHA report. Data for 2009-10, 2008-09 and 2007-08 are available in the 2010-11 NHA performance report ([old] NHA PI 43). |
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#### Attachment tables

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| **Table NHA.23.1** | Unplanned hospital readmission rates, by State and Territory, 2011-12 |
| **Table NHA.23.2** | Unplanned hospital readmission rates, by Indigenous status, hospital peer group, remoteness and SEIFA IRSD quintiles, 2011-12 |

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| 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 of 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 measure is likely to be an underestimate. * Annual data are available. The most recent available data are for 2011-12. * Data are available by State and Territory, though at the CRC request only reported nationally by Indigenous status and socioeconomic status. * Calculation of the indicator for WA was not possible using data from the National Hospital Morbidity Database. The indicator was calculated and supplied by WA Health and was not independently verified by the AIHW. Reported totals do not include WA data.   (Continued next page) |
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| Box 62 (continued) |
| * About 88 per cent of Indigenous Australians were identified correctly in hospital admissions data in 2011-12. However, these data should be interpreted with caution as there is variation among jurisdictions in the quality of the Indigenous status data. * In 2011, the ABS updated the remoteness areas (RA) and SEIFA from a 2006 Census base to a 2011 Census base, though only the SEIFA data have been updated for this report. The AIHW considers that this results in a series break when applied to this indicator and that SEIFA data for 2010-11 and previous years are not directly comparable to 2011-12 data. * All public hospitals provided data, except a mothercraft hospital in the ACT. * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request.   The Steering Committee also notes the following issues:   * Further linkage is required to capture readmissions to any hospital within a State or Territory. * Data have been provided according to the State or Territory of hospitalisation, but at the sub-state level (remoteness area) have been classified by the patients place of usual residence. For example, a person who usually resides in a very remote area of the Northern Territory and is treated in a hospital in a major city of Victoria would be classified for remoteness purposes as very remote area of Victoria (even though Victoria itself has no very remote areas under the ABS remoteness classification). Further work is required to determine whether geographic location for this indicator should be based on usual residence of the patient (used for most indicators) or location of the hospital. * Work is underway to align this indicator with the related Australian Commission on safety and Quality in Healthcare (ACSQHC) performance indicator. However, specifications for the ACSQHC indicator were not finalised at the time of preparation of this report, and the specifications in this report are unchanged from the previous reporting cycle. It is anticipated that revised ACSQHC specifications will be finalised in time for the 2013-14 reporting cycle. |
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### Indicator 24 — Survival of people diagnosed with notifiable cancers

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| Key amendments from previous cycle of reporting: | The indicator is unchanged from the previous NHA report. |
| Outcome: | Australians receive appropriate high quality and affordable hospital and hospital related care |
| Measure: | Five-year relative survival proportions for people diagnosed with cancer  The measure is defined as:   * *numerator* — Probability of surviving for five years in people diagnosed with cancer. * *denominator* — Probability of surviving for five years in the general population   and is expressed as a *percentage*  *Numerator and denominator for disaggregation are matched for sex, age and calendar year*  *95 per cent confidence intervals calculated for rates.* |
| Data source: | *Numerator* — AIHW National Death Index and Australian Cancer Database  *Denominator* — AIHW National Mortality database and ABS Estimated Resident Population (generated life tables) |
| Data provider: | AIHW |
| Data availability: | No new data for this cycle of reporting (2006-2010 data provided for the third (2010-11) cycle of reporting) |
| Cross tabulations provided: | Nil |

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| Box 63 Comment on data quality |
| No new data for this report. National data for 2006–2010 are available in the 2010-11 NHA performance report ([old] NHA PI 44).  The AIHW produce national data irregularly by funded ad hoc requests. The AIHW has advised that State and Territory estimates can be produced but are dependent on the availability of necessary life tables, resourcing, and approval by the State and Territory cancer registries. |
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### Indicator 25 — Rate of community follow up within first seven days of discharge from a psychiatric admission

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| Key amendments from previous cycle of reporting: | * Disaggregations by Indigenous status, remoteness and SEIFA IRSD are available for the first time and included in this report (current year only). * Data for 2007-08, 2008-09, 2009-10 and 2010-11 have been revised and are included in this report (State and Territory disaggregation only). |
| Outcome: | Australians receive appropriate high quality and affordable hospital and related care |
| Measure: | Proportion of separations from a public mental health service organisation’s acute psychiatric inpatient unit(s) for which a community ambulatory mental health service contact, in which the consumer participated, was recorded in the seven days following that separation.  The measure is defined as:   * *numerator* —number of in-scope separations from a public mental health service organisation’s acute psychiatric inpatient unit(s) for which a community ambulatory mental health service contact in which the consumer participated, was recorded in the seven days following that separation. * *denominator* — number of in-scope separations for a public mental health service organisation’s acute psychiatric inpatient unit(s).   and is expressed as a *percentage*  *An ambulatory mental health service contact is the provision of a clinically significant service by a specialised public mental health service provider(s) for patients/clients, other than those patients/clients admitted to psychiatric hospitals or designated psychiatric units in acute care hospitals, and those resident in 24 hour staffed specialised residential mental health services, where the nature of the service would normally warrant a dated entry in the clinical record of the patient/client in question.*  *Should there be a discrepancy in the demographic variables of the consumer between collections, then the variables in the hospital collection should prevail.*  *The scope includes all public mental health service organisation’s acute psychiatric inpatient units.*  *The following separations are excluded:*   * *Same day separations.* * *Statistical and change of care type separations.* * *Separations that end by transfer to another acute or psychiatric inpatient hospital.* * *Separations that end by death, left against medical advice/discharge at own risk.*   *The following community ambulatory mental health service contacts are excluded:*   * *Service contacts occurring on the day of separation.*   *Same day separations are defined as inpatient episodes where the admission and separation dates are the same.* |
| Data source: | State and Territory admitted patient and community mental health care data. |
| Data provider: | AIHW |
| Data availability: | 2011-12  2007-08, 2008-09, 2009-10 and 2010-11 (revised State and Territory disaggregations) |
| Cross tabulations provided: | State and Territory, by   * Indigenous status * Remoteness (ASGS)   National by SEIFA IRSD deciles (2011 SEIFA with ASGC) |

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| Box 64 Results |
| For this report, new data for this indicator are available for 2011-12.   * Data by State and Territory are presented in tables NHA.25.1–2 * Data by Indigenous status are presented in table NHA.25.2 * Data by remoteness are presented in table NHA.25.2 * Data by socioeconomic status are presented in tables NHA.25.3. * Revised data are provided in this report for 2010-11 (table NHA.25.4), 2009-10 (table NHA.25.5), 2008-09 (table NHA.25.6) and 2007-08 (table NHA.25.7). |
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#### Attachment tables

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| **Table NHA.25.1** | Rate of community follow up within first seven days of discharge from a psychiatric admission, 2011-12 |
| **Table NHA.25.2** | Rate of community follow up within first seven days of discharge from a psychiatric admission, by State and Territory, by Indigenous status, remoteness, 2011-12 |
| **Table NHA.25.3** | Rate of community follow up within first seven days of discharge from a psychiatric admission, by SEIFA IRSD deciles, 2011-12 (per cent) |
| **Table NHA.25.4** | Rate of community follow up within first seven days of discharge from a psychiatric admission, 2010-11 |
| **Table NHA.25.5** | Rate of community follow up within first seven days of discharge from a psychiatric admission, 2009-10 |
| **Table NHA.25.6** | Rate of community follow up within first seven days of discharge from a psychiatric admission, 2008-09 |
| **Table NHA.25.7** | Rate of community follow up within first seven days of discharge from a psychiatric admission, 2007-08 |

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| 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on the rate of community follow up within the first seven days of discharge from a psychiatric admission. * Data are available by State and Territory. National data are available by Indigenous status. Data disaggregated by SES are not available due to the unavailability of Victorian data. * Annual data are available. The most recent available data are for 2011-12. * Care should be taken when interpreting these data, as states and territories vary in their capacity to track post-discharge follow-up. SA indicated that the data submitted were not based on unique patient identifier or data matching approaches. * Australian totals for 2011-12 should be interpreted with caution due to public sector community mental health data not being available from Victoria and data quality issues for SA and Tasmania.   The Steering Committee also notes the following issues:   * Community mental health care data for 2011-12 are not available for Victoria due to service level collection gaps resulting from protected industrial action during this period. This affects all data collected in community-based ambulatory settings and the National Outcomes Casemix Collection in inpatient settings. No substitute or proxy data have been included at the jurisdictional level or to fill the gap in calculation of the national results. * Further disaggregation of this indicator by State and Territory, by Indigenous status and SES is a priority. * Data have been provided according to the State or Territory of the service, but at the sub-state level (remoteness area) have been classified by the client’s place of usual residence. For example, a person who usually resides in a very remote area of the Northern Territory and is treated in a service in a major city of Victoria would be classified for remoteness purposes as very remote area of Victoria (even though Victoria itself has no very remote areas under the ABS remoteness classification). Further work is required to determine whether geographic location for this indicator should be based on usual residence of the client (used for most indicators) or location of the service. |
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### Indicator 26 — Residential and community aged care places per 1000 population aged 70+ years

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| Key amendments from previous cycle of reporting: | The CRC has advised that it no longer requires data for this indicator disaggregated by Aged Care Planning Region. This disaggregation has been removed from this report. |
| Outcome: | Older Australians receive appropriate high quality and affordable health and aged care services |
| Interim measure: | Operational residential and community aged care places/packages per 1000 persons aged 70 years or over plus Aboriginal and Torres Strait Islander persons aged 50–69 years, excluding services funded through Home and Community Care  The interim measure for this indicator is defined as:   * *numerator* — number of operational aged care places as at 30 June^^ * *denominator* — population aged 70 years or over (plus Indigenous persons aged 50–69 years)   and is expressed as a *rate per 1000 population (calculated separately for residential and community aged care services)*  *Residential aged care – includes Multi-Purpose Services and places delivered under the National Aboriginal and Torres Strait Islander Flexible Aged Care and Aged Care Innovative Pool*  *Community aged care – includes Community Aged Care Packages (CACP), Extended Aged Care at Home (EACH), EACH Dementia, Transition Care Program, Multi-Purpose Services and packages delivered under the National Aboriginal and Torres Strait Islander Flexible Aged Care Strategy and Aged Care Innovative Pool* |
| Data source: | *Numerator* — Australian Government Department of Social Services’ (DSS) Aged Care data warehouse  *Denominator* — DSS population projections.   * Total population projection based on 2011 Census as prepared for DSS by ABS according to the assumptions agreed to by the then DoHA as at 30 June 2013. * Indigenous population projections for 50-69 year olds based on ABS Indigenous Experimental 2006 ERP data at SLA level and aligned to published ABS Indigenous data Experimental Estimates and Projections (ABS Cat. No. 3238.0 series B)   Data are available annually |
| Data provider: | AIHW on behalf of DSS |
| Data availability: | 2013 (at 30 June) |
| Cross tabulations provided: | State and Territory by service type  Nationally, by service type (residential and community care), by:   * remoteness (ASGS) |

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| Box 66 Results |
| For this report, new data for this indicator are available for 2012-13.   * Data by State and Territory are presented in table NHA.26.1 * Data by service type are presented in table NHA.26.1 * Data by remoteness are presented in table NHA.26.2.   Data for 2011-12 are available in the 2011-12 NHA performance report. Data for  2010-11 are available in the 2010-11 NHA performance report. Data for 2009-10 and 2008-09 are available in the 2009-10 NHA performance report ([old] NHA PI 49). |
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#### Attachment tables

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| **Table NHA.26.1** | Residential and community aged care places, by State and Territory, 2013 |
| **Table NHA.26.2** | Residential and community aged care places per 1000 population, by remoteness, 2013 |

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| 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 of 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 or socioeconomic status (SES). * Annual data are available. The most recent available data are for 2012-13. * Data are of acceptable accuracy. * State and Territory data in this report are comparable with data in the 2011-12 NHA performance report. * In 2011, the ABS updated the remoteness areas (RA) from a 2006 Census base to a 2011 Census base. The AIHW considers that this results in a series break when applied to this indicator and that RA data for 2012 and previous years are not directly comparable to 2013 data. * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request.   (Continued next page) |
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| Box 67 (continued) |
| The Steering Committee also notes the following issues:   * 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. |
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### Indicator 27 — Number of hospital patient days used by those eligible and waiting for residential aged care

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| Key amendments from previous cycle of reporting: | This indicator is unchanged from the previous NHA. |
| Outcome: | Older Australians receive appropriate high quality and affordable health and aged care services |
| 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  As there is no accurate measure for this indicator, a proxy measure is reported  The proxy measure is defined as:   * *numerator* — the number of patient days used by patients who are waiting for residential aged care, where * the care type was maintenance, and * a diagnosis (either principal or additional) was ‘person awaiting admission to residential aged care service’, and * the separation mode was ‘discharge/transfer to (an)other acute hospital’, ‘discharge, transfer to residential aged care, unless this is usual place of residence’, ‘statistical discharge—type change’, ‘died’, ‘discharge/transfer to other health care accommodation (including mothercraft hospitals)’ or ‘left against medical advice/discharge at own risk; statistical discharge from leave; discharge/transfer to (an)other psychiatric hospital’, and * the separation was overnight only * *denominator* — total patient days (including overnight and same-day separations)   and is expressed as a *number* and a *rate per 1000 patient days* |
| Data source: | AIHW National Hospital Morbidity Database (NHMD). Data are available annually |
| Data provider: | AIHW |
| Data availability: | 2011-12 |
| Cross tabulations provided: | State and Territory, by   * Indigenous status * remoteness (ASGC) * SEIFA IRSD quintiles (2011 based SEIFA IRSD with ASGC)   Nationally, by:   * SEIFA IRSD deciles (2011 based SEIFA IRSD with ASGC |

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| Box 68 Results |
| For this report, new data for this indicator are available for 2011-12.   * Data by State and Territory are presented in table NHA.27.1 * Data by Indigenous status are presented in table NHA.27.1 * Data by remoteness area are presented in table NHA.27.1 * Data by socioeconomic status are presented in tables NHA.27.1–2   Data for 2010-11 are available in the 2011-12 NHA performance report. Data for  2009-10 are available in the 2010-11 NHA performance report. Data for 2008-09 and 2007-08 are available in the 2009-10 NHA performance report ([old] NHA PI 57). |
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#### Attachment tables

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| **Table NHA.27.1** | Hospital patient days used by those eligible and waiting for residential aged care, by State and Territory, by Indigenous status, by remoteness and SEIFA IRSD quintiles, 2011-12 |
| **Table NHA.27.2** | Hospital patient days used by those eligible and waiting for residential aged care, by SEIFA IRSD deciles, 2011-12 |

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| Box 69 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data do not provide a count of patient days in public and private hospitals used by those eligible and waiting for residential aged care (as assessed and approved by an Aged Care Assessment Team [ACAT]). The data provided are a proxy indicator based on patients’ care status. * Annual data are available by State and Territory by Indigenous status and socioeconomic status. The most recent available data are for 2011-12. * All public hospitals provided data, except a mothercraft hospital in the ACT. Most private hospitals also provided data, except private day hospital facilities in the ACT and the NT. * About 88 per cent of Indigenous Australians were identified correctly in hospital admissions data in 2011-12. However, these data should be interpreted with caution as there is variation among jurisdictions in the quality of the Indigenous status data.   (Continued next page) |
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| Box 69 (continued) |
| * Data in this report are comparable with data in previous reports for all states and territories except Tasmania. However, comparability of the data across jurisdictions may be affected by variation in the assignment of non-acute care types. Tasmanian data are not strictly comparable over time due to changes in the inclusions/exclusions of hospitals. * In 2011, the ABS updated the remoteness areas (RA) and SEIFA from a 2006 Census base to a 2011 Census base, though only SEIFA data were updated for this report. The AIHW considers that this results in a series break when applied to this indicator and that SEIFA data for 2010-11 and previous years are not directly comparable to 2011-12 data. * Interpretation of rates for jurisdictions should take into consideration cross-border flows, particularly between NSW and the ACT. * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request.   The Steering Committee also notes the following issues:   * Data have been provided according to the State or Territory of hospitalisation, but at the sub-state level (remoteness area) have been classified by the patients place of usual residence. For example, a person who usually resides in a very remote area of the Northern Territory and is treated in a hospital in a major city of Victoria would be classified for remoteness purposes as very remote area of Victoria (even though Victoria itself has no very remote areas under the ABS remoteness classification). Further work is required to determine whether geographic location for this indicator should be based on usual residence of the patient (used for most indicators) or location of the hospital. * Further development is required to enable reporting on the number of days waited by people in hospitals who have received ACAT assessments and are deemed eligible for residential aged care. |
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### Indicator 28 — Proportion of residential aged care services that are three year re-accredited

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| Key amendments from previous cycle of reporting: | This indicator is unchanged from the previous NHA report. |
| Outcome: | Older Australians receive appropriate high quality and affordable health and aged care services. |
| Measure: | Proportion of residential aged care services that are three year  re-accredited.  The measure is defined as:   * *numerator* — Number of residential aged care facilities that received re-accreditation for three years during the financial year, decision as in effect at 30 June * *denominator* — Total number of residential aged care facilities that received re-accreditation decisions during the financial year.   and is expressed as a *percentage*  *Commencing services receive accreditation for one year in the first instance, and are excluded from consideration until their first re-accreditation occurs.* |
| Data source: | Aged Care Standards and Accreditation Agency. Data are available annually. |
| Data provider: | AIHW and DSS |
| Data availability: | 2012-13 |
| Cross tabulations provided: | State and territory by:   * remoteness (ASGS) * size of facility (places) (1-20 places, 21-40 places, 41-60 places, 61-80 places, 81-100 places, 101+ places)   *Some disaggregations may result in numbers too small for publication.* |

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| Box 70 Results |
| For this report, new data for this indicator are available for 2012-13.   * Data by State and Territory are presented in table NHA.28.1–3 * Data by remoteness are presented in table NHA.28.2 * Data by size of facility are presented in table NHA.28.3.   Data for 2008-09, 2009-10, 2010-11, 2011-12 are available in the 2011-12 NHA performance report. |
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#### Attachment tables

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| **Table NHA.28.1** | Proportion of residential aged care services that are three year re-accredited, by State and Territory, 2012-13 |
| **Table NHA.28.2** | Proportion of residential aged care services that are three year re-accredited, by State and Territory, by remoteness, 2012-13 |
| **Table NHA.28.3** | Proportion of residential aged care services that are three year re-accredited, by State and Territory, by size of facility (places), 2012-13 |

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| Box 71 Comment on data quality |
| The DQS for this indicator was developed by DSS (and includes comments from the AIHW) and is included in its original form in the section of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on the proportion of residential aged care services that are three year re-accredited. * Data are available by State and Territory. Data are not currently available by the socioeconomic status (SES) of the location of the facility and/or care recipients. * Annual data are available. The most recent available data are for 2012-13. * The data are restricted to services seeking re-accreditation. Data excludes those services which were subject to a review audit — that is, services about which the regulator has sufficient concerns to decide that the provider may not be meeting the Accreditation Standards or its responsibilities under the *Aged Care Act 1997*. * Data are only for re-accreditation decisions made during the financial year. In  2011-12, there were around 2 700 accredited residential aged care facilities, and around 1 130 re-accreditation decisions were made. * In 2011, the ABS updated the remoteness areas (RA) from a 2006 Census base to a 2011 Census base. The AIHW considers that this results in a series break when applied to this indicator and that RA data for 2011-12 are not directly comparable to 2012-13 data.   The Steering Committee also notes the following issues:   * This indicator is a proxy measure of the quality of aged care. Although it identifies facilities that met the re-accreditation standards, it does not distinguish levels at which facilities may have exceeded the standards. * Consideration of disaggregation of this indicator by SES is a priority. |
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### Indicator 29 — Proportion of residential aged care days on hospital leave due to selected preventable causes

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| Key amendments from previous cycle of reporting: | This indicator is unchanged from the previous NHA report. |
| Outcome: | Older Australians receive appropriate high quality and affordable health and aged care services. |
| Measure: | Proportion of residential aged care days that are taken as hospital leave for selected preventable causes.  A measure for this indicator has yet to be developed. |
| Data source: | DSS Aged Care Data Warehouse. Data are available annually |
| Data provider: | DSS |
| Data availability: | Data are not currently available. |
| Cross tabulations provided: | Nil |

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| Box 72 Comment on data quality |
| There are currently no available data for reporting against this indicator.  It is expected that further development of this indicator will incorporate measures relating to aged care associated infections (*Staphylococcus aureus* bacteraemia or an alternative infection of more relevance to aged care), falls and pressure ulcers.  It is anticipated that, following development work, data will be available for the 2014-15 cycle of reporting. |
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### Indicator 30 — Elapsed times for aged care services

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| Key amendments from previous cycle of reporting: | This indicator is unchanged from the previous NHA report. |
| Outcome: | Older Australians receive appropriate high quality and affordable health and aged care services. |
| Measure: | The elapsed time between an Aged Care Assessment Team (ACAT) approval and entry into a residential aged care service or commencement of a Community Aged Care Package (CACP), Extended Aged Care at Home (EACH) package or Extended Aged Care at Home Dementia (EACHD) package  The measure is defined as:   * *numerator* — Number of new aged care recipients who commence a service within elapsed time periods during the period. * *denominator* — Total number of new aged care recipients during the period.   and is expressed as a *percentage of people admitted by length of entry period and service type*  *Elapsed time period categories include: within two days or less, seven days or less, less than one month, less than three months, less than nine months.*  *Analysis of Indigenous status is by self-reported indication on the associated last ACAT assessment record made before entry into aged care.*  *Disaggregation by State and Territory is derived from the location of the aged care service. Disaggregation by Remoteness and SEIFA is derived from the recipient’s postcode at time of assessment.* |
| Data source: | AIHW on behalf of DSS’s Aged Care Assessment Program Minimum Data Set and Aged Care Data Warehouse. Data are available annually. |
| Data provider: | AIHW on behalf of DSS |
| Data availability: | 2012-13 |
| Cross tabulations provided: | State and territory, by service type (RAC High care, RAC Low care, CACP, EACH, EACHD), by:   * Indigenous status * remoteness (ASGS) * SEIFA IRSD quintiles (2011 SEIFA IRSD with ASGS)   Nationally by service type (RAC High care, RAC Low care, CACP, EACH, EACHD) by:   * by SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS).   *Some disaggregations may result in numbers too small for publication* |

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| Box 73 Results |
| For this report, new data for this indicator are available for 2012-13.   * Data by State and Territory are presented in tables NHA.30.1–4 * Data by remoteness are presented in table NHA.30.2 * Data by socioeconomic status are presented in tables NHA.30.3 and 30.5 * Data by Indigenous status are presented in table NHA.30.4.   Data for 2008-09, 2009-10, 2010-11, 2011-12 are available in the 2011-12 NHA performance report. |
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#### Attachment tables

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| **Table NHA.30.1** | Elapsed times for aged care services, by State and Territory, 2012-13 |
| **Table NHA.30.2** | Elapsed times for aged care services, by State and Territory, by remoteness, 2012-13 |
| **Table NHA.30.3** | Elapsed times for aged care services, by State and Territory, by SEIFA IRSD quintiles, 2012-13 |
| **Table NHA.30.4** | Elapsed times for aged care services, by State and Territory, by Indigenous status, 2012-13 |
| **Table NHA.30.5** | Elapsed times for aged care services, by SEIFA IRSD deciles, 2012-13 |

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| Box 74 Comment on data quality |
| The DQS for this indicator was developed by the then DoHA (and includes comments from the AIHW) and is included in its original form in the section of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on the elapsed time between an Aged Care Assessment Team (ACAT) approval and entry into a residential aged care service or commencement of a Community Aged Care Package (CACP), Extended Aged Care at Home (EACH) package or Extended Aged Care at Home Dementia (EACHD) package. * Annual data are available. The most recent available data are for 2012-13. * Data are available by State and Territory, Indigenous status, remoteness and socioeconomic status (SES), and are comparable over time by State and Territory and Indigenous status.   (Continued next page) |
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| Box 74 continued |
| * In 2011, the ABS updated the remoteness areas (RA) and SEIFA from a 2006 Census base to a 2011 Census base. The AIHW considers that this results in a series break when applied to this indicator and that RA and SEIFA data for 2011-12 are not directly comparable to 2012-13 data. * The term 'elapsed time' is used, because the period of time between the ACAT approval and entry into residential care or commencement of community care may be influenced by factors that cannot be categorised as time spent 'waiting' (and not all 'waiting' time is included). Factors that influence elapsed time include: * care placement offers that are not accepted * the availability of alternative community care, informal care and respite services * variations in care fee regimes that influence client choice of preferred service * building quality and perceptions about quality of care that influence client choice of preferred service. * The data for elapsed time by remoteness and SES were sourced at a later date than the data for elapsed time by State and Territory, resulting in slightly larger total numbers of admissions. The variance across the different breakdowns of this indicator is less than 0.3 per cent.   The Steering Committee also notes the following issues:   * Caution should be exercised when interpreting these data, as they do not include those clients who have received an ACAT approval and who may have spent time waiting, but who: * do not enter residential care or commence a CACP, EACH or EACHD (for example, who die before entering care) * ultimately decide not to take-up a care placement offer. * For residential aged care, it is important to focus on high care services, as the link between ‘elapsed time’ before entry to residential care and actual ‘waiting time’ is stronger for high care residents than for low care residents. |
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### Indicator 31 — Proportion of aged care residents who are full pensioners relative to the proportion of full pensioners in the general population.

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| Key amendments from previous cycle of reporting: | This indicator is unchanged from the previous NHA report. |
| Outcome: | Older Australians receive appropriate high quality and affordable health and aged care services. |
| Measure: | Proportion of aged care recipients who are full pensioners relative to the proportion of full pensioners in the general population.  A measure for this indicator has yet to be developed. |
| Data source: | DSS’s Aged Care Data Warehouse; Department of Human Services (DHS) (Centrelink) Pensions Database; DVA’s Client Database. |
| Data provider: | DSS on behalf of DHS and DVA. |
| Data availability: | Data are not currently available. |
| Cross tabulations provided: | Nil |

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| Box 75 Comment on data quality |
| There are currently no available data for reporting against this indicator.  It is expected that, following data development work in late 2013 to collect information on pension status of aged care recipients, data will be available for the 2014-15 cycle of reporting. |
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### Indicator 32 — Patient satisfaction/experience

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| Key amendments from previous cycle of reporting: | Data are provided for the first time for the Indigenous population for measure (c) (not able to be backcast). |
| Outcome: | Australians have positive health and aged care experiences which take account of individual circumstances and care needs |
| Interim measure: | Nationally comparative information that indicates levels of patient satisfaction around key aspects of the care they received  There are nine measures [(a) to (i)] for this indicator. Indicators 32(c) through to 32(i) each have three sub-indicators: Whether [particular health professional] listened carefully to, showed respect for and spent enough time with person.  Measure 32 (a) is defined as:   * *numerator* — number of persons who saw a GP (for their own health in the last 12 months who waited longer than felt acceptable to get an appointment * *denominator* — total number of persons who saw a GP for their own health in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  Measure 32 (b) is defined as:   * *numerator* — number of persons who were referred to a medical specialist by a GP in the last 12 months who waited longer than felt acceptable to get an appointment * *denominator* — total number of persons who were referred to a medical specialist by a GP in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  Measure 32 (c) is defined as:   * *numerator* — number of persons who saw a GP in the last 12 months who reported the GP always or often: listened carefully to them; showed respect; and spent enough time with them (calculated separately for each *category*) * denominator — total number of persons who saw a GP (for their own health) in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  Measure 32 (d) is defined as:   * *numerator* — number of persons who saw a medical specialist in the last 12 months who reported the medical specialist always or often: listened carefully to them showed respect; and spent enough time with them * *denominator* — total number of persons who saw a medical specialist in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  Measure 32 (e) is defined as:   * *numerator* — number of persons who saw a dental practitioner in the last 12 months who reported the dental practitioner always or often: listened carefully to them; showed respect; and spent enough time with them * *denominator* — total number of persons who saw a dental practitioner in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*   * Measure 32 (f) is defined as: * *numerator* — number of persons who went to a hospital emergency department in the last 12 months who reported the ED doctors or specialists always or often: listened carefully to them; showed respect; and spent enough time with them * *denominator* — total number of persons who went to a hospital emergency department in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  Measure 32 (g) is defined as:   * *numerator* — number of persons who went to a hospital emergency department in the last 12 months who reported the ED nurses always or often: listened carefully to them; showed respect; and spent enough time with them * *denominator* — total number of persons who went to a hospital emergency department in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  Measure 32 (h) is defined as:   * *numerator* — number of persons admitted to a hospital in the last 12 months who reported the hospital doctors or specialists always or often: listened carefully to them; showed respect; and spent enough time with them * *denominator* — total number of persons admitted to a hospital in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  Measure 32 (i) is defined as:   * *numerator* — number of persons admitted to a hospital in the last 12 months who reported the hospital nurses always or often: listened carefully to them; showed respect; and spent enough time with them * *denominator* — total number of persons who have been admitted to a hospital in the last 12 months   and is expressed as a *directly age standardised rate (per cent)*  *Population is limited to persons aged 15 years or over*  *Some survey respondents may report pathology and imaging as a referral to a medical specialist*  *Dental practitioner includes dentist, dental hygienist or dental specialist*  *Responses from proxy interviews are not counted for questions on personal opinions* |
| Data source: | (All) ABS Patient Experience Survey (PExS). Data are available annually.  (Indigenous) ABS National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) component of the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) |
| Data provider: | ABS |
| Data availability: | 2012-13 |
| Cross tabulations provided: | State and Territory for (a) to (i) by:   * remoteness (ASGS)   Nationally for (a) to (i) by:   * SEIFA IRSD deciles (2011 SEIFA IRSD with ASGS) * remoteness (ASGS)   (Indigenous population only – measure (c) only) Nationally by:  • Remoteness (non-remote areas only) (ASGS) |

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| Box 76 Results |
| For this report, data are available for 2012-13.   * Data by State and Territory are presented in tables NHA.32.1, 3, 5, 7, 9, 11, 13, 15 and 17 * Data by remoteness are presented in tables NHA.32.1–18 * Data by socioeconomic status are presented in tables NHA.32.19–27 * Data for Indigenous persons only are presented in table NHA.32.28.   Apparent differences in results between years may not be statistically significant. To assist in interpretation, 95 per cent confidence intervals and relative standard errors are provided in the attachment tables for this indicator.  Data for 2011-12 are available in the 2011-12 NHA performance report, but are not directly comparable with data included in this report for measures (a) and (b). Data for  2010-11 are provided in the 2010-11 NHA performance report ([old] NHA PI 58) and data for 2009 are provided in the 2009-10 NHA performance report ([old] NHA PI 58), but these data are not directly comparable with data included in this report for measures (a) and (b). |
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#### Attachment tables

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| **Table NHA.32.1** | Proportion of persons who saw a GP (for their own health) in the last 12 months reporting they waited longer than felt acceptable to get an appointment, by State and Territory, by remoteness, 2012-13 |
| **Table NHA.32.2** | Proportion of persons who saw a GP (for their own health) in the last 12 months reporting they waited longer than felt acceptable to get an appointment, by remoteness, 2012-13 |
| **Table NHA.32.3** | Proportion of persons referred to a medical specialist (for their own health) in the last 12 months reporting they waited longer than felt acceptable to get an appointment, by remoteness, by State and Territory 2012-13 |
| **Table NHA.32.4** | Proportion of persons who were referred to a medical specialist (for their own health) in the last 12 months reporting they waited longer than felt acceptable to get an appointment, by remoteness, 2012-13 |
| **Table NHA.32.5** | Proportion of persons who saw a GP in the last 12 months reporting the GP always or often: listened carefully, showed respect, and spent enough time with them, by State and Territory, by remoteness, 2012-13 |
| **Table NHA.32.6** | Proportion of persons who saw a GP in the last 12 months reporting the GP always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, 2012-13 |
| **Table NHA.32.7** | Proportion of persons who saw a medical specialist in the last 12 months reporting the medical specialist always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, by State and Territory, 2012-13 |
| **Table NHA.32.8** | Proportion of persons who saw a medical specialist in the last 12 months reporting the medical specialist always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, 2012-13 |
| **Table NHA.32.9** | Proportion of persons who saw a dental professional in the last 12 months reporting the dental professional always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, by State and Territory, 2012-13 |
| **Table NHA.32.10** | Proportion of persons who saw a dental professional in the last 12 months reporting the dental professional always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, 2012-13 |
| **Table NHA.32.11** | Proportion of persons who went to an emergency department in the last 12 months reporting the ED doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them, by State and Territory, by remoteness, 2012-13 |
| **Table NHA.32.12** | Proportion of persons who went to an emergency department in the last 12 months reporting the ED doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, 2012-13 |
| **Table NHA.32.13** | Proportion of persons who went to an emergency department in the last 12 months reporting the ED nurses always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, by State and Territory, 2012-13 |
| **Table NHA.32.14** | Proportion of persons who went to an emergency department in the last 12 months reporting the ED nurses always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, 2012-13 |
| **Table NHA.32.15** | Proportion of persons who were admitted to hospital in the last 12 months reporting the hospital doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, by State and Territory, 2012-13 |
| **Table NHA.32.16** | Proportion of persons who were admitted to hospital in the last 12 months reporting the hospital doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, 2012-13 |
| **Table NHA.32.17** | Proportion of persons who were admitted to hospital in the last 12 months reporting the hospital nurses always or often: listened carefully, showed respect, and spent enough time with them, by State and Territory, by remoteness, 2012-13 |
| **Table NHA.32.18** | Proportion of persons who were admitted to hospital in the last 12 months reporting the hospital nurses always or often: listened carefully, showed respect, and spent enough time with them, by remoteness, 2012-13 |
| **Table NHA.32.19** | Proportion of persons who saw a GP (for their own health) in the last 12 months reporting they waited longer than felt acceptable to get an appointment, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.32.20** | Proportion of persons who were referred to a medical specialist by a GP in the last 12 months reporting they waited longer than felt acceptable to get an appointment, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.32.21** | Proportion of persons who saw a GP in the last 12 months reporting the GP always or often: listened carefully, showed respect, and spent enough time with them, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.32.22** | Proportion of persons who saw a medical specialist in the last 12 months reporting the medical specialist always or often: listened carefully, showed respect, and spent enough time with them, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.32.23** | Proportion of persons who saw a dental practitioner in the last 12 months reporting the dental practitioner always or often: listened carefully, showed respect, and spent enough time with them, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.32.24** | Proportion of persons who have been to a hospital emergency department in the last 12 months reporting ED doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.32.25** | Proportion of persons who have been to a hospital emergency department in the last 12 months reporting ED nurses always or often: listened carefully, showed respect, and spent enough time with them, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.32.26** | Proportion of persons who have been admitted to a hospital in the last 12 months reporting hospital doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.32.27** | Proportion of persons who have been admitted to a hospital in the last 12 months reporting hospital nurses always or often: listened carefully, showed respect, and spent enough time with them, by SEIFA IRSD deciles, 2012-13 |
| **Table NHA.32.28** | Proportion of persons who saw a GP in the last 12 months reporting the GP always or often: listened carefully, showed respect, and spent enough time with them, Indigenous persons only, by remoteness, 2012-13 |

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| 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on elements of patient experience and satisfaction with key elements of care. The data are based on peoples’ self-reported attitudes on whether they felt they waited too long for an appointment, and whether the health professional they saw spent enough time with them, listened carefully and showed them respect. * The most recent data are for 2012-13 from the Patient Experience Survey (PExS): * Data are available by State and Territory, and nationally by socioeconomic status (SES).   (Continued next page) |
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| Box 77 (continued) |
| * Data for measure 32(a) are not comparable over time. There has been a noticeable contextual effect for associated data with the change in question ordering in the 2011-12 and 2012-13 surveys. * Data for measure 32(b) are comparable between 2012-13 and 2011-12, but not for prior years. There has been a noticeable contextual effect for associated data with the change in question ordering in the 2011-12 survey. * Data are available for the first time for the Indigenous population from the 2012-13 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) (measure (c) only). * Data from the PExS are not comparable with data from the NATSIHS. * The 2011-12 PExS was the first to include households in very remote areas, (although it still excluded discrete Indigenous communities). Small differences evident in the NT estimates between 2010-11 and 2011-12 may in part be due to the inclusion of households in very remote areas. Data from the NATSIHS are available for non-remote areas only (major cities, inner regional and outer regional). * 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 online, and on request.   The Steering Committee also notes the following issues:   * Comparable time series data and comparable data by Indigenous status are both priorities for this indicator. * Data limitations mean that:   – disaggregation by sub-state for remoteness areas is only available for major cities (with other remoteness categories combined)  – disaggregation by SES is only available at the national level. |
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### Indicator 33 — Full time equivalent employed health practitioners per 1000 population (by age group)

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| Key amendments from previous cycle of reporting: | * Data have been backcast due to revised Estimated Resident Population (ERP) data * Data are available for the first time for allied health professionals and included in this report. * Data are now presented as a *rate per 100 000 population* to improve interpretability (previously per 1000 population) |
| Outcome: | Australians have a sustainable health system. |
| Measure: | Full time equivalent employed health practitioner rate (for the professions of medical practitioners, nurses/midwives, dental practitioners and allied health professionals).  The measure is defined as:   * *numerator* — full-time equivalent (FTE) number in the workforce in the reference year * *denominator* — Australian population in the reference year   and is expressed as a *rate per 100 000 population*  *The workforce for each profession is defined as those employed in the profession. This excludes those who are registered in the profession but are retired from regular work, working outside the profession, on extended leave of 3 months or more or working outside Australia.*  *Full time equivalent (FTE) number equals the total hours worked by workforce divided by the standard working week for selected professions.*  *A full time working week has been defined as 40 hours for medical practitioners and as 38 hours for dental practitioners, nurses and midwives and allied health practitioners* |
| Data source: | Numerator — AIHW National Health Workforce Data Set  Denominator — ABS Estimated Resident Population |
| Data provider: | AIHW |
| Data availability: | 2012 (medical practitioners, nurses/midwives, dental practitioners, allied health practitioners)  2011 (revised data for medical practitioners, nurses/midwives, dental practitioners, new data for allied health practitioners)  2010 (revised data for medical practitioners) |
| Cross tabulations provided: | State and Territory, by profession, by   * age group (<25, 25–34, 35–44, 45–54, 55–64 and 65 or over) |

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| Box 78 Results |
| For this report, new data for this indicator are available for 2012.   * Data by State and Territory, by profession, by age are presented in table NHA.33.1   Revised data are provided in this report:   * Data for 2011 are presented in table NHA.33.2 * Data for 2010 are presented in table NHA.33.3 |
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#### Attachment tables

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| **Table NHA.33.1** | Full time equivalent employed health practitioners per 100 000 population, State and Territory, by profession, by age group, 2012 (rate per 100,000 population) |
| **Table NHA.33.2** | Full time equivalent employed health practitioners per 100 000 population, State and Territory, by profession, by age group, 2011 (rate per 100,000 population) |
| **Table NHA.33.3** | Full time equivalent employed health practitioners per 100,000 population, State and Territory, by profession, by age group, 2010 (rate per 100,000 population) |

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| Box 79 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 of this report titled ‘Data Quality Statements’. Key points from the DQS are summarised below.   * The data provide relevant information on the rate of full-time equivalent employed health practitioners (for the professions of medical practitioners, nurses/midwives, dental practitioners and allied health professionals). * The National Health Workforce Data Set (NHWDS) is a combination of registration (including demographic) information provided by the Australian Health Practitioner Regulation Agency (AHPRA) and workforce details obtained by the Health Workforce Survey. * The rates have been calculated per 100 000 population for this indicator to assist with interpretation. * Data are available annually. The most recent data are for 2012.   (Continued next page) |
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| Box 79 (continued) |
| * Following the 2011 Census of Population of Housing, the ABS has rebased the Australian population back to 1991. This rebasing had a significant impact on the population time series, and, where available, data have been resupplied back to the baseline reporting year using the rebased ERP. * Medical practitioners, dental practitioners and nurses/midwives and allied health professionals are required by law to be registered to practise in Australia (except Aboriginal and Torres Strait Islander health practitioners in the allied health workforce where those who are not required by their employer to use the title 'Aboriginal and Torres Strait Islander health practitioner', 'Aboriginal health practitioner' or 'Torres Strait Islander health practitioner' are not required to be registered, and can continue to work using their current titles (for example, 'Aboriginal health worker'. 'drug and alcohol worker' and 'mental health worker')). The Health Workforce Survey is voluntary and only practitioners who renew their registration receive a questionnaire. * Care should be taken when drawing conclusions about the size of the differences between estimates across years. Raw data have undergone imputation and weighting to adjust for non-response, which may have introduced bias in the final survey data (more pronounced in lower response rates). * Data for allied health practitioners are not comparable between 2011 and 2012 due to four additional professions joining the National Registration and Accreditation Scheme in 2012. * Differences in survey methodology may affect the comparability of results. * Detailed explanatory notes are publicly available to assist in the interpretation of results. * Additional data from the data source are available online, and on request.   The Steering Committee has no additional issues for noting with this indicator. |
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## 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 8 lists the NHA performance benchmarks and the page reference for the associated DQSs.

Table 8 Data quality statements for performance benchmarks in the National Healthcare Agreement

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| Performance benchmark | Page no. in this report |
| (a) close the life expectancy gap for Indigenous Australians within a generation | 654 |
| (b) halve the mortality gap for Indigenous children under five by 2018 | 654 |
| (c) 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) by 2023 | 669 |
| (d) by 2018, increase by five percentage points the proportion of Australian adults and Australian children at a healthy body weight, over the 2009 baseline | 642 |
| (e) by 2018, reduce the national smoking rate to 10 per cent of the population and halve the Indigenous smoking rate, over the 2009 baseline | 646 |
| (f) 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 | 712 |
| (g) 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 | 742 |

Table 9 lists the NHA performance indicators and the page reference for the associated DQSs.

Table 9 Data quality statements for performance indicators in the National Healthcare Agreement

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| Performance indicator | Page no. in this report |
| 1. Proportion of babies born of low birth weight | 632 |
| 2. Incidence of selected cancers | 637 |
| 3. Prevalence of overweight and obesity | 642 |
| 4. Rates of current daily smokers | 646 |
| 5. Levels of risky alcohol consumption | 650 |
| 6. Life expectancy | 654 |
| 7. Infant and young child mortality rate | 654 |
| 8. Major causes of death | 660 |
| (Continued next page) | |

Table 9 (continued)

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| Performance indicator | Page no. in this report |
| 9. Incidence of heart attacks | 664 |
| 10. Prevalence of type 2 diabetes | 669 |
| 11. Proportion of adults with very high levels of psychological distress | 672 |
| 12. Waiting times for GPs | 676; 681 |
| 13. Waiting times for public dentistry | 683;688 |
| 14 People deferring access to selected health care due to financial barriers | 690; 696 |
| 15. Effective management of diabetes | 698 |
| 16. Potentially avoidable deaths | 701 |
| 17. Treatment rates for mental illness | 705 |
| 18. Selected potentially preventable hospitalisations | 712 |
| 19. Selected potentially avoidable GP-type presentations to emergency departments | 718, 722 |
| 20. Waiting times for elective surgery | 726 |
| 21. Waiting times for emergency hospital care | 732, 738 |
| 22. Healthcare associated infections | 742 |
| 23. Unplanned hospital readmission rates | 746 |
| 24. Survival of people diagnosed with notifiable cancers | .. |
| 25. Rate of community follow up within first seven days of discharge from a psychiatric admission | 752 |
| 26. Residential and community aged care places per 1,000 population aged 70+ years | 756 |
| 27. Number of hospital patient days used by those eligible and waiting for residential aged care | 759 |
| 28. Proportion of residential aged care services that are three year reaccredited | 764 |
| 29. Proportion of residential aged care days on hospital leave due to selected preventable causes | .. |
| 30. Elapsed times for aged care services | 767 |
| 31. Proportion of aged care residents who are full pensioners relative to the proportion of full pensioners in the general population | .. |
| 32. Patient satisfaction/experience | 770; 778 |
| 33. Full time equivalent employed health practitioners per 1,000 population (by age group and profession type) | 778 |

### **Data Quality Statement — Indicator 1: Proportion of babies born of low birthweight**

Key data quality points:

* Birthweight is included in the Perinatal National Minimum Data Set (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 stillbirths and the measure may therefore differ slightly from information presented in other publications on low birthweight.
* The National Perinatal Data Collection (NPDC) includes information on the Indigenous status of the mother only. Since 2005, all jurisdictions have collected 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. The current data have not been adjusted for under-identification of Indigenous status of the mother and thus jurisdictional comparisons of Indigenous data should not be made.
* Remoteness data for 2010 and previous years are not directly comparable to remoteness data for 2011 and subsequent years.
* SEIFA data for 2011 are not directly comparable with SEIFA data from previous years.

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| **Outcome** | Australians are born and remain healthy. |
| **Indicator** | The incidence of low birthweight among liveborn babies of Aboriginal and Torres Strait Islander mothers and other mothers as a proportion of liveborn infants. |
| **Measure (computation)** | *Numerator*: Number of low birthweight live-born singleton infants born in a calendar year.  Low birthweight is defined as less than 2500 grams.  Denominator: Number of live-born singleton infants born in a calendar year.  Calculation: 100 × (Numerator ÷ Denominator)  Variability band: to be calculated using the standard method for estimating 95 per cent confidence intervals as follows:  Crude rate  Where n=number of live-born singleton infants.  CI = confidence interval  CR = crude rate (expressed as a percentage) |
| **Data source/s** | This indicator is calculated using data from the AIHW National Perinatal Data Collection (NPDC).  For data by socioeconomic status: calculated by National Perinatal Epidemiology and Statistics Unit (NPESU) using the ABS’ Socioeconomic Index for Areas (SEIFA) Index of Relative Socioeconomic Disadvantage (IRSD) 2011. 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 population and each decile has approximately 10 per cent of the population.  For data by remoteness: ABS’ Australian Statistical Geography Standard (ASGS). |
| **Institutional environment** | The NPESU calculated this indictor on behalf of the Australian Institute of Health and Welfare (AIHW). Data were supplied by State and Territory health authorities to the the AIHW. 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. |
| **Relevance** | The National Perinatal Data Collection comprises data items as specified in the Perinatal 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, except in WA, where births are included if gestational age is 20 weeks or more, or if gestation unknown, if birthweight is at least 400 grams, and in Victoria where livebirths are included or any gestational age and stillbirths if gestational age is 20 weeks or more, or if gestation unknown, if birthweight is at least 400 grams. 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 includes all relevant data elements of interest for this indicator. Birthweight is a Perinatal NMDS item. In 2011, very few (0.02 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. However, the proportion of Indigenous mothers for the period 2002–2011 has been consistent, at 3.6–3.9 per cent of women who gave birth. For maternal records where Indigenous status was not stated (0.2 per cent), data were excluded from Indigenous and non-Indigenous analyses.  The indicator is presented by Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-Economic Disadvantage (IRSD). The data supplied to the NPDC include a code for SLA from all states and territories. Reporting by remoteness is in accordance with the Australian Statistical Geography Standard (ASGS). |
| **Timeliness** | The reference period for the data is 2011. Collection of data for the NPDC is annual. |
| **Accuracy** | Inaccurate responses may occur in all data provided to the AIHW. The AIHW does not have direct access to perinatal records to determine the accuracy of the data provided. However, the NPESU undertakes validation on receipt of data by the AIHW. 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 NPESU 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 NPESU. 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 NPESU 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 data supplied for the 2011 Perinatal NMDS by Victoria to prepare this indicator was provisional and subject to vary with data quality activities. Further minor changes to the data are not foreseen to produce any detectable change to the indicator.  The geographical location code for the area of usual residence of the mother is included in the Perinatal NMDS. Only 0.1 per cent of records were non-residents or 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 nearly universally reported. Less than 0.05 per cent of records were missing overall. 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 0.2 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 and thus jurisdictional comparisons of Indigenous data should not be made.  Disaggregated data by Indigenous status is reported by single year for time series and by three-year combined data for the current reporting period. Single year data by Indigenous status should be used with caution due to the small number of low birthweight infants born to Indigenous mothers each year. |
| **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 will differ slightly from those presented here as this measure excludes multiple births and stillbirths.  Changing levels of Indigenous identification over time and across jurisdictions may also affect the accuracy of compiling a consistent time series in future years.  In 2011, the ABS updated the standard geography used in Australia for most data collections from the Australian Standard Geographical Classification (ASGC) to the Australian Statistical Geography Standard (ASGS). Also updated at this time were remoteness areas and the Socio-Economic Indices for Areas (SEIFA), based on the 2011 ABS Census of Population and Housing.  The new remoteness areas will be referred to as RA 2011, and the previous remoteness areas as RA 2006. The new SEIFA will be referred to as SEIFA 2011, and the previous SEIFA as SEIFA 2006.  Data for 2007 through to 2010 reported by remoteness are reported for RA 2006. Data for 2011 are reported for RA 2011. The AIHW considers the change from RA 2006 to RA 2011 to be a series break when applied to data supplied for this indicator, therefore remoteness data for 2010 and previous years are not comparable to remoteness data for 2011 and subsequent years.  Data for 2007 through to 2010 reported for SEIFA quintiles and deciles are reported using SEIFA 2006 at the Statistical Local Area (SLA) level. Data for 2011 are reported using SEIFA 2011 at the SLA level. The AIHW considers the change from SEIFA 2006 to SEIFA 2011 to be a series break when applied to data supplied for this indicator, therefore SEIFA data for 2011 are not directly comparable with SEIFA data from previous years. |
| **Interpretability** | Supporting information on the use and quality of the Perinatal NMDS 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: 2006-2009. 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 and Chapter 5).  Metadata information for this indicator has been published in the AIHW’s online metadata repository, METeOR. Metadata information for the Perinatal NMDS are also published in METeOR, and in the National health data dictionary. |
| **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). |

### **Data Quality Statement — Indicator 2: Incidence of selected cancers**

Key data quality points:

* 2010 incidence data for NSW and ACT were not available for inclusion in the 2010 version of the Australian Cancer Database (ACD). The development of the new NSW Cancer Registries system has resulted in a delay in processing incidence data for 2010 onwards. Details of the expected time-line for processing of 2010 cancer incidence data for NSW and ACT are available at: http://www.cancerinstitute.org.au/data-and-statistics/accessing-our-data/availability-of-nsw-central-cancer-registry-data#incidence-when-2009. Therefore 2010 incidence data for NSW and ACT were estimated by the Australian Institute of Health and Welfare (AIHW). Although the estimation procedure has been shown to be reasonably accurate for estimating overall cancer incidence, its accuracy with respect to individual cancers will vary. Until the actual 2010 cancer data are available from these jurisdictions caution should be exercised when comparing the 2010 NSW, ACT and Australian data with data from previous years. The estimates of 2010 incidence in NSW and ACT cannot be disaggregated by Indigenous status, remoteness area or socioeconomic status. The Australian totals for these tables do not include NSW and ACT.
* This indicator only counts one year of incidence data. For jurisdictions that record relatively small numbers of cancers, rates may fluctuate widely from year to year; these changes should be interpreted with caution.
* 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 (NSW, Qld, WA and NT). Indigenous data for other jurisdictions should be interpreted with caution. Even with adequate data quality, the small numbers behind many disaggregations means certain Indigenous data are not robust enough for meaningful comparisons. Information on adequacy of Indigenous identification in cancer registry data is provided to AIHW by each jurisdictional cancer registry.
* Some jurisdictions may use an imputation method to impute missing Indigenous status for reporting purposes. This may lead to an underreporting of rates in this Indicator compared to those shown in jurisdictional cancer incidence reports.
* The incidence rate in Indigenous Australians may fluctuate considerably from year to year due to the behaviour of rare events in small populations.
* Remoteness area and socioeconomic status are based on Statistical Local Area (SLA) of residential address at the time of diagnosis.
* Due to Health Department policy in the ACT and NT, incidence rates based on counts of between 1 and 4 persons have been suppressed because of statistical unreliability.

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| **Outcome** | Australians are born and remain healthy |
| **Indicator** | Incidence of selected cancers |
| **Measure (computation)** | The selected cancers of public health importance are bowel cancer, lung cancer, melanoma of the skin, breast cancer in females and cervical cancer.  For bowel cancer, lung cancer and melanoma, 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 breast and cervical cancer the numerator is the number of new cases occurring in the Australian female population in the reported year. The denominator is the total Australian 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. |
| **Data source/s** | *Numerator*: Australian Cancer Database (ACD)  *Denominators*:  For bowel cancer, lung cancer and melanoma: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP).  For breast and cervical cancer: ABS ERP for female population.  For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous population) Series B.  For data by Remoteness area: ABS ERPs for Australian Standard Geographical Classifications (ASGC) Remoteness Areas.  For data by socioeconomic status: calculated by AIHW using the ABS’ 2006 Index of Relative Socio-economic Disadvantage (IRSD) and ERPs by Statistical Local Area (SLA). Each SLA in Australia is ranked by IRSD score and divided into quintiles and deciles in a population-based manner, such that each quintile has approximately 20 per cent of the population and each decile has approximately 10 per cent of the population. |
| **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 of the skin and squamous cell carcinoma of the skin. |
| **Relevance** | The data used to calculate this indicator are accurate and of high quality. The mandatory reporting of cancers and the use of Estimated Resident Populations (ERPs) 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 2014 COAG Reform Council report are based on cancers diagnosed in 2010, noting that cancers for NSW and ACT are based on estimates. |
| **Accuracy** | 2010 incidence data for NSW and ACT were not available for inclusion in the 2010 version of the ACD. The development of the new NSW Cancer Registries system has resulted in a delay in processing incidence data for 2010 onwards. Details of the expected time-line for processing of 2010 cancer incidence data for NSW and ACT are available at: http://www.cancerinstitute.org.au/data-and-statistics/accessing-our-data/availability-of-nsw-central-cancer-registry-data#incidence-when-2009. Therefore 2010 incidence data for NSW and ACT were estimated by the AIHW. Although the estimation procedure has been shown to be reasonably accurate for estimating overall cancer incidence, its accuracy with respect to individual cancers will vary.  As NSW and ACT make up about a third of Australia’s population, the national incidence data for 2010 is likely to be somewhat inaccurate for some individual cancers; which cancers these are is not predictable. Until the actual 2010 cancer data are available from these jurisdictions caution should be exercised when comparing the 2010 NSW, ACT and Australian data with data from previous years. The estimates of 2010 incidence in NSW and ACT cannot be disaggregated by Indigenous status, remoteness area or socioeconomic status. The Australian totals for these tables do not include NSW and ACT.  It is anticipated that the 2011 version of the ACD will include the real 2010 incidence data for NSW and ACT.  2009 incidence data for NSW and ACT include estimates of so-called ‘death certificate only’ (DCO) cases. An extended delay in the provision of 2009 mortality data from the Council of Australian Registrars has meant that NSW and ACT have not been able to register cases of cancer that are recorded on a death certificate but which were not notified to the cancer registry by any other means. The number of such cases in 2009 for each cancer, sex and age group has been estimated by the AIHW based on the numbers observed for 2004–2008. Overall for the five cancers covered in the Indicator, about 1.2 per cent of NSW cases and 1.4 per cent of ACT cases are estimated DCO cases. The percentage varies by cancer type.  For Indigenous status, the numerator for ‘Indigenous’ is the number of people who self-reported that they were Indigenous at the time of diagnosis. ‘Other’ includes those who self-reported that they were not Indigenous at the time of diagnosis and those who chose not to identify as either Indigenous or non-Indigenous.  Caution is required when examining differences across Indigenous status as Vic, SA, Tas and ACT do not have adequate data quality for this indicator. NSW, Qld, WA and NT have indicated that their Indigenous data quality is sufficient for reporting; however, 2010 incidence data for NSW is estimated and Indigenous status for these estimates is not available. Therefore, in 2010, Qld, WA and NT are the only jurisdictions with adequate Indigenous data quality.  Socioeconomic status rankings (by Index of Relative Socio-Economic Disadvantage (IRSD) score) are calculated by SLA using a population-based method at the Australia-wide level. That is, the quintiles are national quintiles, not state and territory quintiles.  An SLA-to-remoteness-area concordance and SLA-to-socioeconomic-status concordance were used to allocate remoteness area and socioeconomic status to each record on the ACD based on the person’s SLA of residence at time of diagnosis.  Caution is required when examining differences across remoteness area and socioeconomic status categories. The SLA of a person is computed by the cancer registry based on the address provided by the person. Some people may supply an address other than that where they normally reside or the details the person provides may not correspond to a valid address meaning that their cancer record cannot be allocated to a remoteness area or socioeconomic status category at all. Such records are excluded from the tables and this may affect some remoteness area and socioeconomic categories more than others. Also, because the concordances are based on the 2006 census, SLA boundaries may have changed over time which creates inaccuracies.  Due to the very small number of diagnoses involved, disaggregation by Indigenous status, or remoteness area, or socioeconomic status by state and territory is not necessarily robust. For example, some SLAs cover a large and heterogeneous geographical area including towns and very remote areas, yet all people in a given SLA are assigned the same socioeconomic status.  Variability bands have been provided to indicate the extent to which conclusions can be drawn about differences in incidence rates between population subgroups. The bands are calculated as 95 per cent confidence intervals around the age-standardised rate, based on the assumption that the number of cancers diagnosed within each category is a Poisson random variable. Although this is a standard assumption in cancer incidence calculations around the world it is important to note that it is not possible to prove or disprove this assumption.  This indicator only counts one year of incidence data. For jurisdictions that record relatively small numbers of cancers, rates may fluctuate widely from year to year; these changes should be interpreted with caution.  Due to Health Department policy in the ACT and NT, incidence rates based on counts of between 1 and 4 persons have been suppressed because of statistical unreliability.  This indicator is calculated on data that have been supplied to the AIHW and undergone extensive checks at both the source cancer registry and the AIHW. The state and territory cancer registries have checked the tables and given their approval for the AIHW to supply them to the Productivity Commission. |
| **Coherence** | These data are published annually by the AIHW. While there are sometimes changes to coding for particular cancers, it is possible to map coding changes to make meaningful comparisons over time.  Not all state and territory cancer registries use the same ICD-10 code groupings to classify certain cancers. This may mean that data presented here are different to those reported by jurisdictional cancer registries, for certain cancers. The definitions used in this Indicator are as follows.  Bowel cancer: ICD-10 codes C18–C20  Lung cancer: ICD-10 codes C33–C34  Melanoma of the skin: ICD-10 code C43  Breast cancer in females: ICD-10 code C50 and sex female  Cervical cancer: ICD-10 code C53.  Some jurisdictions may use an imputation method to impute missing Indigenous status for reporting purposes. This may lead to an underreporting of rates in this Indicator compared to those shown in jurisdictional cancer incidence reports.  The incidence rate in Indigenous Australians may fluctuate considerably from year to year due to the behaviour of rare events in small populations. |
| **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 readers. Information on how and why 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, 2012*. Information about the Australian Cancer Database is available on the AIHW website. |
| **Accessibility** | The NCSCH provides summary 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. More specialised data can be requested via the AIHW website |

### **Data Quality Statement — Indicator 3: Prevalence of overweight and obesity**

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| **Outcome** | Australians are born and remain healthy |
| **Indicator** | Proportion of adults and children who are overweight or obese |
| **Measure (computation)** | *Numerator*: Number of persons aged 18 years and over with a Body Mass Index (BMI) greater than or equal to 25, and number of persons aged 5-17 years exceeding age and sex specific BMI values for overweight and obesity.  *Denominator*: Number of persons aged 18 years and over and number of persons aged 5-17 years, for whom height and weight measurements were taken. |
| **Data source/s** | For the 2014 reporting cycle, the denominator and numerator for this indicator, for the general and non-indigenous population, use data from the full sample or Core component of the general population component of the ABS Australian Health Survey (AHS) from approximately 32 000 people, which is weighted to benchmarks for the total AHS in-scope estimated resident population at 31 October 2011.  This information replaces data supplied for the 2013 reporting cycle which was based on the NHS subset (20 500 people) of the full sample (32 000 people). The larger sample size (the full sample or Core) supplied for the 2014 reporting cycle provides more accurate estimates and allows for analysis at a finer level of disaggregation.  For more information on the structure of the AHS, see Structure of the Australian Health Survey. For information on scope and coverage, see the Australian Health Survey: Users’ Guide, 2011–13 (ABS cat. no. 4363.0.55.001).  For the 2014 reporting cycle, the denominator and numerator for the Aboriginal and Torres Strait Islander population use data from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) component of the 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) from approximately 9 300 people, which is weighted to benchmarks for the Aboriginal and Torres Strait Islander estimated resident population at 30 June 2011.  For the 2015 reporting cycle, the denominator and numerator for this indicator will use data from the full sample or Core component of the AATSIHS of approximately 13 000 people.  For more information on the structure of the AATSIHS, see Structure of the Australian Aboriginal and Torres Strait Islander Health Survey. For information on scope and coverage, see Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002). |
| **Institutional environment** | These surveys were 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **Relevance** | The 2011–13 AHS and 2012-13 NATSIHS collected measured height and weight from persons aged 2 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.  Despite some limitations, BMI is widely used internationally as a relatively straightforward way of measuring overweight and obesity. |
| **Timeliness** | The AHS is conducted every three years over a 12-month period. Results from the 2011-12 Core component of the AHS were released in June 2013.  The AATSIHS is conducted approximately every six years over a  12-month period. Results from the 2012-13 NATSIHS component of the AATSIHS were released in November 2013. The previous NATSIHS was conducted in 2004-05. |
| **Accuracy** | The AHS was 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 residing in very remote areas has only a minor effect on estimates for individual states and territories, except for the Northern Territory, where such persons make up approximately 23 per cent of the population. The response rate for the 2011-12 Core component was 82 per cent Results are weighted to account for non-response.  The AATSIHS was conducted in all states and territories, including very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were excluded from the survey. The final response rate for the 2012-13 NATSIHS component was 80 per cent. Results are weighted to account for non-response.  As they are drawn from a sample survey, data for the indicator are 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 the relative standard error (RSE) of the estimates. 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.  The following comments apply to data for the general and non-Indigenous populations only:   * Data for Northern Territory for 2007-08 should be used with caution due to large RSEs resulting from the small sample size for NT in 2007-08. * RSEs for adult overweight and obesity rates by state/territory and Remoteness Areas are generally within acceptable limits, except for remote areas in all jurisdictions and outer regional areas in Victoria where rates are considered too unreliable for general use. * The breakdown by state/territory and SEIFA quintiles for adults in general has sampling error within acceptable limits, except quintile 5 in Northern Territory which should be used with caution. For children, remoteness and SEIFA disaggregations by state/territory should generally be used with caution. * Adult overweight and obesity rates by age and sex generally have acceptable levels of sampling error at the state/territory level, though some of the rates for females in Northern Territory should be used with caution. * Sampling errors for BMI data for adults by state/territory are generally within acceptable limits, though rates of underweight for most states/territories for both adults and children should be used with caution. * Rates of overweight and obesity for adults by state/territory and disability status are within acceptable limits. For children with disability, rates of overweight and obesity should generally be used with caution.   The following comments apply to data from the NATSIHS for the Aboriginal and Torres Strait Islander population only:   * Data for overweight and obesity is not directly comparable to the  2004-05 NATSIHS due to the difference in the collection methodology and the possible erroneous estimation of respondents’ self-reported measurements in 2004-05. * Data collected on measured height, weight and waist circumference in the 2012-13 NATSIHS used the same methodology and equipment as the 2011-12 NHS. Neither survey collected self-reported measurements so the two are directly comparable. |
| **Coherence** | The methods used to construct the indicator are consistent and comparable with other collections and with international practise.  Most surveys, including Computer-Assisted Telephone Interviewing (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. This includes the 2004-05 NATSIHS and 2004-05 NHS. This means data for 2004-05 are not comparable with 2011–13 data which are 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 AHS and NATSIHS collected 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 Australian Health Survey: Users’ Guide, 2011–13 (ABS cat. no. 4363.0.55.001) on the ABS website.  Data for the general and non-Indigenous populations replaces data supplied for the 2013 reporting cycle which was based on the NHS subset (20 500 people) of the full sample (32000 people). The larger sample size (the full sample or Core) supplied for the 2014 reporting cycle provides more accurate estimates and allows for analysis at a finer level of disaggregation. For more information on the structure of the AHS, see Structure of the Australian Health Survey.  For information on how the results compare between the two samples, see Comparison of Results in Australian Health Survey: Updated Results, 2011-12 (ABS cat. no. 4364.0.55.003).  Information on how to interpret and use the NATSIHS data appropriately is available from Explanatory Notes in Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001) and also from the Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002).  Many health-related issues are closely associated with age, so 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. 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 Australian Health Survey: First Results, 2011-12 (ABS cat. no. 4364.0.55.001) and Australian Health Survey: Health Service Usage and Health Related Actions, 2011-12 (ABS cat. no. 4364.0.55.002) for an overview of results from the NHS component of the AHS. See Australian Health Survey: Updated Results, 2011-12 (ABS cat. no. 4364.0.55.003) for results from the Core component of AHS. Other information from this survey is also available on request.  The data for NATSIHS are available from the ABS website in the publication *Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13* (ABS cat. no. 4727.0.55.001). Other information from the survey is available on request. |

### **Data Quality Statement — Indicator 4: Rates of current daily smokers**

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| **Outcome** | Australians are born and remain healthy |
| **Indicator** | Proportion of adults who are current daily smokers. |
| **Measure (computation)** | *Numerator:* Number of persons aged 18 years and over who reported being current daily smokers.  *Denominator*: Number of persons aged 18 years and over. |
| **Data source/s** | For the 2014 reporting cycle, the denominator and numerator for this indicator, for the general and non-indigenous population, use data from the full sample or Core component of the general population component of the ABS Australian Health Survey (AHS) from approximately 32 000 people, which is weighted to benchmarks for the total AHS in-scope estimated resident population at 31 October 2011.  This information replaces data supplied for the 2013 reporting cycle which was based on the NHS subset (20,500 people) of the full sample (32 000 people). The larger sample size (the full sample or Core) supplied for the 2014 reporting cycle provides more accurate estimates and allows for analysis at a finer level of disaggregation.  For more information on the structure of the AHS, see Structure of the Australian Health Survey. For information on scope and coverage, see the Australian Health Survey: Users’ Guide, 2011–13 (ABS cat. no. 4363.0.55.001).  For the 2014 reporting cycle, the denominator and numerator for the Aboriginal and Torres Strait Islander population use data from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) component of the 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) from approximately 9,300 people, which is weighted to benchmarks for the Aboriginal and Torres Strait Islander estimated resident population at 30 June 2011.  For the 2015 reporting cycle, the denominator and numerator for this indicator will use data from the full sample or Core component of the AATSIHS of approximately 13 000 people.  For more information on the structure of the AATSIHS, see Structure of the Australian Aboriginal and Torres Strait Islander Health Survey. For information on scope and coverage, see Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002). |
| **Institutional environment** | These surveys were 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **Relevance** | The 2011–13 AHS and the 2012-13 NATSIHS collected self-reported information on smoker status from persons aged 15 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 AHS is conducted every three years over a 12-month period. Results from the 2011-12 Core component of the AHS were released in June 2013.  The AATSIHS is conducted approximately every six years over a 12-month period. Results from the 2012-13 NATSIHS component of the AATSIHS were released in November 2013. The previous NATSIHS was conducted in 2004-05. |
| **Accuracy** | The AHS was 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 residing in very remote areas has only a minor effect on estimates for individual states and territories, except for the Northern Territory, where such persons make up approximately 23 per cent of the population. The response rate for the 2011-12 Core component was 82 per cent. Results are weighted to account for non-response.  The AATSIHS was conducted in all states and territories, including very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were excluded from the survey. The final response rate for the 2012-13 NATSIHS component was 80 per cent. Results are weighted to account for non-response.  As they are drawn from a sample survey, data for the indicator are 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 the relative standard error (RSE) of the estimates. 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.  The following comments apply to data for the general and non-Indigenous populations only:   * Data for Northern Territory for 2007-08 should be used with caution due to large RSEs resulting from the small sample size for NT in 2007-08. * This indicator generally has acceptable levels of sampling error for state/territory by sex and age breakdown, for persons under the age of 65 years. For persons aged 65 years and over, rates for Northern Territory and Australian Capital Territory should be used with caution. * RSEs for adult smoking rates by state/territory and remote areas are mostly greater than 25 per cent and should either be used with caution or are considered too unreliable for general use. * Adult smoking rates generally have acceptable levels of sampling error for state/territory and SEIFA quintiles, though some rates for Victoria, Queensland, South Australia, Tasmania, Australian Capital Territory and Northern Territory should either be used with caution or are considered too unreliable for general use.   The following comments apply to data from the NATSIHS for the Aboriginal and Torres Strait Islander population only:   * Smoking questions were changed in the 2012-13 NATSIHS to add questions about specific tobacco products (chewing tobacco, cigars, pipes, other), in order to account for potential high levels of chewing tobacco use among Aboriginal and Torres Strait Islander people, which would elevate nicotine levels observed in biomedical data. This change in the questionnaire is minor and the data are considered to be comparable to the 2011-12 AHS data. * Overall, this indicator has an RSE of less than 25 per cent for all states and territories. Finer levels of disaggregation (e.g. by the inclusion of other cross-classifying variables) may result in higher levels of sampling error. |
| **Coherence** | The methods used to construct the indicator are consistent and comparable with other collections and with international practice. The AHS and NATSIHS collected 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 recent NDSHS in 2010 show slightly lower estimates for current daily smoking than in the 2011–13 AHS. 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 Australian Health Survey: Users’ Guide, 2011–13 (ABS cat. no. 4363.0.55.001).  Data for the general and non-Indigenous populations replaces data supplied for the 2013 reporting cycle which was based on the NHS subset (20 500 people) of the full sample (32 000 people). The larger sample size (the full sample or core) supplied for the 2014 reporting cycle provides more accurate estimates and allows for analysis at a finer level of disaggregation. For more information on the structure of the AHS, see Structure of the Australian Health Survey.  For information on how the results compare between the two samples, see Comparison of Results in Australian Health Survey: Updated Results, 2011-12 (ABS cat. no. 4364.0.55.003).  Information on how to interpret and use the NATSIHS data appropriately is available from Explanatory Notes in Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001) and also from the Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002).  Many health-related issues are closely associated with age, so 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. 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 Australian Health Survey: First Results, 2011-12 (ABS cat. no. 4364.0.55.001) and Australian Health Survey: Health Service Usage and Health Related Actions, 2011-12 (ABS cat. no. 4364.0.55.002) for an overview of results from the NHS component of the AHS. See Australian Health Survey: Updated Results, 2011-12 (ABS cat. no. 4364.0.55.003) for results from the Core component of AHS. Other information from this survey is also available on request.  The data for NATSIHS are available from the ABS website in the publication Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13 (ABS cat. no. 4727.0.55.001). Other information from the survey is available on request. |

### **Data Quality Statement — Indicator 5: Levels of risky alcohol consumption**

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| **Outcome** | Australians are born and remain healthy |
| **Indicator** | Proportion of adults at risk of long-term harm from alcohol. |
| **Measure (computation)** | *Numerator*: Number of persons aged 18 years and over who reported an average of more than 2 standard drinks per day in the last week.  *Denominator*: Number of persons aged 18 years and over. |
| **Data source/s** | The denominator and numerator for this indicator, for the general and non-indigenous population, use data from the National Health Survey (NHS) component of the general population component of the ABS Australian Health Survey (AHS), which is weighted to benchmarks for the total AHS in-scope estimated resident population at 31 October 2011.  For more information on the structure of the AHS, see Structure of the Australian Health Survey. For information on scope and coverage, see Australian Health Survey: Users’ Guide, 2011–13 (ABS cat. no. 4363.0.55.001).  For the 2014 reporting cycle, the denominator and numerator for the Aboriginal and Torres Strait Islander population use data from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) component of the 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) from approximately 9,300 people, which is weighted to benchmarks for the Aboriginal and Torres Strait Islander estimated resident population at 30 June 2011.  For more information on the structure of the AATSIHS, see Structure of the Australian Aboriginal and Torres Strait Islander Health Survey. For information on scope and coverage, see Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002). |
| **Institutional environment** | These surveys were 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **Relevance** | The 2011-12 NHS and 2012-13 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.  To measure against the 2009 NHMRC guidelines, 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 (%) x number of drinks (of that type) consumed x vessel size (in millilitres).   An average daily amount of alcohol consumed was calculated (that is, 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, persons who consumed more than 2 standard drinks on any day were at risk of long term health problems. |
| **Timeliness** | The AHS is conducted every three years over a 12-month period. Results from the 2011-12 NHS component of the AHS were released in October 2012.  The AATSIHS is conducted approximately every six years over a 12-month period. Results from the 2012-13 NATSIHS component of the AATSIHS were released in November 2013. The previous NATSIHS was conducted in 2004-05. |
| **Accuracy** | The AHS was 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 residing in very remote areas has only a minor effect on estimates for individual states and territories, except for the Northern Territory, where such persons make up approximately 23 per cent of the population. The response rate for the 2011-12 NHS component was 85 per cent. Results are weighted to account for non-response.  The AATSIHS was conducted in all states and territories, including very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were excluded from the survey. The final response rate for the 2012-13 NATSIHS component was 80 per cent. Results are weighted to account for non-response.  As they are drawn from a sample survey, data for indicators are 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 the relative standard error (RSE) of the estimates. 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.  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.  The following comments apply to data for the general and non-Indigenous populations only.   * Data for Northern Territory for 2007-08 should be used with caution due to large RSEs resulting from the small sample size for NT in 2007-08. * This indicator generally has acceptable levels of sampling error for state/territory and Remoteness Areas, except for remote areas where some rates are considered too unreliable for general use. The breakdown by state/territory and SEIFA quintiles in general has sampling error within acceptable limits, except for the two lowest quintiles in Australian Capital Territory which should either be used with caution or are considered too unreliable for general use. |
| **Coherence** | The AHS and AATSIHS collected a range of other health-related information that can be analysed in conjunction with alcohol risk level. For more detailed information see the Australian Health Survey: User Guide, 2011–13 (ABS cat. no. 4363.0.55.001).  Aggregate levels of alcohol consumption implied by the AHS 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, Australia, 2011-12 (ABS 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 most recent NDSHS in 2010 show slightly lower estimates for long-term harm from alcohol than in the 2011–13 AHS. 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 NHS data is available from the Australian Health Survey: User Guide, 2011–13 (ABS cat. no. 4363.0.55.001).  Information on how to interpret and use the NATSIHS data appropriately is available from Explanatory Notes in Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001) and also from the Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002).  Many health-related issues are closely associated with age, so 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. 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 Australian Health Survey: First Results, 2011-12 (ABS cat. no. 4364.0.55.001) and Australian Health Survey: Health Service Usage and Health Related Actions, 2011-12 (ABS cat. no. 4364.0.55.002) for an overview of results from the NHS component of the AHS. Other information from this survey is also available on request.  The data for NATSIHS are available from the ABS website in the publication Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13 (ABS cat. no. 4727.0.55.001). Other information from the survey is available on request. |

### **Data Quality Statement — Indicator 6: Life expectancy**

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| **Outcome** | Australians are born and remain healthy |
| **Indicator** | PI 6: Life expectancy at birth |
| **Measure (computation)** | Life tables for the Australian population, 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*: Deaths occurred during 2010–2012 provided by State and Territory Registrars of Births, Deaths and Marriages.  *Denominator*: Estimated resident population (ERP) for the period  2010-2012. |
| **Data source/s** | [Life Tables, States, Territories and Australia](http://www.abs.gov.au/ausstats/abs@.nsf/mf/3302.0.55.001), 2010-2012 (cat. no. 3302.0.55.001). |
| **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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument)  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. |
| **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. These life tables are not published by the ABS, they are used as inputs into ABS population projections.  The life tables are current or period life tables, based on death rates for a short period of time during which mortality has remained much the same. Mortality rates for the Australian and state and territory life tables are based on death registrations and estimated resident population for the period 2010–2012. The life tables do not take into account future assumed improvements in mortality.  Life tables are presented separately for males and females. The life table depicts the mortality experience of a hypothetical group of newborn babies throughout their entire lifetime. It is based on the assumption that this group is subject to the age-specific mortality rates of the reference period. Typically this hypothetical group is 100 000 in size. |
| **Timeliness** | ABS estimates of life expectancy at birth are calculated for a 3-year period and published on an annual basis. |
| **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.  Information on deaths 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.  Sources of non-sample error include:   * completeness of an individual record at a given point in time; * completeness of the dataset (eg impact of registration lags, processing lags and duplicate records); * extent of coverage of the population (whilst all deaths are legally required to be registered, some cases may not be registered for an extended time, if at all); and * lack of consistency in the application of questions or forms used by data providers, both through time and between different jurisdictions.   In November 2010, the Queensland Registry of Births, Deaths and Marriages registered 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). The ABS life tables are based on deaths by year of occurrence, and are therefore unaffected by this late registration of deaths.  Every effort is made to minimise error by working closely with data providers, the careful design of forms, training of processing staff, and efficient data processing procedures.  ERP is based on Census counts by place of usual residence, adjusted for net Census undercount and the number of Australian residents temporarily overseas on Census night, and backdated from the Census date to 30 June. For post-censal years, ERP is obtained by adding  post-censal births, deaths and migrations to the Census ERP. |
| **Coherence** | The methods used to construct the indicator are consistent and comparable with other collections and with international practice. |
| **Interpretability** | Please view [Explanatory Notes](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3302.0.55.001Explanatory%20Notes12010-2012?OpenDocument) and [Glossary](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/3302.0Glossary12012?opendocument&tabname=Notes&prodno=3302.0&issue=2012&num=&view=) that provide information on the data sources, terminology, classifications and other technical aspects associated with these statistics. |
| **Accessibility** | ABS life expectancy estimates are published on the ABS website <http://www.abs.gov.au> (see Life Tables, States, Territories and Australia, 2010-2012 (cat. no. 3302.0.55.001). |

### **Data Quality Statement — Indicator 7: Infant and young child mortality**

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| **Outcome** | Close the life expectancy gap within a generation |
| **Indicator** | NHA 7– Infant and young child mortality rate |
| **Measure (computation)** | *Numerator*: death registrations for the period 2007-2012 (single years) 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 Deaths Collection (3302.0)  Denominator: ABS Births Collection, ABS Estimated Residential Population (3101.0)  *Infant*: ABS Births Collection (3301.0)  Child 0-4: ABS Population Projections (2006 Census based), (3222.0)  Child 1-4: ABS Population Projections (2006 Census based), (3222.0)  Indigenous: ABS Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians (2006 Census based), (3238.0) |
| **Institutional environment** | These collections are 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **Relevance** | Deaths data are published on an annual basis. The ABS Deaths 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.  The ABS Births collection includes all births that are live born and have not been previously registered, births to temporary visitors to Australia, births occurring within Australian Territorial waters, births occurring in Australian Antarctic Territories and other external territories, births occurring in transit (i.e. on ships or planes) if registered in the state or territory of "next port of call", births to Australian nationals employed overseas at Australian legations and consular offices and births that occurred in earlier years that have not been previously registered (late registrations). Births data exclude fetal deaths, adoptions, sex changes, legitimations and corrections, and births to foreign diplomatic staff, and births occurring on Norfolk Island.  For further information on the ABS Deaths and Births collections, see the relevant Data Quality Statements. |
| **Timeliness** | 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. Generally ERP data is not changed once it has been finalised unless there are compelling reasons to do so, as in June 2013 when data from September 1991 to June 2006 was revised (for more information on this recasting process, please see the feature article titled Recasting 20 years of ERP in the December quarter 2012 issue of Australian Demographic Statistics (cat. no. 3101.0).  For further information on ABS Estimated Resident Population, see the relevant Data Quality Statement. |
| **Accuracy** | Information on births and deaths is obtained from a complete enumeration of births and deaths registered during a specified period and are not subject to sampling error. However, births and deaths data sources are subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data.  Concerns have been raised with the accuracy of the NSW births counts in recent years. In response to these concerns the ABS, in conjunction with the NSW Registry of Births, Deaths and Marriages, has undertaken an investigation which has led to the identification of an ABS systems processing error. The ABS acknowledges that this has resulted in previous undercounts of births in NSW. Data for NSW and Australia have been revised to include previously unprocessed NSW birth registrations for the period 2005 to 2011.  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.  In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Aboriginal and Torres Strait Islander Australians.  The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010.  Investigation conducted by the WA Registrar of Births, Deaths and Marriages indicated that some deaths of non-Indigenous people were wrongly recorded as deaths of Indigenous people in WA for 2007, 2008 and 2009. The ABS discussed this issue with a range of key stakeholders and users of Aboriginal and Torres Strait Islander deaths statistics. Following this discussion, the ABS did not release WA Aboriginal and Torres Strait Islander deaths data for the years 2007, 2008 and 2009 in the 2010 issue of Deaths, Australia publication, or in the 2011 COAG data supply. The WA Registry corrected the data and resupplied the corrected data to the ABS. These corrected data were then released by the ABS in spreadsheets attached to Deaths, Australia, 2010 (cat. no. 3302.0) publication on 24 May 2012, and are included in this round of COAG reporting.  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).  Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population projections are based on 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 projected Indigenous population from the total population. For the current round of COAG reporting, in the absence of 2011 Census-based Indigenous population projections, the  non-Indigenous population denominator has been calculated by subtracting the 2006 Census-based Indigenous projections (see Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, August 2009, cat. no. 3238.0) from the 2006 Census-based ERP for total population (3101.0). 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.  Non-Indigenous data from the Deaths collection do not include death registrations with a ‘not stated’ Indigenous status.  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** | Deaths data are available in a variety of formats on the ABS website under the 3302.0 product family. Births data are available in a variety of formats on the ABS website under the 3301.0 product family. ERP data is available in a variety of formats on the ABS website under the 3101.0 product family. 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. |
| **Accessibility** | Data for this indicator have been presented as crude rates, either per 1 000 live births or 1 000 estimated resident population. |

### **Data Quality Statement — Indicator 8: Major cause of death**

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| **Outcome** | Social inclusion and Indigenous health |
| **Indicator** | NHA 8–Age standardised mortality by major cause of death |
| **Measure (computation)** | *Numerator*: death registrations for 2007–2011 (5-year aggregate) and 2008-2012 (single years) provided by state and territory Registrars of Births, Deaths and Marriages.  *Denominator*: Estimated Resident Population; Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians; Population Projections |
| **Data source/s** | *Numerator*: ABS Causes of Death collection (3303.0)  *Denominator*: ABS Estimated Residential Population (3101.0)  Indigenous: ABS Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians (3238.0), Series B;  Non-Indigenous: the projected Indigenous population (3238.0, Series B) subtracted from the ABS 2006-Census-based Estimated Resident Population. |
| **Institutional environment** | These collections are 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **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, which is coded according to the International Statistical Classification of Diseases and Related Health Problems (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 causes 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 by the ABS to code cause of death since 1997.  For further information on the ABS Causes of Death collection, see the relevant Data Quality Statement. |
| **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.  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 the 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. Generally ERP data is not changed once it has been finalised unless there are compelling reasons to do so, as in June 2013 when data from September 1991 to June 2006 was revised (for more information on this recasting process, please see the feature article titled Recasting 20 years of ERP in the December quarter 2012 issue of Australian Demographic Statistics (cat. no. 3101.0).  For further information on ABS Estimated Resident Population, see the relevant Data Quality Statement. |
| **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 coroner certified deaths registered after 1 January 2006 are now subject to a revisions process. In this round of COAG reporting, 2007, 2008 and 2009 data is final, 2010 data is revised and 2011 data is preliminary. Data for 2010 and 2011 is subject to further revisions. Prior to 2006 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 enables the use of additional information relating to coroner certified deaths, as it becomes available over time. This results in increased specificity of the assigned ICD-10 codes.  Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Technical Note: Causes of Death Revisions 2009 and 2010 and in Causes of Death, Australia, 2011 (cat.no. 3303.0).  In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Aboriginal and Torres Strait Islander Australians.  The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010. Please note that there are differences between data output in the Causes of Death, Australia, 2010 publication (cat. No. 3303.0) and 2010 data reported for COAG, as this adjustment was not applied in the publication. For further details see Technical Note: Registration of outstanding deaths, Queensland 2010, from the Deaths, Australia, 2010 publication (cat. no, 3302.0) and Explanatory Note 103 in the Causes of Death, Australia, 2010 publication (cat. no. 3303.0).  Investigation conducted by the WA Registrar of Births, Deaths and Marriages indicated that some deaths of non-Indigenous people were wrongly recorded as deaths of Indigenous people in WA for 2007, 2008 and 2009. The ABS discussed this issue with a range of key stakeholders and users of Aboriginal and Torres Strait Islander deaths statistics. Following this discussion, the ABS did not release WA Aboriginal and Torres Strait Islander deaths data for the years 2007, 2008 and 2009 in the 2010 issue of Deaths, Australia publication, or in the 2011 COAG data supply. The WA Registry corrected the data and resupplied the corrected data to the ABS. These corrected data were then released by the ABS in spreadsheets attached to Deaths, Australia, 2010 (cat. no. 3302.0) publication on 24 May 2012, and are included in this round of COAG reporting.  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).  Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population projections are based on 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 projected Indigenous population from the total population. For the current round of COAG reporting, in the absence of 2011 Census-based Indigenous population projections, the  non-Indigenous population denominator has been calculated by subtracting the 2006 Census-based Indigenous projections (see Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, August 2009, cat. no. 3238.0) from the 2006 Census-based Estimated Resident Population (3101.0). 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.  Non-Indigenous data from the Causes of Death collection do not include death registrations with a ‘not stated’ Indigenous status.  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. Age-standardised death rates based on a very low death count have been deemed unpublishable. Some cells have also not been published to prevent back-calculation of these suppressed cells. Caution should be used when interpreting rates for this indicator.  Mortality rates for neoplasms may differ compared to individual State and Territory Cancer Registry mortality rates due to different sources of death data being used to calculate these rates. ABS mortality data is the cause of death data used for this indicator. |
| **Coherence** | The methods used to construct the indicator are consistent and comparable with other collections and with international practice. |
| **Interpretability** | 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. |
| **Accessibility** | Data for all deaths in this indicator have been age-standardised, using the direct method, to 85 years +. Data for Indigenous deaths in this indicator have been age-standardised, using the direct method, to 75 years + to account for differences between the age structures of the Indigenous and non-Indigenous populations. Direct age-standardisation to the 2001 total Australian population was used (see Data Cube: Standard Population for Use in Age-Standardisation Table in Australian Demographic Statistics, Dec 2012 (cat. no. 3101.0)). Age-standardised results provide a measure of relative difference only between populations. |

### **Data Quality Statement — Indicator 9: Incidence of heart attacks**

Key data quality points:

* This indicator estimates the incidence of acute coronary events from the National Hospital Morbidity Database (NHMD) and the National Mortality Database (NMD).
* It is an interim indicator while validation work is underway.
* The accuracy of the estimates is reliant on the accuracy and consistency of coding of the principal diagnosis and underlying cause of death in each jurisdiction. It also relies on the accuracy of coding of transfers to another acute hospital and of death in hospital.
* Variations in key variables (particularly in transfer rates in hospitals) across jurisdictions indicate that the method of estimation may lead to an under-estimate of incidence in some jurisdictions and an over-estimate in others. The extent of this cannot be measured until the algorithm is validated. As a result, State and Territory estimates are not presented.
* The estimates provided in Table 9.1, by sex, are derived using data from all jurisdictions. The estimates shown in Table 9.2 for Indigenous and Other Australians are derived using only data from the five jurisdictions where the quality of identification is considered reasonable in both the NHMD and the NMD (NSW, Qld, WA, SA and NT).

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| **Outcome** | Australians are born and remain healthy |
| **Indicator** | Incidence of heart attacks |
| **Measure (computation)** | Count (a) number of deaths where ‘acute coronary heart disease’ (ICD-10 codes I20–I24) is the underlying cause of death in each calendar year (based on year of registration of death). For ages > 24 years.  Count (b) number of non-fatal hospitalisations where ‘acute myocardial infarction’ (ICD-10-AM I21) or ‘unstable angina’ (ICD-10-AM I20.0) are the principal diagnosis, and separation mode is not equal to ‘died’ or ‘transferred to another acute hospital’, and care type is not equal to ‘new born-unqualified days only’ or ‘organ procurement – posthumous’ or ‘hospital border’ in each calendar year (based on discharge date from hospital). For ages > 24 years.  The number of acute coronary events is estimated by: (a) + (b):  *Numerator*  Number of deaths recorded with an underlying cause of acute coronary heart disease (a) plus the number of non-fatal hospitalisations with a principal diagnosis of acute myocardial infarction or unstable angina that do not end in a transfer to another acute hospital (b).  For ages > 24 years.  *Denominator*  Total population aged 25 years and over for year in question.  Rates  100 000 x (numerator ÷ denominator).  Age specific rates are presented for each age 10 year age group 25 years and over by sex.  Total rates are directly age-standardised to the 2001 Australian population using 10 year age groups.  Indigenous  National incidence estimates for Indigenous and Other Australians are calculated based on data from NSW, Qld, SA, WA and NT only.  Indigenous rates are directly age-standardised to the 2001 Australian population using 10 year age groups capped at 75+.  The estimates for Indigenous and Other Australians, and associated Total, are derived using only data from the five jurisdictions where the quality of identification is considered reasonable in both the NHMD and the NMD (NSW, Qld, WA, SA and NT). |
| **Data source/s** | *Numerator:* Australian Institute of Health and Welfare (AIHW) National Hospital Morbidity Database (NHMD), AIHW National Mortality Database (NMD)  *Denominator*: For total population: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June (2007 to 2011).  For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous population) Series B. |
| **Institutional environment** | The Australian Institute of Health and Welfare (AIHW) has calculated this indicator using data extracted from the AIHW NHMD, the NMD and Australian Bureau of Statistics (ABS) population data.  The AIHW is a national agency set up by the Australian Government under the Australian Institute of *Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia’s health and welfare. It is an independent statutory authority established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.  The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.  The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.  One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.  The Australian Institute of *Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988* (Commonwealth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.  For further information see the AIHW website [www.aihw.gov.au](http://www.aihw.gov.au) |
| **Relevance** | The data provide an estimate of the incidence of acute coronary events in Australia, based on administrative data currently available. Non-fatal events are estimated from the National Hospital Morbidity Database (NHMD) and fatal events from the National Mortality Database (NMD).  It is an estimate of ‘events’, not individuals. It should be noted that an individual may have multiple events in the one year or in different years. Each would be counted.  The method of estimation has been developed based on an analysis of current hospital and deaths data (AIHW 2011. Monitoring acute coronary syndrome using national hospital data: an information paper on trends and issues. Cat. No. CVD 57. Canberra). This method has not yet been validated and should therefore be considered interim. The AIHW is currently undertaking work to validate the algorithm.  The accuracy of the estimates rely on the accuracy of coding of the principal diagnosis (as either AMI or UA) in the NHMD and of the underlying cause of death (as acute coronary heart disease) in the NMD. It also relies on the accuracy of coding of transfers to another acute hospital and of death in hospital.  One acute coronary event may involve multiple hospitalisations, due to transfers for treatment and ongoing care. In the NHMD these are recorded as multiple unlinked hospital episodes. Therefore, to estimate the number of non-fatal events only those episodes that did not end in a transfer to another acute hospital or end in a death in hospital are counted.  The coding of principal diagnosis and the coding of death in hospital in the NHMD are likely to be of reasonable quality. However, the coding of transfers may vary across hospitals and jurisdictions.  It is possible that the method underestimates the number of fatal acute coronary deaths by only counting those deaths coded as ICD-10 I20-I24. This excludes chronic coronary heart disease (I25). It is possible that some deaths from heart attacks are coded as chronic heart disease, especially in older people. However, the extent of this is unknown until validation is undertaken.  The year in which the event occurred is determined from the separation date for hospitalisations, and from the year of registration of death.  Data are reported by the state or territory of residence of the person at the time of hospitalisation or death.  Variations in key variables (particularly in transfer rates) across jurisdictions indicate that the method of estimation may lead to an  under-estimate of incidence in some jurisdictions and an over-estimate in others. This variation may be due to differences in treatment patterns but could also be due to differences in coding practices. As the extent of this cannot be measured until the algorithm is validated estimates are not reported at a jurisdictional level.  Estimates for Indigenous and Other Australians, are based on data from those jurisdictions where the quality of identification is considered reasonable in both the NHMD and the NMD. Only NSW, Qld, WA, SA and the NT are included in the national estimates reported by Indigenous status. Estimates for Other Australians are calculated by subtracting Indigenous estimates from total estimates for the five jurisdictions and divided by the population of Other Australians in those jurisdictions. Other Australians therefore includes non-Indigenous people and people whose Indigenous status was not stated or inadequately described. |
| **Timeliness** | This indicator reports the latest information available (for years 2007 to 2011). |
| **Accuracy** | The method of estimation has not yet been validated and possible errors are not able to be calculated at this time. Estimates should be treated with caution until the method is validated. This work will inform reporting at a jurisdictional level for the 2013-14 NHA performance report.  The accuracy of the estimates will depend on the accuracy of coding in the NHMD and the NMD (see data sources for DQS for each data source). In particular the accuracy of coding of principal diagnosis, hospital transfers, deaths in hospital and underlying cause of death are central to the accuracy of the estimates.  The accuracy of Indigenous estimates is also reliant on the appropriate identification of Indigenous people in the NHMD and the NMD. Only five jurisdictions are considered to have reasonable quality Indigenous identification in both datasets required to estimate this indicator (the NHMD and the NMD). The five jurisdictions are NSW, QLD, WA, SA and the NT. Indigenous counts for the NT exclude acute coronary events treated in the private hospital in the NT. All non-fatal events treated in the private hospital in the NT are therefore included in the incidence counts for Other Australians.  The computation method for age-standardisation of data reported by Indigenous status has been refined since the previous reporting cycle.  Deaths occurring between 1992 and 2006 but registered in 2010 by the Queensland Registry of Births, Deaths and Marriages are excluded from the estimates for Indigenous and Other Australians.  NMD data for 2009 and 2010 has been revised since the previous reporting cycle. NMD data for 2010 and 2011 may be subject to further revisions. |
| **Coherence** | This is the second year in which this indicator has been reported. The method should be considered as interim until validation is complete. |
| **Interpretability** | NHMD  The NHMD data were supplied to the AIHW 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. Hospitals may be required to provide data to states and territories through administrative arrangements, contractual requirements or legislation.  The scope of the NHMD is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's offshore territories are not included.  The hospital separations data do not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.  States and territories supplied these data to the AIHW under the terms of the National Health Information Agreement.  The data quality statement for the AIHW National Hospital Morbidity Database can be found in Appendix 1 of Australian hospital statistics 2011-12 or at <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129543822>  Year specific data quality statements for the National Hospital Morbidity Database 2010-11 and 2011-12 can be found at [http://meteor.aihw.gov.au/content/index.phtml/itemId/511338](http://meteor.aihw.gov.au/content/index.phtml/itemId/511338%20) and  <http://meteor.aihw.gov.au/content/index.phtml/itemId/529483>  NMD  The AIHW NMD contains cause of death information for all deaths registered in Australia. Information is provided to the AIHW by the Registrars of Births, Deaths and Marriages and coded nationally by the Australian Bureau of Statistics (ABS).  The data quality statements for the AIHW National Mortality Database can be found in the following ABS publications:  ABS Quality declaration summary for Causes of death, Australia, 2011 (cat. no. 3303.0)  <http://www.abs.gov.au/Ausstats/abs@nsf/0/D4A300EE1E04AA43CA2576E800156A24?OpenDocument> and  ABS Quality declaration summary for Deaths, Australia, 2011 (cat. no. 3302.0) <http://www.abs.gov.au/Ausstats/abs@.nsf/0/9FD0E6AAA0BB3388CA25750B000E3CF5?OpenDocument> |
| **Accessibility** | The AIHW provide a variety of products that draw upon the NMD and NHMD including online data cubes and reports.  These products may be accessed on the AIHW website:  <http://www.aihw.gov.au/hospitals-data/>  <http://www.aihw.gov.au/deaths/> |

### **Data Quality Statement — Indicator 10: Prevalence of Type 2 diabetes**

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| **Outcome** | Australians are born and remain healthy |
| **Indicator** | Prevalence of Type 2 diabetes |
| **Measure (computation)** | *Numerator*: Number of persons aged 18 years and over with known diabetes (Type 2) or newly diagnosed diabetes as determined by a fasting plasma glucose test.  For the supplementary measure: number of persons aged 25 years and over with known diabetes (Type 2) or newly diagnosed diabetes as determined by a fasting plasma glucose test.  *Denominator*: Number of persons aged 18 years and over.  For the supplementary measure: number of persons aged 25 years and over. |
| **Data source/s** | For the 2014 reporting cycle, the denominator and numerator for this indicator for the general population uses data from the 2011–12 National Health Measures Survey (NHMS) component of the Australian Bureau Statistics (ABS) Australian Health Survey (AHS) (approximately 9,500 people aged 18 years and over), which is weighted to benchmarks for the total AHS in-scope population derived from the Estimated Resident Population (ERP).  For information on scope and coverage, see the Australian Health Survey: Users’ Guide (cat. no. 4363.0.55.001) on the ABS website, [www.abs.gov.au](http://www.abs.gov.au)  For the 2015 reporting cycle, the denominator and numerator for this indicator for the Aboriginal and Torres Strait Islander population will use data from the National Aboriginal and Torres Strait Islander Health Measures Survey (NATSIHMS) component of the 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS). |
| **Institutional environment** | The 2011–12 NHMS was 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.  The interview components of the AHS were conducted under the *Census and Statistics Act 1905*. Ethics approval was sought and gained (for the NHMS component only) from the Australian Government Department of Health and Ageing’s Departmental Ethics Committee.  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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **Relevance** | The 2011–12 NHMS uses a combination of blood test results for fasting plasma glucose and self-reported information on diabetes diagnosis and medication use to measure prevalence of Type 2 diabetes.  A respondent to the survey is considered to have known diabetes (type 2) if they had ever been told by a doctor or nurse that they have Type 2 diabetes and:   * They were taking diabetes medication (either insulin or tablets); or * Their blood test result for fasting plasma glucose was greater than or equal to 7.0 mmol/L.   A respondent to the survey is considered to have newly diagnosed diabetes if they reported no prior diagnosis of diabetes, but had a fasting plasma glucose value greater than or equal to 7.0 mmol/L.  Note: The type of diabetes for newly diagnosed cases cannot be determined from a fasting plasma glucose test alone. However, as it is assumed that the vast majority of newly diagnosed cases would be Type 2, all newly diagnosed cases of diabetes have been included in this measure.  The estimates exclude persons who did not fast for 8 hours or more prior to their blood test. Excludes women with gestational diabetes.  The same definition for diabetes will be used in the NATSIHMS. |
| **Timeliness** | The NHMS was conducted for the first time in 2011–13. Results from the 2011-12 NHMS were released in August 2013. Results from the NATSIHMS will be released in 2014. |
| **Accuracy** | The AHS was 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 residing in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up approximately 23 per cent of the population. The final response rate for the ‘core’ component of the AHS was 82 per cent.  All selected persons aged 5 years and over were invited to participate in the voluntary NHMS. Of all of those who took part in the AHS, 38 per cent went on to complete the biomedical component.  Analysis of the sample showed that the characteristics of persons who participated in the NHMS were similar with those for the AHS overall. The only significant difference was for smoking, where the NHMS sample had a lower rate of current smokers than the AHS sample (12.0 per cent compared with 17.6 per cent). For more information, see the Explanatory Notes in Australian Health Survey: Biomedical Results for Chronic Disease (cat. no. 4364.0.55.005).  In order to get an accurate reading for the fasting plasma glucose test, participants were asked to fast for 8 hours before their test. The results presented for this indicator refer only to those people who did fast (approximately 79 per cent of adults who participated in the NHMS). Analysis of the characteristics of people who fasted compared with those who did not fast showed no difference between fasters and non-fasters.  As they are drawn from a sample survey, data for the indicator are 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, and the supplementary indicator, generally have acceptable levels of sampling error for State/Territory by sex breakdown. However, rates by sex for the Northern Territory should be used with caution. Likewise, the RSEs for Remote Australia are both greater than 25 per cent and should be used with caution. |
| **Coherence** | The methods used to construct the indicator are consistent and comparable with other collections. The AHS collected a range of other health-related information that can be analysed in conjunction with diabetes status.  Other non-ABS collections, such as the 1999–2000 Australian Diabetes, Obesity and Lifestyle Study (AusDiab) and the 2009-10 Victorian Health Monitor (VHM) have reported estimates of diabetes prevalence based on biomedical measures and self-reported diagnosis and medication use.  Results from the recent VHM were very similar to those from the NHMS. Results from AusDiab showed higher estimates of diabetes than the NHMS, however this difference is most likely due to the difference in test used to measure diabetes (AusDiab used an Oral Glucose Tolerance test, which is a more comprehensive test for diabetes than fasting plasma glucose).  For information on how these studies compare, see Australian Health Survey: Biomedical Results for Chronic Disease (cat. no. 4364.0.55.005). |
| **Interpretability** | Information to aid interpretation of the data is available from the Australian Health Survey: Users’ 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. 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 Australian Health Survey: Biomedical Results for Chronic Disease (cat. no. 4364.0.55.005). Other information from this survey is also available on request. |

### **Data Quality Statement — Indicator 11: Proportion of adults with very high levels of psychological distress**

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| **Outcome** | Australians are born and remain healthy |
| **Indicator** | Proportion of adults with very high levels of psychological distress |
| **Measure (computation)** | *Numerator*: Number of persons aged 18 years and over with very high levels of psychological distress.  *Denominator*: Number of persons aged 18 years and over. |
| **Data source/s** | For the 2014 reporting cycle, the denominator and numerator for this indicator for the general and non-Indigenous populations use data from the 2011-12 National Health Survey (NHS) component of the Australian Bureau Statistics (ABS) Australian Health Survey (AHS) (approximately 17 000 people aged 18 years and over), which is weighted to benchmarks for the total NHS in-scope population derived from the estimated resident population (ERP).  For information on scope and coverage, see the Australian Health Survey: Users’ Guide, 2011–13 (ABS cat. no. 4363.0.55.001).  For the 2014 reporting cycle, the denominator and numerator for the Aboriginal and Torres Strait Islander population use data from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) component of the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) (approximately 5 500 people aged 18 years and over), which is weighted to benchmarks for the total AATSIHS in-scope population derived from the ERP.  For more information on the structure of the AATSIHS, see Structure of the Australian Aboriginal and Torres Strait Islander Health Survey. For information on scope and coverage, see Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002). |
| **Institutional environment** | The NHS and NATSIHS were collected, processed, and published by the ABS. The ABS operates within a framework of the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. This framework ensures the independence and impartiality from political influence of these statistical collections, 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 2011-12 NHS collected information about psychological distress using the Kessler Psychological Distress Scale-10 (K10). The K10 is a scale of non-specific psychological distress. Adults aged 18 years and over were asked questions about negative emotional states experienced in the 4 weeks prior to interview.  For each question, there was a five-level response scale based on the amount of time that a respondent experienced the particular problem. The response options were:   * all of the time * most of the time * some of the time * a little of the time, or * none of the time.   Each of the items were scored from 1 for 'none' to 5 for 'All of the time'. Scores for the ten items were summed, yielding a minimum possible score of 10 and a maximum possible score of 50, with low scores indicating low levels of psychological distress and high scores indicating high levels of psychological distress.  K10 results are grouped for output into the following four levels of psychological distress:   * low (scores of 10-15, indicating little or no psychological distress) * moderate (scores of 16-21) * high (scores of 22-29) * very high (scores of 30-50)   Based on research from other population studies, a very high level of psychological distress shown by the K10 may indicate a need for professional help.  While Indigenous status is collected in the NHS, the survey sample and methodology are not designed to provide output that separately identifies Aboriginal and Torres Strait Islander people. Comparisons between the psychological distress of Aboriginal and Torres Strait Islander persons and non-Indigenous persons utilise NATSIHS data for Aboriginal and Torres Strait Islander rates. In the previous reporting cycle, these comparisons were based on data from the 2007-08 NHS and the 2008 National Aboriginal and Torres Strait Islander Social Survey.  The 2012-13 NATSIHS collects information about psychological distress experience by Aboriginal and Torres Strait Islander persons aged 18 years and over using the Kessler-5 (K5) Scale, which is a subset of five questions from the Kessler Psychological Distress Scale-10 (K10). For comparability, NHS data for non-Indigenous rates of psychological distress were derived to match the NATSIHS questions. Differences between the K5 collected in the NATSIHS and the K10 collected in the NHS are summarised in the Information Paper: Use of the Kessler Psychological Distress Scale in ABS Health Surveys, Australia, 2007-08 (ABS cat. no. 4817.0.55.001).  Responses to the K5 questions were summed, resulting in a minimum possible score of 5 and a maximum possible score of 25. Low scores indicate low levels of psychological distress and high scores indicate high levels of psychological distress. Scores were grouped and output as follows:   * low/moderate 5-11 * high/very high 12-25, or * not stated.   Professor Kessler was consulted on the use of the modified scale and advised that the K5 provides a worthwhile short set of psychological distress questions. For more information see Measuring the social and emotional wellbeing of Aboriginal and Torres Strait Islander peoples (AIHW cat. no. IHW 24) on the AIHW website [www.aihw.gov.au](http://www.aihw.gov.au) |
| **Timeliness** | The NHS is conducted every three years over a 12 month period. Results from the 2011-12 NHS were released in October 2012.  The 2012-13 NATSIHS was conducted from April 2012 to February 2013. Results were released in November 2013. The previous NATSIHS was conducted in 2004-05. |
| **Accuracy** | The AHS was 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 residing in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up approximately 23 per cent of the population. The response rate for the 2011-12 NHS was 85 per cent and the 2007-08 NHS was 91 per cent. Results are weighted to account for non-response.  The 2012-13 NATSIHS was conducted in all states and territories, including very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were excluded from the survey. The final response rate for the 2012-13 NATSIHS component was 80 per cent. Results are weighted to account for non-response.  As they are drawn from a sample survey, the indicators are 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 the relative standard error (RSE) of the estimates. 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.  Comparisons cannot be drawn between rates of high/very high psychological distress from the 2011-12 NHS and those from the 2011-12 NATSIHS, unless K5 data is provided from the 2011-12 NHS for  non-Indigenous persons only.  Female rates of very high psychological distress by sex by SEIFA IRSD quintiles have acceptable levels of sampling error. However the rate for males in the fifth quintile should be used with some caution due to its RSE of 27.2.  Sampling errors for adult rates of very high psychological distress by remoteness by SEIFA IRSD deciles are generally within acceptable limits apart from decile 1 for females and deciles 1 to 4 for males. |
| **Coherence** | The methods used to construct the indicator are consistent and comparable with other collections and with international practice.  The NHS and NATSIHS collect a range of other health-related information that can be analysed in conjunction with psychological distress. |
| **Interpretability** | Information to aid interpretation of the data is available from the Australian Health Survey: Users’ Guide, 2011–13 (ABS cat. no. 4363.0.55.001).  Many health-related issues are closely associated with age, so 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 between non-Indigenous and Indigenous populations. 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 NATSIHS data appropriately is available from Explanatory Notes in Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001) and also from the Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002). |
| **Accessibility** | See Australian Health Survey: First Results, 2011-12 (ABS cat. no. 4364.0.55.001) and Australian Health Survey: Health Service Usage and Health Related Actions, 2011-12 (ABS cat. no. 4364.0.55.002) for an overview of results from the NHS component of the AHS. See Australian Health Survey: Updated Results, 2011-12 (ABS cat. no. 4364.0.55.003) for results from the Core component of AHS. Other information from this survey is also available on request.  The data for NATSIHS are available from the ABS website in the publication Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13 (ABS cat. no. 4727.0.55.001). Other information from the survey is available on request. |

### **Data Quality Statement — Indicator 12: Waiting times for GPs *(Patient Experience Survey)***

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| **Outcome** | Australians receive appropriate high quality and affordable primary and community health services |
| **Indicator** | Indicator 12: Waiting times for GPs |
| **Measure (computation)** | Length of time a patient needs to wait to see a GP for an urgent  appointment  *Numerator*: Number of people aged 15 years and over who reported seeing a GP for urgent medical care (for their own health) within specified waiting time categories (within 4 hours, more than 4 hours but within 24 hours, 24 hours or more).  *Denominator*: Number of persons aged 15 years and over who saw a GP for urgent medical care (for their own health) in the last 12 months. |
| **Data source/s** | ABS Patient Experience Survey, 2012-13 |
| **Institutional environment** | Data Collector(s): The Patient Experience Survey is a topic on the Multipurpose Household Survey. It is 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](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument)  Collection authority: The *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*.  Data Compiler(s): Data is compiled by the Health section of the Australian Bureau of Statistics (ABS).  Statistical confidentiality is guaranteed under the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. The ABS notifies the public through a note on the website when an error in data has been identified. The data is withdrawn, and the publication is re-released with the correct data. Key users are also notified where possible. |
| **Relevance** | Level of Geography: Data is available by State/Territory, Sex, 2011 SEIFA and 2011 Remoteness (major cities, inner and outer regional, remote and very remote Australia).  Data Completeness: All data is available for this indicator from this source.  Indigenous Statistics: Indigenous data and associated data quality statements will be provided in a separate data supply. Due to differences in survey design and collection methodology, ABS advises that data from the Patient Experience survey is not comparable to data from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). As such, comparisons between Indigenous and the general population are not available for this indicator.  Socioeconomic status data: Data is available by the 2011 SEIFA index of disadvantage. There has been no significant impact from transitioning from 2006 SEIFA to 2011 SEIFA. Similarly, there has been no significant impact from transitioning from the 2006 remoteness classification to the 2011 remoteness classification.  Numerator/Denominator Source: Same data source.  Data for this indicator was collected for all persons in Australia, excluding the following people:   * members of the Australian permanent defence forces * diplomatic personnel of overseas governments, customarily excluded from census and estimated population counts * overseas residents in Australia * members of non-Australian defence forces (and their dependents) * people living in non-private dwellings such as hotels, university residences, boarding schools, hospitals, retirement homes, homes for people with disabilities, and prisons. * people living in discrete indigenous communities   The 2011-12 iteration of the Patient Experience survey was the first to include households in very remote areas, (although it still excluded discrete indigenous communities). The 2012-13 iteration continues to include data from very remote areas. The inclusion of very remote areas will serve to improve the coverage of the estimates, particularly for the Northern Territory. Small differences evident in the NT estimates between 2010-11 and 2011-12 may in part be due to the inclusion of households in very remote areas.  Data was self-reported for this indicator. The definition of 'urgent medical care' was left up to the respondent, although discretionary interviewer advice was that going to the GP for a medical certificate for work would not be considered urgent. |
| **Timeliness** | Collection interval/s: Patient Experience data is collected annually.  Data available: The 2012-13 data used for this indicator became available from 22 November 2013.  Referenced Period: July 2012 to June 2013.  There are not likely to be revisions to this data after its release. |
| **Accuracy** | Method of Collection: The data was collected by computer assisted telephone interview.  Data Adjustments: Data was weighted to represent the total in scope Australian population, and was adjusted to account for confidentiality and non-response.  Sample/Collection size: The sample for the 2012-13 patient experience survey was 30,749 fully-responding households. Note this is a substantial increase from the 2011-12 sample size of 26,437. This increase will improve the reliability of the data, particularly at finer levels of disaggregation.  Response rate: Response rate for the survey was 78.9 per cent  As data is drawn from a sample survey, the indicator is subject to sampling error, which occurs because a proportion of the population is used to produce estimates that represent the whole population. Rates should be considered with reference to their corresponding relative standard errors (RSEs) and 95 per cent confidence intervals. Estimates with a relative standard error between 25 per cent and 50 per cent should be used with caution, and estimates with a relative standard error over 50 per cent are considered too unreliable for general use.  This indicator generally has acceptable levels of sampling error and provides reliable data for most breakdowns. However, RSEs for remote/very remote breakdowns are mostly greater than 25 per cent and should either be used with caution or are considered too unreliable for general use. Similarly, data for the “other” remoteness category has high RSEs when cross classified by State. Caution should be used when interpreting these data.  Known Issues: Data was self-reported and interpretation of urgent medical care was left up the respondent.  The data is self-reported but not attitudinal, as respondents are reporting their experiences of using the health system (in this instance, the time they waited between making an appointment for urgent medical care and the time they got to see the GP).  Explanatory footnotes are provided for each table. |
| **Coherence** | Consistency over time: 2009 was the first year data was collected for this indicator. Questions relating to this indicator were also asked in 2010-11, 2011-12 and 2012-13.  ABS recommends that this data item is not comparable over time. There was a significant change in question wording and coding methodology in the 2011-12 Patient Experience Survey for the ‘waiting times for GPs’ questions. As such, 2012-13 is comparable to 2011-12, but not before this (ie 2012-13 data for indicator 12 is not comparable to 2010-11 or 2009). This has been footnoted in the relevant tables.  Numerator/denominator: The numerator and denominator are directly comparable, one being a sub-population of the other.  The numerator and denominator are compiled from a single source.  Jurisdiction estimate calculation: Jurisdiction estimates are calculated the same way, although the exclusion of discrete indigenous communities in the sample will affect the NT more than it affects other jurisdictions.  Jurisdiction/Australia estimate calculation: All estimates are compiled the same way.  Collections across populations: Data is collected the same way across all jurisdictions.  The Patient Experience survey provides the only national data available for this indicator. At this stage, there are no other comparable data sources. |
| **Interpretability** | Context: This data was collected from a representative sample of the Australian population and questions were asked in context of the year prior to the survey. The data was collected over a twelve month period and therefore should minimise any seasonality effects in the data.  Other Supporting information: The ABS Patient Experience data is published in Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0). This publication includes explanatory and technical notes.  Socioeconomic status definition: The SEIFA Index of Relative Socio-economic Disadvantage uses a broad definition of relative socio-economic disadvantage in terms of people's access to material and social resources, and their ability to participate in society. While SEIFA represents an average of all people living in an area, it does not represent the individual situation of each person. Larger areas are more likely to have greater diversity of people and households.  Socioeconomic status derivation: The 2011 SEIFA index of relative  socio-economic disadvantage is derived from Census variables related to disadvantage, such as low income, low educational attainment, unemployment, and dwellings without motor vehicles.  Socioeconomic status deciles derivation: Deciles are based on an equal number of areas. A score for a collection district (CD) is created by adding together the weighted characteristics of that CD. The scores for all CDs are then standardised to a distribution where the average equals 1000 and roughly two-thirds of the scores lie between 900 and 1100. The CDs are ranked in order of their score, from lowest to highest. Decile 1 contains the bottom 10 per cent of CDs, Decile 2 contains the next 10 per cent of CDs and so on. Further information on SEIFA can be found in the ABS Technical paper Socio-Economic Indexes for Areas 2011 (cat. No. 2033.0.55.001).  Any ambiguous or technical terms for the data are available from the Technical Note, Glossary and Explanatory Notes in Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0). |
| **Accessibility** | Data publicly available. Tables showing data on GPs are available in Health Services: Patient Experiences in Australia, 2009 (cat. no. 4839.0.55.001), Patient Experiences in Australia: Summary of Findings, 2010-11, Patient Experiences in Australia: Summary of Findings, 2011-12 and Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0).  Data is not available prior to public access.  Supplementary data is available. Additional data from the Patient Experience Survey is available upon request.  Access permission/Restrictions: Customised data requests may incur a charge.  Contact Details: For more information, please call the ABS National Information and Referral Service 1300 135 070. |

### **Data Quality Statement — Indicator 12: Waiting times for GPs *(Australian Aboriginal and Torres Strait Islander Health Survey)***

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| **Outcome** | Australians receive appropriate high quality and affordable primary and community health services |
| **Indicator** | NHA 12 – Waiting times for GPs |
| **Measure (computation)** | Length of time a patient needs to wait to see a GP for an urgent appointment.  *Numerator*: number of persons aged 15 years and over who reported seeing a GP for urgent medical care (for their own health) within specified waiting time categories.  *Denominator*: total population of persons aged 15 years or over who saw a GP for urgent medical care (for their own health) in the last 12 months and is expressed as a directly age standardised rate [per cent calculated separately for each waiting time category (within four hours; more than four hours but within 24 hours; and more than 24 hours)]. |
| **Data source/s** | The Australian Bureau of Statistics (ABS) 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) comprises three surveys — the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), the National Aboriginal and Torres Strait Islander Nutrition and Physical Activity Survey (NATSINPAS) and the National Aboriginal and Torres Strait Islander Health measurements Survey (NATSIHMS). Data for waiting times for GPs is sourced from the NATSHS component of the AATSIHS in non-remote areas only. |
| **Institutional environment** | The NATSIHS was collected, processed and published by the ABS. The ABS operates within a framework that includes the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. These ensure the independence from political influence and impartiality 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **Relevance** | Data are available by state/territory and by Remoteness Area for non-remote areas only (major cities, inner regional and outer regional).  The NATSIHS collected self-reported information on whether a person had seen a GP in the last 12 months for urgent medical care. This question was asked of all persons in non-remote areas only, excluding the following:   * non-Indigenous persons * non-Australian diplomats, diplomatic staff and members of their household * members of non-Australian Defence forces stationed in Australia and their dependents, and * overseas visitors.   Due to differences in survey design and collection methodology, ABS advises that data from the NATSIHS are not comparable with data from the Patient Experience Survey. Comparisons between Aboriginal and Torres Strait Islander people and the general population are therefore not available for this indicator. |
| **Timeliness** | The 2012-13 NATSIHS was conducted from April 2012 to February 2013. First results were released in November 2013. The previous NATSIHS was conducted in 2004-05. |
| **Accuracy** | The NATSIHS was conducted in all states and territories, including very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were excluded from the survey. The final response rate was 80 per cent. Results are weighted to account for non-response.  As they are drawn from a sample survey, data for the indicator are 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 the relative standard error (RSE) of the estimates. 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. |
| **Coherence** | The numerator and denominator are compiled from a single source and are directly comparable, one being a sub-population of the other.  The methods used to construct the indicator are consistent and comparable with other collections and with international practice.  The NATSIHS collected a range of other health-related information that can be analysed in conjunction with this indicator. |
| **Interpretability** | The data for the NATSIHS are available from the ABS website in the publication Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001). Other information from the survey is available on request. |
| **Accessibility** | Information on how to interpret and use the data appropriately is available from Explanatory Notes in Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001) and the Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002). |

### **Data Quality Statement — Indicator 13: Waiting times for public dentistry *(Patient Experience Survey)***

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| **Outcome** | Australians receive appropriate high quality and affordable primary and  community health services |
| **Indicator** | Indicator 13: Waiting times for public dentistry |
| **Measure (computation)** | Measure: Waiting time between being placed on a public dentistry waiting list and being seen by a dental professional  *Numerator*: Number of persons aged 15 years and over who reported being on a public dental waiting list and who reported seeing a dental professional at a government dental clinic (for their own health) within specified waiting time categories (people waiting less than 1 month, People waiting 1 month or more).  *Denominator*: Number of persons aged 15 years and over who needed to see a dental professional and who reported being on a public dental waiting list (for their own health) in the last 12 months. |
| **Data source/s** | ABS Patient Experience Survey, 2012-13 |
| **Institutional environment** | Data Collector(s): The Patient Experience Survey is a topic on the Multipurpose Household Survey. It is 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](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument)  Collection authority: The *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*.  Data Compiler(s): Data is compiled by the Health section of the Australian Bureau of Statistics (ABS).  Statistical confidentiality is guaranteed under the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. The ABS notifies the public through a note on the website when an error in data has been identified. The data is withdrawn, and the publication is re-released with the correct data. Key users are also notified where possible. |
| **Relevance** | Level of Geography: Data is available by State/Territory, by 2011 Remoteness (major cities, inner and outer regional, remote and very remote Australia) and 2011 SEIFA.  Data Completeness: All data is available for this indicator from this source.  Indigenous Statistics: Indigenous data and associated data quality statements will be provided in a separate data supply. Due to differences in survey design and collection methodology, ABS advises that data from the Patient Experience survey is not comparable to data from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). As such, comparisons between Indigenous and the general population are not available for this indicator.    Socioeconomic status data: Data is available by the 2011 SEIFA index of disadvantage. There has been no significant impact from transitioning from 2006 SEIFA to 2011 SEIFA. Similarly, there has been no significant impact from transitioning from the 2006 remoteness classification to the 2011 remoteness classification.  Numerator/Denominator Source: Same data source.  Data for this indicator was collected for all persons in Australia, excluding the following people:   * members of the Australian permanent defence forces * diplomatic personnel of overseas governments, customarily excluded from census and estimated population counts * overseas residents in Australia * members of non-Australian defence forces (and their dependents) * people living in non-private dwellings such as hotels, university residences, boarding schools, hospitals, retirement homes, homes for people with disabilities, and prisons. * people living in discrete indigenous communities   The 2011-12 iteration of the Patient Experience survey was the first to include households in very remote areas, (although it still excluded discrete indigenous communities). The 2012-13 iteration continues to include data from very remote areas. The inclusion of very remote areas will serve to improve the coverage of the estimates, particularly for the Northern Territory. Small differences evident in the NT estimates between 2010-11 and 2011-12 may in part be due to the inclusion of households in very remote areas.  Data was self-reported for this indicator. |
| **Timeliness** | Collection interval/s: Patient Experience data is collected annually.  Data available: The 2012-13 data used for this indicator became available from 22 November 2013.  Referenced Period: July 2012 to June 2013.  There are not likely to be revisions to this data after its release. |
| **Accuracy** | Method of Collection: The data was collected by computer assisted telephone interview.  Data Adjustments: Data was weighted to represent the total in scope Australian population, and was adjusted to account for confidentiality and non-response.  Sample/Collection size: The sample for the 2012-13 patient experience survey was 30,749 fully-responding households. Note this is a substantial increase from the 2011-12 sample size of 26,437. This increase will improve the reliability of the data, particularly at finer levels of disaggregation.  Response rate: Response rate for the survey was 78.9 per cent  As data is drawn from a sample survey, the indicator is subject to sampling error, which occurs because a proportion of the population is used to produce estimates that represent the whole population. Rates should be considered with reference to their corresponding relative standard errors (RSEs) and 95 per cent confidence intervals. Estimates with a relative standard error between 25 per cent and 50 per cent should be used with caution, and estimates with a relative standard error over 50 per cent are considered too unreliable for general use.  There has been extensive aggregation of categories in this year’s specifications (ie waiting time categories, SEIFA and remoteness categories have all been aggregated from last year’s more detailed cross classifications). However, even with the aforementioned aggregations, RSEs for this indicator are often greater than 25 per cent and should either be used with caution or are considered too unreliable for general use. Specifically, data for the “one month or less” waiting time category, as well as State data for SA, Tas, ACT and NT all have high RSEs and should be used with caution.  Known Issues: This indicator may not cover those who saw a public dental professional but were not placed on a public dental waiting list.  Explanatory footnotes are provided for each table. |
| **Coherence** | Consistency over time: Questions relating to this indicator were first asked in the 2011-12 Patient Experience Survey, and were again asked in the 2012-13 cycle.  ABS recommends that this data item is not comparable over time. There was a significant change in question wording and sequencing in the  2012-13 Patient Experience Survey for the ‘waiting times for public dentistry’ questions. In 2012-13, this indicator no longer excludes ‘urgent dental care’. Further, in 2012-13 the waiting times for public dentistry” questions were asked of all people who needed to see a dental professional. In 2011-12, it was only asked of those whose most recent dental visit was to a government clinic. As a result, time series comparisons are not possible. This has been footnoted in the relevant tables.  Numerator/denominator: The numerator and denominator are directly comparable, one being a sub-population of the other.  The numerator and denominator are compiled from a single source.  Jurisdiction estimate calculation: Jurisdiction estimates are calculated the same way, although the exclusion of discrete indigenous communities in the sample will affect the NT more than it affects other jurisdictions.  Jurisdiction/Australia estimate calculation: All estimates are compiled the same way.  Collections across populations: Data is collected the same way across all jurisdictions.  The Patient Experience survey provides the only national data available for this indicator. At this stage, there are no other comparable data sources. |
| **Interpretability** | Context: This data was collected from a representative sample of the Australian population and questions were asked in context of the year prior to the survey. The data was collected over a twelve month period and therefore should minimise any seasonality effects in the data.  Other Supporting information: The ABS Patient Experience data is published in Patient Experiences in Australia: Summary of Findings,  2012-13 (cat. no. 4839.0). This publication includes explanatory and technical notes.  Socioeconomic status definition: The SEIFA Index of Relative Socio-economic Disadvantage uses a broad definition of relative socio-economic disadvantage in terms of people's access to material and social resources, and their ability to participate in society. While SEIFA represents an average of all people living in an area, it does not represent the individual situation of each person. Larger areas are more likely to have greater diversity of people and households.  Socioeconomic status derivation: The 2011 SEIFA index of relative  socio-economic disadvantage is derived from Census variables related to disadvantage, such as low income, low educational attainment, unemployment, and dwellings without motor vehicles.  Socioeconomic status quintile derivation: Quintiles are based on an equal number of areas. A score for a collection district (CD) is created by adding together the weighted characteristics of that CD. The scores for all CDs are then standardised to a distribution where the average equals 1000 and roughly two-thirds of the scores lie between 900 and 1100. The CDs are ranked in order of their score, from lowest to highest. Quintile 1 contains the bottom 20 per cent of CDs, quintile 2 contains the next 20 per cent and so on. Further information on SEIFA can be found in the ABS Technical paper [*Socio-Economic Indexes for Areas 2011* (cat. No. 2033.0.55.001).](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/2033.0.55.001Main+Features12011?OpenDocument)  Any ambiguous or technical terms for the data are available from the Technical Note, Glossary and Explanatory Notes in Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0). |
| **Accessibility** | Data publicly available. Tables showing dental data are available in Patient Experiences in Australia: Summary of Findings, 2011-12 and 2012-13 (cat. no. 4839.0).  The dental data available in 4839.0 is shown by SEIFA, remoteness,  self-assessed health status and whether has a long term health condition. Jurisdictional data is not currently publicly available but may be made available in the future.  Data is not available prior to public access.  Supplementary data is available. Additional data from the Patient Experience Survey is available upon request.  Access permission/Restrictions: Customised data requests may incur a charge.  Contact Details: For more information, please call the ABS National Information and Referral Service on 1300 135 070. |

### **Data Quality Statement — Indicator 13: Waiting times for public dentistry *(Australian Aboriginal and Torres Strait Islander Health Survey)***

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| **Outcome** | Australians receive appropriate high quality and affordable primary and community health services |
| **Indicator** | NHA 13 – Waiting times for public dentistry |
| **Measure (computation)** | Waiting time between being placed on a public dentistry waiting list and being seen by a dental professional.  *Numerator*: number of persons aged 15 years and over who reported seeing a dental professional at a government dental clinic within specified waiting time categories for non-urgent treatment.  *Denominator*: total population of persons aged 15 years and over who reported seeing a dental professional at a government dental clinic in the last 12 months. |
| **Data source/s** | The Australian Bureau of Statistics (ABS) 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) comprises three surveys — the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), the National Aboriginal and Torres Strait Islander Nutrition and Physical Activity Survey (NATSINPAS) and the National Aboriginal and Torres Strait Islander Health measurements Survey (NATSIHMS). Data for waiting times for public dentistry is sourced from the NATSIHS component of the AATSIHS in non-remote areas only. |
| **Institutional environment** | The NATSIHS was collected, processed and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework that includes the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. These ensure the independence from political influence and impartiality 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **Relevance** | Data are available by state/territory and by Remoteness Area for non-remote areas only (major cities, inner regional and outer regional).  The NATSIHS collected self-reported information on whether a person had seen a GP in the last 12 months for urgent medical care. This question was asked of all persons in non-remote areas only, excluding the following:   * non-Indigenous persons * non-Australian diplomats, diplomatic staff and members of their household * members of non-Australian Defence forces stationed in Australia and their dependents, and * overseas visitors.   Due to differences in survey design and collection methodology, ABS advises that data from the NATSIHS are not comparable with data from the Patient Experience Survey. Comparisons between Aboriginal and Torres Strait Islander people and the general population are therefore not available for this indicator. |
| **Timeliness** | The 2012-13 NATSIHS was conducted from April 2012 to February 2013. First results were released in November 2013. The previous NATSIHS was conducted in 2004-05. |
| **Accuracy** | The NATSIHS was conducted in all states and territories, including very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were excluded from the survey. The final response rate was 80 per cent. Results are weighted to account for non-response.  As they are drawn from a sample survey, data for the indicator are 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 the relative standard error (RSE) of the estimates. 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. |
| **Coherence** | The numerator and denominator are compiled from a single source and are directly comparable, one being a sub-population of the other.  The methods used to construct the indicator are consistent and comparable with other collections and with international practice.  The NATSIHS collected a range of other health-related information that can be analysed in conjunction with this indicator. |
| **Interpretability** | The data for the NATSIHS are available from the ABS website in the publication Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001). Other information from the survey is available on request. |
| **Accessibility** | Information on how to interpret and use the data appropriately is available from Explanatory Notes in Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001) and the Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002). |

### **Data Quality Statement — Indicator 14: People deferring access to selected healthcare due to financial barriers*(Patient Experience Survey)***

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| **Outcome** | Australians receive appropriate high quality and affordable primary and community health services |
| **Indicator** | Indicator 14: People deferring access to selected healthcare due to financial barriers |
| **Measure (computation)** | Proportion of people who required treatment but deferred that treatment  due to cost, by type of health service  *Numerator:*   * 14.1 People reporting delaying/not seeing a GP in the last 12 months due to cost. * 14.2 People reporting delaying/not seeing a medical specialist in the last 12 months due to cost. * 14.3 People reporting delaying/not getting a prescription filled in the last 12 months due to cost. * 14.4 People reporting delaying/not seeing a dental professional in the last 12 months due to cost. * 14.5 People reporting delaying/not getting a pathology or imaging tests in the last 12 months due to cost. * 14.6, 14.7, 14.8 GP - People reporting delaying/not seeing a GP in the last 12 months due to cost. * 14.6, 14.7, 14.8 Medical Specialist - People reporting delaying/not seeing a medical specialist in the last 12 months due to cost. * 14.6, 14.7, 14.8 Medication - People reporting delaying/not getting a prescription filled in the last 12 months due to cost. * 14.6, 14.7, 14.8 Dental - People reporting delaying/not seeing a dental professional in the last 12 months due to cost. * 14.6, 14.7, 14.8 Pathology/Imaging - People reporting delaying/not getting a referred pathology or imaging tests in the last 12 months due to cost.   *Denominator:*   * 14.1 - People aged 15 years and over who needed to see a GP in the last 12 months. * 14.2 - People aged 15 years and over who were referred to a medical specialist in the last 12 months. * 14.3 - People aged 15 years and over who received a prescription for medication from a GP in the last 12 months. * 14.4 - People aged 15 years and over who needed to see a dental professional in the last 12 months. * 14.5 - People aged 15 years and over who needed to have referred pathology or imaging tests in the last 12 months. * 14.6, 14.7, 14.8 GP - people aged 15 years and over who needed to see a GP in the last 12 months. * 14.6, 14.7, 14.8 Medical Specialist - people aged 15 years and over who were referred to a medical specialist in the last 12 months. * 14.6, 14.7, 14.8 Medication - People aged 15 years and over who received a prescription for medication from a GP in the last 12 months. * 14.6, 14.7, 14.8 Dental - people aged 15 years and over who needed to see a dental professional in the last 12 months. * 14.6, 14.7, 14.8 Pathology/Imaging - people aged 15 years and over who needed to have a referred pathology or imaging tests in the last 12 months. |
| **Data source/s** | ABS Patient Experience Survey, 2012-13 |
| **Institutional environment** | Data Collector(s): The Patient Experience Survey is a topic on the Multipurpose Household Survey. It is 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](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument).  Collection authority: The *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*.  Data Compiler(s): Data is compiled by the Health section of the Australian Bureau of Statistics (ABS).  Statistical confidentiality is guaranteed under the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. The ABS notifies the public through a note on the website when an error in data has been identified. The data is withdrawn, and the publication is re-released with the correct data. Key users are also notified where possible. |
| **Relevance** | Level of Geography: Data is available by State/Territory, 2011 SEIFA, Sex and 2011 Remoteness (major cities, inner and outer regional, remote and very remote Australia).  Data Completeness: All data is available for this indicator from this source.  Indigenous Statistics: Indigenous data and associated data quality statements will be provided in a separate data supply. Due to differences in survey design and collection methodology, ABS advises that data from the Patient Experience survey is not comparable to data from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). As such, comparisons between Indigenous and the general population are not available for this indicator.  Socioeconomic status data: Data is available by the 2011 SEIFA index of disadvantage. There has been no significant impact from transitioning from 2006 SEIFA to 2011 SEIFA. Similarly, there has been no significant impact from transitioning from the 2006 remoteness classification to the 2011 remoteness classification.  Numerator/Denominator Source: Same data source.  Data for this indicator was collected for all persons in Australia, excluding the following people:   * members of the Australian permanent defence forces * diplomatic personnel of overseas governments, customarily excluded from census and estimated population counts * overseas residents in Australia * members of non-Australian defence forces (and their dependents) * people living in non-private dwellings such as hotels, university residences, boarding schools, hospitals, retirement homes, homes for people with disabilities, and prisons. * people living in discrete indigenous communities   The 2011-12 iteration of the Patient Experience survey was the first to include households in very remote areas, (although it still excluded discrete indigenous communities). The 2012-13 iteration continues to include data from very remote areas. The inclusion of very remote areas will serve to improve the coverage of the estimates, particularly for the Northern Territory. Small differences evident in the NT estimates between 2010-11 and 2011-12 may in part be due to the inclusion of households in very remote areas.  Data was self-reported for this indicator. |
| **Timeliness** | Collection interval/s: Patient Experience data is collected annually.  Data available: The 2012-13 data used for this indicator became available from 22 November 2013.  Referenced Period: July 2012 to June 2013.  There are not likely to be revisions to this data after its release. |
| **Accuracy** | Method of Collection: The data was collected by computer assisted telephone interview.  Data Adjustments: Data was weighted to represent the total in scope Australian population, and was adjusted to account for confidentiality and non-response.  Sample/Collection size: The sample for the 2012-13 patient experience survey was 30,749 fully-responding households. Note this is a substantial increase from the 2011-12 sample size of 26,437. This increase will improve the reliability of the data, particularly at finer levels of disaggregation.  Response rate: Response rate for the survey was 78.9 per cent.  As data is drawn from a sample survey, the indicator is subject to sampling error, which occurs because a proportion of the population is used to produce estimates that represent the whole population. Rates should be considered with reference to their corresponding relative standard errors (RSEs) and 95 per cent confidence intervals. Estimates with a relative standard error between 25 per cent and 50 per cent should be used with caution, and estimates with a relative standard error over 50 per cent are considered too unreliable for general use.  The standard errors for the key data items in this indicator are relatively low and provide reliable state and territory data as well as remoteness and SEIFA breakdowns. An exception to this would be State data for Tasmania, ACT and NT, where RSEs are consistently higher than other States. Similarly, data for the “other” remoteness category has high RSEs when cross classified by State. Caution should be used when interpreting these data.  Known Issues: Data was self-reported. |
| **Coherence** | 2009 was the first year data was collected for this indicator. Questions relating to this indicator were also asked in 2010-11, 2011-12 and  2012-13.  Time series issues with this indicator are outlined below.  **Delayed or did not see GP due to cost:** 2012-13 not comparable to previous years. 2012-13 is not comparable to 2011-12, nor before this  (ie not comparable to 2010-11 or 2009 either). While the question wording itself did not change from 2011-12 to 2012-13, the position in the survey (ie where the question was asked) did change. There has been a noticeable context effect with this change in question ordering. As a result, ABS recommends that this data item is not comparable over time. This has been footnoted in the relevant tables. Further to this change, there was a change in the question wording/sequencing in 2011-12 that has also meant that data is not comparable over time.  **Delayed or did not see Medical Specialist due to cost:** 2012-13 comparable to 2011-12, but not before this (ie not comparable to 2010-11 or 2009). This is due to changes in question wording/sequencing in the patient experience survey. As a result, a time series can be started from 2011-12 onwards. This has been footnoted in the relevant tables.  **Delayed or did not get prescription filled due to cost**: 2012-13 comparable to 2011-12 and 2010-11, but not before this (ie not comparable to 2009). This is due to changes in question wording/sequencing in the patient experience survey. As a result, a time series can be started from 2010-11 onwards. This has been footnoted in the relevant tables.  **Delayed or did not see dental professional due to cost:** 2012-13 not comparable to previous years. 2012-13 is not comparable to 2011-12, nor before this (ie not comparable to 2010-11 or 2009 either). This is due to changes in question wording/sequencing in the patient experience survey. This has been footnoted in the relevant tables.  **Delayed or did not get pathology or imaging test due to cost**: 2012-13 not comparable to previous years. 2012-13 is not comparable to 2011-12, nor before this (ie not comparable to 2010-11 or 2009 either). This is due to changes in question wording/sequencing in the patient experience survey. This has been footnoted in the relevant tables.  Numerator/denominator: The numerator and denominator are directly comparable, one being a sub-population of the other.  The numerator and denominator are compiled from a single source.  Jurisdiction estimate calculation: Jurisdiction estimates are calculated the same way, although the exclusion of discrete indigenous communities in the sample will affect the NT more than it affects other jurisdictions.  Jurisdiction/Australia estimate calculation: All estimates are compiled the same way.  Collections across populations: Data is collected the same way across all jurisdictions.  The Patient Experience survey provides the only national data available for this indicator. At this stage, there are no other comparable data sources. |
| **Interpretability** | Context: This data was collected from a representative sample of the Australian population and questions were asked in context of the year prior to the survey. The data was collected over a twelve month period and therefore should minimise seasonality effects in the data.  Other Supporting information: The ABS Patient Experience data is published in Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0). This publication includes explanatory and technical notes.  Socioeconomic status definition: The SEIFA Index of Relative Socio-economic Disadvantage uses a broad definition of relative socio-economic disadvantage in terms of people's access to material and social resources, and their ability to participate in society. While SEIFA represents an average of all people living in an area, it does not represent the individual situation of each person. Larger areas are more likely to have greater diversity of people and households.  Socioeconomic status derivation: The 2011 SEIFA index of relative  socio-economic disadvantage is derived from Census variables related to disadvantage, such as low income, low educational attainment, unemployment, and dwellings without motor vehicles.  Socioeconomic status deciles derivation: Deciles are based on an equal number of areas. A score for a collection district (CD) is created by adding together the weighted characteristics of that CD. The scores for all CDs are then standardised to a distribution where the average equals 1000 and roughly two-thirds of the scores lie between 900 and 1100. The CDs are ranked in order of their score, from lowest to highest. Decile 1 contains the bottom 10 per cent of CDs, Decile 2 contains the next 10 per cent of CDs and so on. Further information on SEIFA can be found in the ABS Technical paper [*Socio-Economic Indexes for Areas 2011* (cat. No. 2033.0.55.001).](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/2033.0.55.001Main+Features12011?OpenDocument)  Any ambiguous or technical terms for the data are available from the Technical Note, Glossary and Explanatory Notes in Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0). |
| **Accessibility** | Data publicly available. Tables showing patients experiences with health professionals are available in Health Services: Patient Experiences in Australia, 2009 (cat. no. 4839.0.55.001), Patient Experiences in Australia: Summary of Findings, 2010-11, Patient Experiences in Australia: Summary of Findings, 2011-12 and Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0).  The data is shown by age, sex, remoteness and SEIFA. Jurisdictional data is not currently publicly available but may be made available in the future.  Data is not available prior to public access.  Supplementary data is available. Additional data from the Patient Experience Survey is available upon request.  Access permission/Restrictions: Customised data requests may incur a charge.  Contact Details: For more information, please call the ABS National Information and Referral Service 1300 135 070. |

### **Data Quality Statement — Indicator 14: People deferring access to selected healthcare due to financial barriers *(Australian Aboriginal and Torres Strait Islander Health Survey)***

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| **Outcome** | Australians receive appropriate high quality and affordable primary and community health services |
| **Indicator** | NHA 14 – People deferring access to selected healthcare due to financial barriers |
| **Measure (computation)** | Proportion of people who required treatment but deferred that treatment due to cost, by type of health service.  *Numerator*: number of Indigenous persons aged 15 years and over who reported needing to see a GP in the last 12 months, but did not because of cost.  *Denominator*: total population of Indigenous persons aged 15 years and over who reported needing to see a GP in the last 12 months, but did not because of cost, and is expressed as a directly age standardised rate (per cent). |
| **Data source/s** | The Australian Bureau of Statistics (ABS) 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) comprises three surveys — the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), the National Aboriginal and Torres Strait Islander Nutrition and Physical Activity Survey (NATSINPAS) and the National Aboriginal and Torres Strait Islander Health measurements Survey (NATSIHMS). Data for people deferring access to selected healthcare is sourced from the NATSIHS component of the AATSIHS. |
| **Institutional environment** | The NATSIHS was collected, processed and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework that includes the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. These ensure the independence from political influence and impartiality 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **Relevance** | Data are available by state/territory and by Remoteness Area for non-remote areas only (major cities, inner regional and outer regional).  The NATSIHS collected self-reported information on whether a person had seen a GP in the last 12 months for urgent medical care. This question was asked of all persons in non-remote areas only, excluding the following:   * non-Indigenous persons * non-Australian diplomats, diplomatic staff and members of their household * members of non-Australian Defence forces stationed in Australia and their dependents, and * overseas visitors.   Due to differences in survey design and collection methodology, ABS advises that data from the NATSIHS are not comparable with data from the Patient Experience Survey. Comparisons between Aboriginal and Torres Strait Islander people and the general population are therefore not available for this indicator. |
| **Timeliness** | The 2012-13 NATSIHS was conducted from April 2012 to February 2013. First results were released in November 2013. The previous NATSIHS was conducted in 2004-05. |
| **Accuracy** | The NATSIHS was conducted in all states and territories, including very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were excluded from the survey. The final response rate was 80 per cent. Results are weighted to account for non-response.  As they are drawn from a sample survey, data for the indicator are 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 the relative standard error (RSE) of the estimates. 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. |
| **Coherence** | The numerator and denominator are compiled from a single source and are directly comparable, one being a sub-population of the other.  The methods used to construct the indicator are consistent and comparable with other collections and with international practice.  The NATSIHS collected a range of other health-related information that can be analysed in conjunction with this indicator. |
| **Interpretability** | The data for the NATSIHS are available from the ABS website in the publication Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001). Other information from the survey is available on request. |
| **Accessibility** | Information on how to interpret and use the data appropriately is available from Explanatory Notes in Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001) and the Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. no. 4727.0.55.002). |

### **Data Quality Statement — Indicator 15:** Effective management of diabetes

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| **Outcome** | Australians are born and remain healthy |
| **Indicator** | Effective management of diabetes |
| **Measure (computation)** | *Numerator*: Number of persons aged between 18 and 69 years with known diabetes, as determined by a fasting plasma glucose test, who have an HbA1c level of less than or equal to 7.0 per cent.  *Denominator*: Number of persons aged between 18 and 69 years with known diabetes, as determined by a fasting plasma glucose test. |
| **Data source/s** | For the 2014 reporting cycle, the denominator and numerator for this indicator for the general population uses data from the 2011–12 National Health Measures Survey (NHMS) component of the Australian Bureau Statistics (ABS) Australian Health Survey (AHS), which is weighted to benchmarks for the total AHS in-scope population derived from the Estimated Resident Population (ERP).  For information on scope and coverage, see the Australian Health Survey: Users’ Guide (cat. no. 4363.0.55.001) on the ABS website, [www.abs.gov.au](http://www.abs.gov.au)  For the 2015 reporting cycle, the denominator and numerator for this indicator for the Aboriginal and Torres Strait Islander population will use data from the National Aboriginal and Torres Strait Islander Health Measures Survey (NATSIHMS) component of the 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS). |
| **Institutional environment** | The 2011–12 NHMS was 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.  The interview components of the AHS were conducted under the *Census and Statistics Act 1905*. Ethics approval was sought and gained (for the NHMS component only) from the Australian Government Department of Health and Ageing’s Departmental Ethics Committee.  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** | For this indicator, the fasting plasma glucose test is used in the determination of people with known diabetes and the HbA1c test is used in the determination of effective management of diabetes.  The 2011–12 NHMS uses a combination of blood test results for fasting plasma glucose and self-reported information on diabetes diagnosis and medication use to measure prevalence of known diabetes.  A respondent to the survey is considered to have known diabetes if they had ever been told by a doctor or nurse that they have diabetes and:   * They were taking diabetes medication (either insulin or tablets); or * Their blood test result for fasting plasma glucose was greater than or equal to 7.0 mmol/L.   Persons with known diabetes who have an HbA1c result of less than or equal to 7.0 per cent are considered to be managing their diabetes effectively.  The estimates exclude persons who did not fast for 8 hours or more prior to their blood test. Excludes women with gestational diabetes.  The same definition for diabetes will be used in the NATSIHMS. |
| **Timeliness** | The NHMS was conducted for the first time in 2011–13. Results from the 2011-12 NHMS were released in August 2013. Results from the NATSIHMS will be released in 2014. |
| **Accuracy** | The AHS was 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 residing in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up approximately 23 per cent of the population. The final response rate for the ‘core’ component of the AHS was 82 per cent.  All selected persons aged 5 years and over were invited to participate in the voluntary NHMS. Of all of those who took part in the AHS, 38 per cent went on to complete the biomedical component.  Analysis of the sample showed that the characteristics of persons who participated in the NHMS were similar with those for the AHS overall. The only significant difference was for smoking, where the NHMS sample had a lower rate of current smokers than the AHS sample (12.0 per cent compared with 17.6 per cent). For more information, see the Explanatory Notes in Australian Health Survey: Biomedical Results for Chronic Disease (cat. no. 4364.0.55.005).  In order to get an accurate reading for the fasting plasma glucose test, participants were asked to fast for 8 hours before their test. The results presented for this indicator refer only to those people who did fast (approximately 79 per cent of adults who participated in the NHMS). Analysis of the characteristics of people who fasted compared with those who did not fast showed no difference between fasters and non-fasters.  As they are drawn from a sample survey, data for the indicator are 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 produces high levels of sampling error for some State and Territories when split by sex. Estimates for males and females in Victoria have RSEs greater than 50 per cent and should be considered unreliable for general use. Likewise, estimates for males in the Northern Territory and females in the Australian Capital Territory also have RSEs greater than 50 per cent.  Data for several State and Territories also have RSEs greater than 25 per cent, including the total for Victoria, South Australia. The Australian Capital Territory and the Northern Territory and these estimates should be used with caution.  The RSEs for Remote Australia and SEIFA Quintile 5 are both greater than 25 per cent and should also be used with caution. |
| **Coherence** | The AHS collected a range of other health-related information that can be analysed in conjunction with diabetes management.  The 2009-10 Victorian Health Monitor (VHM) reported estimates of diabetes management based on the proportion of people with known diabetes meeting the HbA1c management target of less than or equal to 7.0 nmol/L. The VHM age-standardised rate (39 per cent) was similar to the NHMS rate for Victoria (36 per cent). |
| **Interpretability** | Information to aid interpretation of the data is available from the Australian Health Survey: Users’ Guide on the ABS website.  Many health-related issues, including diabetes, are closely associated with age. However, there was not sufficient numbers across age ranges to do any meaningful age standardisation at the State/Territory, SEIFA or Remoteness level for this indicator. Therefore the data presented are based on crude rates. |
| **Accessibility** | See Australian Health Survey: Biomedical Results for Chronic Disease (cat. no. 4364.0.55.005). Other information from this survey is also available on request. |

### **Data Quality Statement — Indicator 16: Potentially avoidable deaths**

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| **Outcome** | Primary and community health |
| **Indicator** | NHA 16 – Potentially avoidable deaths |
| **Measure (computation)** | *Numerator*: death registrations for 2007–2012 (5 year aggregate), and 2007-2011 (single years) provided by state and territory Registrars of Births, Deaths and Marriages which have an ICD-10 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, Population Projections, Australia. |
| **Data source/s** | *Numerator*: ABS Causes of Death collection (3303.0).  *Denominator*: ABS Estimated Resident Population (3101.0); Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, August 2009 (cat. no. 3238), Series B.  For the non-Indigenous population, the projected Indigenous population (3238.0, Series B) is subtracted from the 2006-Census-based Estimated Resident Population. |
| **Institutional environment** | These collections are 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **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, which is coded according to the International Statistical Classification of Diseases and Related health Problems (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 causes 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 by the ABS to code cause of death since 1997.  For further information on the ABS Causes of Death collection, see the relevant Data Quality Statement. |
| **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.  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 the 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. Generally ERP data is not changed once it has been finalised unless there are compelling reasons to do so, as in June 2013 when data from September 1991 to June 2006 was revised (for more information on this recasting process, please see the feature article titled Recasting 20 years of ERP in the December quarter 2012 issue of Australian Demographic Statistics (cat. no. 3101.0).  For further information on ABS Estimated Resident Population, see the relevant Data Quality Statement. |
| **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 coroner certified deaths registered after 1 January 2006 are now subject to a revisions process. In this round of COAG reporting, 2007, 2008 and 2009 data is final, 2010 data is revised and 2011 data is preliminary. Data for 2010 and 2011 is subject to further revisions. Prior to 2006 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 enables the use of additional information relating to coroner certified deaths, as it becomes available over time. This results in increased specificity of the assigned ICD-10 codes.  Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Technical Note: Causes of Death Revisions 2009 and 2010 in Causes of Death, Australia, 2011 (cat.no. 3303.0).  In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Aboriginal and Torres Strait Islander Australians.  The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010. Please note that there are differences between data output in the Causes of Death, Australia, 2010 publication (cat. no. 3303.0) and 2010 data reported for COAG, as this adjustment was not applied in the publication. For further details see Technical Note: Registration of outstanding deaths, Queensland 2010, from the Deaths, Australia, 2010 publication (cat. no, 3302.0) and Explanatory Note 103 in the Causes of Death, Australia, 2010 publication (cat. no. 3303.0).  Investigation conducted by the WA Registrar of Births, Deaths and Marriages indicated that some deaths of non-Indigenous people were wrongly identified as deaths of Indigenous people in WA for 2007, 2008 and 2009. The ABS discussed this issue with a range of key stakeholders and users of Aboriginal and Torres Strait Islander deaths statistics. Following this discussion, the ABS did not release WA Aboriginal and Torres Strait Islander deaths data for the years 2007, 2008 and 2009 in the 2010 issue of Deaths, Australia publication, or in the 2011 COAG data supply. The WA Registry corrected the data and resupplied the corrected data to the ABS. These corrected data were then released by the ABS in spreadsheets attached to Deaths, Australia, 2010 (cat. no. 3302.0) publication on 24 May 2012, and are included in this round of COAG reporting.  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).  Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population projections are based on 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 projected Indigenous population from the total population. For the current round of COAG reporting, in the absence of 2011 Census-based Indigenous population projections, the non-Indigenous population denominator has been calculated by subtracting the 2006 Census-based Indigenous projections (see Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, August 2009, cat. no. 3238.0) from the 2006 Census-based Estimated Resident Population (3101.0). 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.  Non-Indigenous data from the Causes of Death collection do not include death registrations with a ‘not stated’ Indigenous status.  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. Age-standardised death rates based on a very low death count have been deemed unpublishable. Some cells have also not been published to prevent back-calculation of these suppressed cells. Caution should be used when interpreting rates for this indicator. |
| **Coherence** | The methods used to construct the indicator are consistent and comparable with other collections and with international practice. |
| **Interpretability** | 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. |
| **Accessibility** | Data for this indicator have been age-standardised, using the direct method, to ‘under 75 years’ of age. Direct age-standardisation to the 2001 total Australian population was used (see Data Cube: Standard Population for Use in Age-Standardisation Table in Australian Demographic Statistics, Dec 2012 (cat. no. 3101.0)). Age-standardised results provide a measure of relative difference only between populations. |

### **Data Quality Statement — Indicator 17: Treatment rates 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.
* private sector admitted patient (Private) data: Indigenous status is not collected by the Private Mental Health Alliance (PMHA)
* Medicare Benefits Schedule (MBS) data: have been adjusted for under-identification of Indigenous status in the Medicare Australia Voluntary Indigenous Identifier (VII) database.
* Department of Veterans’ Affairs (DVA) data: is not available by Indigenous status.
* Persons can receive services from more than one type of service provider during the period. The extent to which this occurs is unknown. However, it is likely that there is overlap between the private data and the Department of Health (Health) MBS and the DVA Treatment Account System (TAS) data.
* A small number of persons receiving mental health treatment may not be included in any of the data sources used for this performance indicator, so using these numbers to provide a count of individuals receiving services is cautioned.
* Remoteness data for 2010-11 and previous years are not directly comparable to remoteness data for 2011-12 and subsequent years.
* SEIFA data for 2011-12 are not directly comparable with SEIFA data from previous reporting years.
* For public sector community mental health services, Victorian data is unavailable (for 2011-12) due to service level collection gaps resulting from protected industrial action during this period. Industrial action over the last 18 months in Tasmania has limited the available data quality and quantity of data. Australian totals of public sector community mental health services for 2011-12 only include available data and should therefore be interpreted with caution. Australian totals for 2011-12 should not be compared to previous years.

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| **Outcome** | Australians receive appropriate high quality and affordable primary and community health services |
| **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) as at 30 June 2011.  *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 with ages over 84 years combined. 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 with ages over 64 years combined.  These are calculated separately for public, private, Medicare Benefits Scheme- and Department of Veterans’ Affairs (DVA)-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 Service (CDMS) data.  For MBS data: Australian Government Department of Health (Health) MBS Statistics.  For DVA data: Australian Government Department of Veterans’ Affairs (DVA) Statistical Services and Nominal Rolls using the Departmental Management Information System (DMIS). These data are known as Treatment Account System (TAS) data.  *Denominator*:  Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June 2011. ABS Indigenous Experimental Estimates and Projections Series B. |
| **Institutional environment** | The Australian Institute of Health and Welfare (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 portfolio, which is accountable to the Parliament of Australia through the Minister for Health. For further information see the AIHW website.  Numerators for this indicator were prepared by State and Territory health authorities, the PMHA, Health and DVA and quality-assessed by the AIHW.  The AIHW drafted the initial data quality statement. The statement was finalised by AIHW following input from State and Territory health authorities, PMHA, Health and DVA. 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.  Health MBS and DVA TAS data  The Department of Human Services (DHS) processes claims made under the *Medicare Australia Act 1973*. These data are then regularly provided to Health. DHS also processes claims for DVA Treatment Card holders made through the MBS under the *Veterans’ Entitlements Act 1986*; *Military Rehabilitation and Compensation Act 2004* and *Medicare Australia Act 1973*. All claiming data is regularly provided to DVA as per the Memorandum of Understanding between DHS and DVA. |
| **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 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 Health MBS and DVA TAS data and private data, as most patients accessing private hospital services would also access MBS services.  Remoteness and socioeconomic status have been allocated using the client’s usual residence, not the location of the service provider. State/territory is reported for the state/territory of the service provider.  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 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.  Health MBS and DVA TAS data  Data are counts of individuals receiving mental health-specific MBS services for which Department of Human Services (DHS) has processed a claim.  Analyses by state/territory, remoteness and socioeconomic status are based on postcode of residence of the client as recorded by DHS at the date of last service processed 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.  DVA clients comprised less than 2 per cent of people receiving Australian Government (Medicare Benefits Scheme- and DVA-funded) clinical mental health services. |
| **Timeliness** | The reference periods for these data are 2007–08, 2008–09, 2009–10, 2010–11 and 2011–12. |
| **Accuracy** | Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider).  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.  Indigenous status data should be interpreted with caution due to the varying and, in some instances, unknown quality of Indigenous identification across jurisdictions. Indigenous status was missing or not reported for more than 11 per cent of all clients.  Private data  Not all private psychiatric hospitals are included in the PMHA’s Centralised Data Management Service (CDMS).  In 2011–12, those that are included account for approximately 98 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 and also financial year, since non-participation rates varied from state to state and financial year.  Indigenous status information is not collected for these data.  Health MBS and DVA TAS data  As with any administrative system a small degree of error may be present in the data captured.  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 DHS.  The data provided are based on the date on which the claim was processed by DHS, 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 service are counted once only in the calculations for this indicator.  Health MBS data presented by Indigenous status have been adjusted for under-identification in the DHS Voluntary Indigenous Identifier (VII) database. Indigenous rates are therefore modelled and should be interpreted with caution. These statistics are not derived from the total Australian Indigenous population, but from those Aboriginal and Torres Strait Islander people who have voluntarily identified as Indigenous to DHS. The statistics have been adjusted to reflect demographic characteristics of the overall Indigenous population, but this adjustment may not address all the differences in the service use patterns of the enrolled population relative to the total Indigenous population. The level of VII enrolment (61 per cent nationally as at August 2012) varies across age-sex-remoteness-State/Territory sub-groups and over time which means that the extent of adjustment required varies across jurisdictions and over time. The methodology for this adjustment was developed and verified by the AIHW and Health for assessment of MBS and PBS service use and expenditure for Indigenous Australians. For an explanation of the methodology, see *Expenditure on health for Aboriginal and Torres Strait Islander people 2006–07.*  DVA TAS data are not available by Indigenous status. |
| **Coherence** | Following the 2011 Census of Population of Housing, the Australian Bureau of Statistics (ABS) has rebased the Australian population back to 1991. This rebasing had a significant impact on the population time series, therefore data have been resupplied for previous years using the rebased Estimated Resident Population (ERP). The exception is for data presented by Indigenous status. Rebased Indigenous population data are not yet available, thus data presented by Indigenous status uses 2006 based ERP.  In 2011, the ABS updated the standard geography used in Australia for most data collections from the Australian Standard Geographical Classification (ASGC) to the Australian Statistical Geography Standard (ASGS). Also updated at this time were remoteness areas and the Socio-Economic Indices for Areas (SEIFA), based on the 2011 ABS Census of Population and Housing. The new remoteness areas will be referred to as RA 2011, and the previous remoteness areas as RA 2006. The new SEIFA will be referred to as SEIFA 2011, and the previous SEIFA as SEIFA 2006.  Data for 2007–08 through to 2010–11 reported by remoteness are reported for RA 2006. Data for 2011–12 are reported for RA 2011. The AIHW considers the change from RA 2006 to RA 2011 to be a series break when applied to data supplied for this indicator, therefore remoteness data for 2010-11 and previous years are not directly comparable to remoteness data for 2011-12 and subsequent years.  Data for 2007-08 through to 2010–11 reported for SEIFA deciles are reported using SEIFA 2006 at the Statistical Local Area (SLA) level. Data for 2011–12 are reported using SEIFA 2011 at the SLA level. The AIHW considers the change from SEIFA 2006 to SEIFA 2011 to be a break in the series, therefore SEIFA data for 2011-12 are not directly comparable with SEIFA data from previous reporting years.  Public data  There has been no major change to the methodology used to collect the data in 2011–12 for the majority of jurisdictions, therefore data is comparable across years.  However, one large Local Health District in New South Wales has incomplete data, so 2011–12 data will be updated for the 2015 report.  For public sector community mental health services, Victorian data is unavailable (for 2011-12) due to service level collection gaps resulting from protected industrial action during this period. Industrial action over the last 18 months in Tasmania has limited the available data quality and quantity of data. Australian totals for 2011-12 only include available data and should therefore be interpreted with caution. Australian totals for 2011-12 should not be compared to previous years.  In past years there has been variation in the underlying concept used to allocate remoteness and socioeconomic status across jurisdictions (i.e. location of service provider, location of client or a combination of both). In addition, the underlying concordances used by jurisdictions to allocate remoteness may vary. Since 2009–10, remoteness and socioeconomic status have been allocated using the SLA of the client at last contact. For 2011–12 data all jurisdictions have used the same concordance and proportionally allocated records to remoteness and Socio-Economic Indexes for Areas (SEIFA) categories with the following exception:   * New South Wales and the Northern Territory used postcode concordance (rather than SLA concordance) to allocate records to remoteness and SEIFA.   Comparisons over time for remoteness and socioeconomic status should therefore be interpreted with caution.  Private data  There has been no change to the methodology used to collect the data in 2011–12. Therefore, the data are comparable to previous reporting periods.  Health MBS and DVA TAS data  The same methodology to attribute demographic information to the data has been used in 2011–12 as in previous reporting periods.  For 2010–11 and previous years, remoteness and socioeconomic status for both Health MBS and DVA TAS data were allocated using a postcode concordance. For 2011–12, DVA TAS data were allocated to remoteness using geocoding, and to socioeconomic status using an SLA concordance.  MBS items 81325 and 81355 were added from 1 November 2008. These items relate to mental health or psychological services provided to a person who identified as being of Aboriginal or Torres Strait Islander descent.  On 1 January 2010, a new MBS item (2702) was introduced for patients of GPs who have not undertaken mental health skills training. Changes have been made to the existing MBS item 2710 to allow patients of GPs who have undertaken mental health skills training to access a higher rebate. Both of these items relate to the preparation of a GP mental health treatment plan.  On 1 November 2011, MBS items 2715 and 2717 were introduced to cover preparation of a GP mental health treatment plan by a GP who has undertaken mental health skills training. At the same time MBS items 2700 and 2701 were introduced to cover preparation of a GP mental health treatment plan by a GP who has not undertaken mental health skills training.  MBS item 2719 existed from 1 November 2011 to 30 April 2012.  From 2011–12 MBS item 20104 is included to align with other national indicators.  Caution should be taken when interpreting Indigenous rates over time. All other data can be meaningfully compared across reference periods.  Other publications  The AIHW publication series *Mental health services in Australia* contains data that is comparable in coverage (using different MBS item splits) and includes a summary of MBS mental health-related items.  *The data used in this indicator is also published in the COAG National Action Plan on Mental Health—final progress report* *covering implementation to 2010-11.* There may be some differences between the data published in these two sources as:   * rates may be calculated using different ERPs other than the June ERPs used for this indicator, * MBS numbers are extracted using a different methodology. *The COAG National Action Plan on Mental Health—final progress report covering implementation to 2010-11* 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.   The indicator specifications and analysis methodology used for this report are equivalent to the *Healthcare 2011–12: comparing performance across Australia.* |
| **Interpretability** | Information is available for MBS data from:  <http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1> |
| **Accessibility** | MBS statistics are available at:  <http://www.health.gov.au/internet/main/publishing.nsf/Content/Medicare+Statistics-1>  <https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml>  Disaggregation of MBS data by Socio-Economic Indexes for Areas (SEIFA) is not publicly available elsewhere. |

### **Data Quality Statement — Indicator 18: Selected potentially preventable hospitalisations**

Key data quality points:

* The National Hospital Morbidity Database (NHMD) is a comprehensive data set 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.
* Caution should be used in comparing 2007-08 data with later years as changes between the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) 5th edition (used in 2007-08), ICD-10-AM 6th edition (used in 2008-09 and 2009-10) and ICD-10-AM 7th edition (used in 2010-11 and   
  2011-12) and the associated Australian Coding Standards resulted in decreased reporting of additional diagnoses for diabetes, and increased reporting of gastroenteritis (chronic and acute categories, respectively, affected). These changes should also be taken into consideration in interpretation of these data against the National Healthcare Agreement performance benchmark for potentially preventable hospitalisations.
* In addition, interpretation of the related performance benchmark over time is problematic because the benchmark is specified as a proportion of separations rather than a population rate, and admission practices vary across jurisdictions and over time.
* The hospital separations data do not include episodes of non-admitted patient 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.
* SEIFA data for 2011-12 are not directly comparable with SEIFA data from previous reporting cycles.

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| **Outcome** | Australians receive appropriate high quality and affordable hospital and hospital related care |
| **Indicator** | Admissions to hospital that could have potentially been prevented through the provision of appropriate non-hospital services. |
| **Measure (computation)** | The numerator is the number of separations for selected potentially preventable hospitalisations, divided into three groups:   * vaccine-preventable conditions (for example, tetanus, measles, mumps, rubella) * acute conditions (for example, ear, nose and throat infections, perforated/bleeding ulcer, pelvic inflammatory disease (excluding dehydration and gastroenteritis) * chronic conditions (for example, diabetes (principal diagnoses only), asthma, angina, hypertension, congestive heart failure and chronic obstructive pulmonary disease) * all potentially preventable hospitalisations.   The denominator is the Estimated Resident Population (ERP).  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 care to rehabilitation).  Potentially preventable hospitalisations are defined by ICD-10-AM diagnosis codes and/or Australian Classification of Health Interventions (ACHI) procedure codes in scope for each category of potentially preventable hospitalisations (see Appendix B, Australian hospital statistics 2011–12).  Calculation is 100 000 × (numerator ÷ denominator), presented as a number per 100 000 and age-standardised to the Australian population as at 30 June 2001 using 5-year age groups to 84 years, with ages over 84 combined. Indigenous population data are not available for all states and territories for 5-year age groups beyond 64 years, so the Indigenous disaggregation was standardised to 64 years, with ages over 64 combined. |
| **Data source/s** | *Numerator*:  This indicator is calculated using data from the NHMD, based on the national minimum data set (NMDS) for Admitted patient care.  *Denominators*:  For total population: Australian Bureau of Statistics (ABS) ERP as at 30 June 2011.  For data by Indigenous status: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June 2011.  For data by socioeconomic status: calculated by AIHW using the ABS Socio-Economic Indexes For Areas (SEIFA) Index of Relative Socio-economic Disadvantage (IRSD) 2011 and ERP by Statistical Local Area (SLA) as at 30 June 2011. Each SLA in Australia is ranked and divided into quintiles and deciles in a population-based manner, such that each quintile has approximately 20 per cent of the population and each decile has approximately 10 per cent of the population.  For data by remoteness: ABS ERP as at 30 June 2011, 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 AIHW is a major national agency set up by the Australian Government under the Australian Institute of *Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia’s health and welfare. It is an independent statutory authority established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.  The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.  The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.  One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.  The Australian Institute of *Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988* (Cwlth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.  For further information see the AIHW website [www.aihw.gov.au](http://www.aihw.gov.au)  Data for the NHMD were supplied to the AIHW by state and territory health authorities under the terms of the National Health Information Agreement (see the following links):  <http://www.aihw.gov.au/nhissc/>  <http://meteor.aihw.gov.au/content/index.phtml/itemId/182135>>  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. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation. |
| **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 essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's offshore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included.  The hospital separations data do not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.  The analyses by state and territory, remoteness and socioeconomic status are based on the Statistical Local Area (SLA) of usual residence of the patient, not the location of the hospital. Hence rates represent the number separations for patients living in each state/territory, remoteness area or Socio-Economic Indexes for Areas (SEIFA) population group (regardless of the jurisdiction of the hospital they were admitted to) divided by the total number of people living in that remoteness area or SEIFA group in the state/territory.  The SEIFA categories for socioeconomic status represent approximately the same proportion of the national population, but do not necessarily represent that proportion of the population in each state or territory (each SEIFA decile or quintile represents 10 per cent and 20 per cent respectively of the national population). The SEIFA scores for each SLA are derived from 2011 Census data and represent the attributes of the population in that SLA in 2011.  Other Australians includes separations for non-Indigenous people and those for whom Indigenous status was not stated. |
| **Timeliness** | The reference period for this data set is 2011–12. |
| **Accuracy** | For 2011–12 almost all public hospitals provided data for the NHMD, with the exception of all separations for a mothercraft hospital in the Australian Capital Territory.  The majority of private hospitals provided data, with the exception of the private day hospital facilities in the Australian Capital Territory and the Northern Territory.  States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. Where possible, data in individual data sets are checked against 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 AIHW report Indigenous identification in hospital separations data: quality report (AIHW 2013) found that nationally, about 88 per cent of Indigenous Australians were identified correctly in hospital admissions data in the 2011–12 study period, and the ‘true’ number of separations for Indigenous Australians was about 9 per cent higher than reported. The report recommended that the data for all jurisdictions are used in analysis of Indigenous hospitalisation rates, for hospitalisations in total in national analyses of Indigenous admitted patient care. However, these data should be interpreted with caution as there is variation among jurisdictions in the quality of the Indigenous status data.  Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.  Cells have been suppressed to protect confidentiality where the presentation could identify a patient or a service provider or where rates are likely to be highly volatile, for example where the denominator is very small. The following rule was applied:   * Rates were suppressed where the numerator was less than 5 and/or the denominator was less than 1 000. |
| **Coherence** | The information presented for this indicator is calculated using the same methodology as data published in Australian hospital statistics 2011–12 and the National healthcare agreement: performance report 2011–12.  However, caution should be used when comparing 2007–08 with later years due to changes between the ICD-10-AM 5th edition (used in 2007–08), the ICD-10-AM 6th edition (used in 2008–09 and 2009–10) and ICD-10-AM 7th edition (used in 2010–11 and 2011–12) and the associated Australian Coding Standards that resulted in:   * decreased reporting of additional diagnoses for diabetes * increased reporting of diagnoses for dehydration and gastroenteritis.   In light of these comparability issues, the data presented for 2011–12 exclude:   * Diabetes complications (additional diagnoses only) from the chronic conditions category, and * Dehydration and gastroenteritis from the acute conditions category, and * Diabetes complications (additional diagnoses only) and dehydration and gastroenteritis from the total.   However it should be acknowledged that these data are not consistent with the original intent of the indicator.  In addition, Tasmanian data are not comparable over time as 2008–09 data for Tasmania does not include two private hospitals that were included in 2007–08 and 2009–10 data reported in the National Healthcare Agreement performance reports.  Interpretation of the related performance benchmark over time is also problematic because the benchmark is specified as a proportion of separations rather than a population rate, and admission practices vary across jurisdictions and over time. Changes in a jurisdiction’s denominator (separations) can artificially increase or decrease the results of the benchmark. Therefore the data provided in 2014–15 (and interim years) may not be directly comparable to the baseline data from which the target is based.  Methodological variations also exist in the application of SEIFA to various data sets and performance indicators. Any comparisons of the SEIFA analysis for this indicator with other related SEIFA analysis should be undertaken with careful consideration of the methods used, in particular the SEIFA Census year, the SEIFA index used and the approach taken to derive quintiles and deciles.  National level data disaggregated by Indigenous status for 2007–08 included data from NSW, Qld, WA, SA and NT. National level data disaggregated by Indigenous status for 2008–09, 2009–10 and 2010–11 included data from NSW, Victoria, Qld, WA, SA and NT. National level data disaggregated by Indigenous status for 2011–12 and subsequent years includes data from all eight states and territories. Therefore, data disaggregated by Indigenous status from 2007–08 is not comparable to 2008–09, 2009–10 and 2010–11, and data for 2011–12 and subsequent years are not comparable with data for 2010–11 and prior years.  Following the 2011 Census of Population and Housing, the Australian Bureau of Statistics (ABS) has rebased the Australian population back to 1991. This rebasing had a significant impact on the population time series, therefore data have been resupplied for previous years using the rebased Estimated Resident Population (ERP). The exception is for data presented by Indigenous status. Rebased Indigenous population data are not yet available, thus data presented by Indigenous status use 2006 based ERP.  In 2011, the ABS updated the Socio-Economic Indices for Areas (SEIFA), based on the 2011 ABS Census of Population and Housing. The new SEIFA will be referred to as SEIFA 2011, and the previous SEIFA as SEIFA 2006. Data for 2007-08 through to 2010-11 reported for SEIFA quintiles and deciles are reported using SEIFA 2006 at the Statistical Local Area (SLA) level. Data for 2011-12 are reported using SEIFA 2011 at the SLA level. The AIHW consider the change from SEIFA 2006 to SEIFA 2011 to be a series break when applied to data supplied for this indicator, therefore SEIFA data for 2011-12 are not directly comparable with SEIFA data from previous reporting cycles. |
| **Interpretability** | Supporting information on the quality and use of the NHMD are published annually in Australian hospital statistics (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to note 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 is published in the AIHW’s online metadata repository, METeOR, and the National health data dictionary.  The National health data dictionary can be accessed online at:  <http://www.aihw.gov.au/publication-detail/?id=10737422826>  The Data Quality Statement for the National Hospital Morbidity Database can be accessed on the AIHW website at:  <http://meteor.aihw.gov.au/content/index.phtml/itemId/529483> |
| **Accessibility** | The AIHW provides a variety of products that draw upon the NHMD. 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).   These products may be accessed on the AIHW website at: <http://www.aihw.gov.au/hospitals> |

### **Data Quality Statement — Indicator 19: Selected potentially avoidable GP-type presentations to emergency departments *(interim measure)***

Key data quality points:

* The scope of the data used to produce this indicator is non-admitted patients registered for care in emergency departments in public hospitals classified as either peer group A (Principal referral and Specialist women's and children's hospitals) or peer group B (Large hospitals).
* For 2011-12, the coverage of the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) collection is complete for public hospitals in peer groups A and B. It is estimated that 2012-13 has similar coverage, although final coverage cannot be calculated until the 2012-13 National Public Hospital Establishments Database (NPHED) data are available.
* The definition of potentially avoidable GP type presentations is an interim measure, based on data available in the NNAPEDCD. The AIHW is managing revision work for this indicator under the auspices of the Australian Health Ministers' Advisory Council, to be completed by the end of 2013.
* Caution should be used in comparing these data with earlier years as the number of hospitals classified as peer group A or B, and the peer group classification for a hospital, may vary over time.

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| **Outcome** | Australians receive appropriate high quality and affordable primary and community health services. |
| **Indicator** | Attendance 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) where:   * there was a type of visit of Emergency presentation (or Emergency presentation or Not reported for South Australia in 2008–09 and  2009–10); and * a triage category of 4 or 5 was allocated; and * the patient did not arrive by ambulance or police or correctional vehicle; and * the patient was not admitted to the hospital, was not referred to another hospital, and did not die. |
| **Data source/s** | This indicator is calculated using data from the NNAPEDCD, based on the national minimum data set (NMDS) for Non-admitted patient emergency department care (NAPEDC). |
| **Institutional environment** | The Australian Institute of Health and Welfare (AIHW) is a major national agency set up by the Australian Government under the *Australian Institute of Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia’s health and welfare. It is an independent statutory authority established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.  The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.  The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.  One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.  The Australian Institute of *Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988* (Commonwealth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.  For further information see the AIHW website [www.aihw.gov.au](http://www.aihw.gov.au)  Data for the National Non-Admitted Patient Emergency Department Care Database (NNAPEDCD) were supplied to the AIHW by state and territory health authorities under the terms of the National Health Information Agreement (see the following links):  <http://www.aihw.gov.au/nhissc/>  <http://meteor.aihw.gov.au/content/index.phtml/itemId/182135>  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. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation. |
| **Relevance** | The purpose of the NNAPEDCD 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 classified as either peer group A (Principal referral and Specialist women’s and children’s hospitals) or B (Large hospitals). In 2012–13, hospitals in peer groups A and B provided about 86 per cent of all public hospital emergency presentations.  From August 2011, the scope of the NNAPEDCD expanded due to reporting for the National Health Reform Agreement (NPA IPHS), the hospital coverage expands to be Peer Group A, B and Other). For the duration of the agreement, hospitals that have not previously reported to the NNAPEDCD NMDS can come into scope, subject to agreement between the jurisdiction and the Commonwealth.  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.  The indicator includes only peer group A (Principal referral and Specialist women’s and children’s hospitals) and peer group B (Large hospitals).  The definition of potentially avoidable GP type presentations is an interim measure, based on data available in the NNAPEDCD. The AIHW is managing revision work for this indicator under the auspices of the Australian Health Ministers’ Advisory Council, to be completed by the end of 2013. |
| **Timeliness** | The reference period for these data is 2011–12 and 2012–13. |
| **Accuracy** | For 2011–12, the coverage of the NNAPEDCD was 100 per cent in all jurisdictions for public hospitals in peer groups A and B. For 2012–13, the preliminary estimate of the proportion of emergency occasions of service reported to the NNAPEDCD was 100 per cent for public hospitals in peer groups A and B (for review).  In the baseline year (2007–08), the Tasmanian North West Regional Hospital comprised the combined activity of its Burnie Campus and its Mersey Campus. This hospital was a Peer Group B hospital. There was then a change in administrative arrangements for Mersey and it became the only hospital in the country owned and funded by the Australian Government and, by arrangement, operated by the Tasmanian Government. This administrative change necessitated reporting of these campuses as separate hospitals from 2008-09 onwards. On its own the North West Regional Hospital (Burnie Campus only) is a Peer Group B hospital, whilst, on its own the Mersey Community Hospital is a Peer Group C hospital. Burnie and Mersey did not substantially change their activity, rather, it is simply a case that activity is now spread across two hospitals. For National Healthcare Agreement purposes, although it is a Peer Group C hospital, the Mersey Community Hospital continues to be included in reporting for Peer Group B hospitals to ensure comparability over time for Tasmania.  From 2009–10, the data for the Albury Base Hospital (previously reported in New South Wales hospital statistics) were reported in Victorian hospital statistics. This change in reporting arrangements should be factored into any analysis of data for New South Wales and Victoria.  States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on data. Data are checked for valid values, logical consistency and historical consistency. Where possible, data in individual data sets are checked against data from other data sets. Potential errors are queried with jurisdictions, and corrections and resubmissions may be made in response to these queries. The AIHW does not adjust data to account for possible data errors or missing or incorrect values.  Comparability across jurisdictions may be impacted by variation in the assignment of triage categories. |
| **Coherence** | The data reported for 2011–12 and 2012–13 are consistent with data reported for the NNAPEDCD for previous years for individual hospitals.  In addition, the data reported to the NNAPEDCD in previous years has been consistent with the numbers of emergency occasions of services reported to the National Hospital Establishments Database (NPHED) for each hospital for the same reference year.  Time series presentations may be affected by changes in the number of hospitals reported to the collection and changes in coverage.  The information presented for this indicator is calculated using the same methodology as data published in Australian Hospital Statistics: emergency department care (report series) and the National healthcare agreement: performance report 2011–12.  However, 2011–12 data reported previously in these publications are different from the equivalent data published here because the hospitals classified as peer groups A and B were based on 2010–11, rather than 2011–12 peer groups.  Caution should be used in comparing these data with earlier years, as the number of hospitals classified as peer group A or B, or the peer group of a hospital, may vary over time. |
| **Interpretability** | Metadata information for the NAPEDC NMDS and the NAPEDC DSS are published in the AIHW’s online metadata repository, METeOR, and the National health data dictionary.  The National health data dictionary can be accessed online at:  <http://www.aihw.gov.au/publication-detail/?id=10737422826>  The Data Quality Statement for the NNAPEDCD can be accessed on the AIHW website at:  <http://meteor.aihw.gov.au/content/index.phtml/itemId/529471> |
| **Accessibility** | The AIHW provides a variety of products that draw upon the NNAPEDCD. Published products available on the AIHW website are: Australian hospital statistics suite of products with associated Excel tables. These products may be accessed on the AIHW website at: <http://www.aihw.gov.au/hospitals/> |

### **Data Quality Statement — Indicator 19: Selected potentially avoidable GP-type presentations to emergency departments *(interim supplementary measure)***

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| **Outcome** | Australians receive appropriate high quality and affordable primary and  community health services |
| **Indicator** | Indicator 19: Potentially avoidable GP-type presentations to the ED |
| **Measure (computation)** | Proportion of people who reported attending a hospital emergency department and thought the care could have been provided at a General Practice (GP)  *Numerator:* Total number of persons aged 15 years or over who reported going to a hospital emergency department for their own health in the last 12 months and reported that at the time, they thought the care could have been provided at a GP.  *Denominator:* Total number of persons aged 15 years or over who reported going to a hospital emergency department for their own health in the last 12 months |
| **Data source/s** | ABS Patient Experience Survey, 2012-13 |
| **Institutional environment** | Data Collector(s): The Patient Experience Survey is a topic on the Multipurpose Household Survey. It is 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](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument).  Collection authority: The *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*.  Data Compiler(s): Data is compiled by the Health section of the Australian Bureau of Statistics (ABS).  Statistical confidentiality is guaranteed under the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. The ABS notifies the public through a note on the website when an error in data has been identified. The data is withdrawn, and the publication is re-released with the correct data. Key users are also notified where possible. |
| **Relevance** | Level of Geography: Data is available by State/Territory  Data Completeness: All data is available for this indicator from this source.  Numerator/Denominator Source: Same data source.  Data for this indicator was collected for all persons in Australia, excluding the following people:   * members of the Australian permanent defence forces * diplomatic personnel of overseas governments, customarily excluded from census and estimated population counts * overseas residents in Australia * members of non-Australian defence forces (and their dependents) * people living in non-private dwellings such as hotels, university residences, boarding schools, hospitals, retirement homes, homes for people with disabilities, and prisons. * People living in discrete indigenous communities   The 2011-12 iteration of the Patient Experience survey was the first to include households in very remote areas, (although it still excluded discrete indigenous communities). The 2012-13 iteration continues to include data from very remote areas. The inclusion of very remote areas will serve to improve the coverage of the estimates, particularly for the Northern Territory. Small differences evident in the NT estimates between 2010-11 and 2011-12 may in part be due to the inclusion of households in very remote areas.  Data was self-reported for this indicator. Respondents were asked whether they felt at the time they went to the Emergency Department, the care they received could have been provided at a General Practice (GP). |
| **Timeliness** | Collection interval/s: Patient Experience data is collected annually.  Data available: The 2012-13 data used for this indicator became available from 22 November 2013.  Referenced Period: July 2012 to June 2013. Data for 2011-12 and 2010-11 are also provided.  There are not likely to be revisions to this data after its release. |
| **Accuracy** | Method of Collection: The data was collected by computer assisted telephone interview.  Data Adjustments: Data was weighted to represent the total in scope Australian population, and was adjusted to account for confidentiality and non-response.  Sample/Collection size: The sample for the 2012-13 patient experience survey was 30,749 fully-responding households. Note this is a substantial increase from the 2011-12 sample size of 26,437. This increase will improve the reliability of the data, particularly at finer levels of disaggregation.  Response rate: Response rate for the survey was 78.9 per cent  As data is drawn from a sample survey, the indicator is subject to sampling error, which occurs because a proportion of the population is used to produce estimates that represent the whole population. Rates should be considered with reference to their corresponding relative standard errors (RSEs) and 95 per cent confidence intervals. Estimates with a relative standard error between 25 per cent and 50 per cent should be used with caution, and estimates with a relative standard error over 50 per cent are considered too unreliable for general use.  The sample size for the 2009 ABS Patient Experience Survey was comparatively smaller than later years (7 124 fully responding households, and only enumerated over a 6 month period from July-December 2009). As such, the RSE on the 2009 figure is noticeably higher than the RSEs on the data for later years.  This indicator generally has acceptable levels of sampling error and provides reliable data for most breakdowns.  Known Issues: Data was self-reported and views on whether the care they received at the Emergency Department could have been provided at a General Practice was left up the respondent.  Explanatory footnotes are provided for each table. |
| **Coherence** | Consistency over time: 2009 was the first year data was collected for this indicator. It was then collected in the 2010-11, 2011-12 and 2012-13 patient experience surveys. The question wording for this data item has not changed over time, however the position in the survey (ie where the question was asked) changed from 2009 to 2010-11. The ABS believes this may have had some context effect and advises to keep this in mind when comparing data over time. Data are comparable between 2010-11, 2011-12 and 2012-13.  Numerator/denominator: The numerator and denominator are directly comparable, one being a sub-population of the other.  The numerator and denominator are compiled from a single source.  Jurisdiction estimate calculation: Jurisdiction estimates are calculated the same way, although the exclusion of discrete indigenous communities in the sample will affect the NT more than it affects other jurisdictions.  Jurisdiction/Australia estimate calculation: All estimates are compiled the same way.  Collections across populations: Data is collected the same way across all jurisdictions. |
| **Interpretability** | Context: This data was collected from a representative sample of the Australian population and questions were asked in context of the year prior to the survey. The data was collected over a twelve month period and therefore should minimise any seasonality effects in the data.  Other Supporting information: The ABS Patient Experience data is published in Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0). This publication includes explanatory and technical notes.  Any ambiguous or technical terms for the data are available from the Technical Note, Glossary and Explanatory Notes in Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0). |
| **Accessibility** | Data publicly available. Tables showing data on Emergency Department visits are available in Health Services: Patient Experiences in Australia, 2009 (cat. no. 4839.0.55.001), Patient Experiences in Australia: Summary of Findings, 2010-11, Patient Experiences in Australia: Summary of Findings, 2011-12 (cat. no. 4839.0) and Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0).  Data is not available prior to public access.  Supplementary data is available. Additional data from the Patient Experience Survey is available upon request.  Access permission/Restrictions: Customised data requests may incur a charge.  Contact Details: For more information, please call the ABS National Information and Referral Service 1300 135 070. |

### **Data Quality Statement — Indicator 20: Waiting times for elective surgery (measure 20 (a))**

Key Data quality points

* The National Elective Surgery Waiting Times Data Collection (NESWTDC) contains records for patients removed from waiting lists for elective surgery which are managed by public acute hospitals. For 2011–12, coverage of the NESWTDC was about 91 per cent of elective surgery in Australian public hospitals. For 2012–13, the preliminary estimate of the proportion of public elective surgery that was also reported to the NESWTDC is 93 per cent.
* The National Hospital Morbidity Database (NHMD) is a comprehensive data set that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
* For 2011–12 records from the NESWTDC and the NHMD were linked to produce disaggregations by remoteness and socioeconomic status (all jurisdictions). Approximately 97 per cent of NESWTDC records for removals for elective surgery were linked to the NHMD.
* There is apparent variation in the assignment of clinical urgency categories, both among and within jurisdictions, for individual surgical specialties and indicator procedures, influencing the overall total. For example, the proportion of patients admitted from waiting lists who were assigned to Category 3 treatment clinically recommended within 365 days) was 44 per cent for New South Wales and 16 per cent for Queensland (Table A.1 from Australian hospital statistics 2012–13: elective surgery waiting times, Appendix A p 40 <http://www.aihw.gov.au/publication-detail/?id=60129544692>

Table A.1: Admissions from waiting lists for elective surgery, by clinical urgency category, states and territories, 2012–13 (per cent).

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|  | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Total |
| Category 1 | 24 | 31 | 40 | 25 | 26 | 40 | 31 | 29 | 29 |
| Category 2 | 32 | 47 | 44 | 35 | 36 | 41 | 45 | 49 | 39 |
| Category 3 | 44 | 22 | 16 | 40 | 38 | 20 | 24 | 22 | 32 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

*Source*: AIHW 2013. Australian hospital statistics 2012–13: elective surgery waiting times. Health service series No.51. Cat. no. HSE 140. p 40.

* Interpretation of waiting times for jurisdictions should take into consideration these differences. For example, a state could report relatively long median waiting times in association with a relatively high proportion of patients assessed by clinicians in the state as being in Category 3. Conversely, a state in which a relatively high proportion of patients are assessed by clinicians as being in Category 1 or 2 (treatment clinically recommended within 30 days and 90 days, respectively) could have relatively short median waiting times.
* Analyses for remoteness and socioeconomic status are based on the reported area of usual residence of the patient, regardless of the jurisdiction of the hospital. This is relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction.
* The quality of Indigenous status data in the NESWTDC has not been formally assessed for completeness: caution should be exercised when interpreting these data.
* Interpretation of waiting times for jurisdictions should take into consideration cross-border flows, particularly for the Australian Capital Territory.
* SEIFA data for 2011-12 are not directly comparable with SEIFA data from previous reporting cycles.

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| **Outcome** | Australians receive appropriate high quality and affordable hospital and hospital 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 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 be shorter than the median and half the waiting times longer. The 90th percentile data represent the number of days within which 90 per cent of patients were admitted. |
| **Data source/s** | For 2011–12 and 2012–13, this indicator is calculated using data from the NESWTDC, based on the National Minimum Data Set (NMDS) for Elective surgery waiting times (removals data).  For 2011–12, the NESWTDC was linked to the NHMD, based on the NMDS for Admitted patient care, to allow disaggregation by remoteness of area of usual residence and SEIFA of usual residence (all jurisdictions).  For data by socioeconomic status: calculated by AIHW using the Australian Bureau of Statistics (ABS) Socio-Economic Indexes For Areas (SEIFA), Index of Relative Socio-Economic Disadvantage (IRSD) 2011 and Estimated Resident Population (ERP) by Statistical Local Area (SLA) as at 30 June 2011 (2011–12). Each SLA in Australia is ranked and divided into quintiles and deciles in a population-based manner, such that each quintile has approximately 20 per cent of the population and each decile has approximately 10 per cent of the population.  For data by remoteness: ABS ERP as at 30 June 2011 (2011–12), by remoteness areas, as specified in the Australian Standard Geographical Classification. |
| **Institutional environment** | The Australian Institute of Health and Welfare (AIHW) is a major national agency set up by the Australian Government under the Australian Institute of *Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia’s health and welfare. It is an independent statutory authority established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.  The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.  The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.  One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.  The Australian Institute of *Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988* (Cwlth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.  For further information see the AIHW website [www.aihw.gov.au](http://www.aihw.gov.au)  Data for the NESWTDC were supplied to the AIHW by state and territory health authorities under the terms of the National Health Information Agreement (see the following links):  <http://www.aihw.gov.au/nhissc/>  <http://meteor.aihw.gov.au/content/index.phtml/itemId/182135>  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. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation. |
| **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 this NMDS is patients removed from waiting lists for elective surgery which are managed by public acute hospitals. This includes 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 essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's offshore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included.  Analyses by remoteness and socioeconomic status are based on the Statistical Local Area of usual residence of the patient.  The SEIFA categories for socioeconomic status represent approximately the same proportion of the national population, but do not necessarily represent that proportion of the population in each state or territory (each SEIFA decile or quintile represents 10 per cent and 20 per cent respectively of the national population). The SEIFA scores for each SLA are derived from 2011 Census data and represent the attributes of the population in that SLA in 2011.  Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, data represent the waiting time for patients living in each remoteness area or SEIFA population group (regardless of their jurisdiction of residence) for the reporting jurisdiction. This is relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction.  Other Australians includes separations for non-Indigenous people and those for whom Indigenous status was not stated. |
| **Timeliness** | The reference period for these data is 2011–12 and 2012–13. |
| **Accuracy** | For 2011–12 and 2012–13:   * Coverage of the NESWTDC was over 90 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 group (peer group B) and the medium hospitals group (peer group C). In 2011–12, coverage also varied by jurisdiction, ranging from 100 per cent in New South Wales, Western Australia, Tasmania, the Australian Capital Territory and the Northern Territory, to 77 per cent in Victoria. For 2012–13, the preliminary estimate of the proportion of public elective surgery that was also reported to the NESWTDC was 93 per cent * Almost all public hospitals provided data for the NHMD in 2011–12, with the exception of all separations for a mothercraft hospital in the Australian Capital Territory. * Records from the NESWTDC and the NHMD were linked to assign remoteness areas and SEIFA categories from the admitted patient record to the corresponding elective surgery waiting times record. In 2011–12 approximately 97 per cent of NESWTDC records for removals were linked to the NHMD. * There is apparent variation in the assignment of clinical urgency categories, both among and within jurisdictions, and for individual surgical specialties and indicator procedures, as well as overall. Interpretation of waiting times for jurisdictions should take into consideration these differences. * The Indigenous status data were sourced from the NESWTDC for all jurisdictions. * For 2009–10, the data for Albury Base Hospital (previously reported in New South Wales hospital statistics) was reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. From 2010–11, the data for Albury Base Hospital have not been available. * For 2011–12, South Australia and Western Australia provided data for a large number of smaller hospitals (32 and 22 respectively) that were not included in the data for previous years. * For 2011–12, Queensland was not able to provide data for 3 hospitals that had reported almost 10 000 admissions in 2010–11. * The increase in admissions for the Northern Territory between 2010–11 and 2011–12 was, in part, due to the inclusion of certain surgical procedures from 2011–12 that had previously been incorrectly excluded from the NESWTDC by the Northern Territory.   Interpretation of waiting times for jurisdictions should take into consideration cross-border flows, particularly for the Australian Capital Territory.  States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on data. Data are checked for valid values, logical consistency and historical consistency. Where possible, data in individual datasets are checked against data from other datasets. Potential errors are queried with jurisdictions, and corrections and resubmissions may be made in response to these queries. The AIHW does not adjust data to account for possible data errors or missing or incorrect values.  Cells have been suppressed to protect confidentiality where the presentation could identify a patient or a service provider or where rates are likely to be highly volatile, for example, where the denominator is very small. The following rules were applied:   * Cells based on fewer than 10 elective surgery admissions were suppressed. * Cells based on data from one public hospital only were suppressed. |
| **Coherence** | Caution should be exercised when comparing waiting times data between jurisdictions due to differences in the assignment of clinical urgency categories (see Australian hospital statistics 2012–13: elective surgery waiting times, Appendix A p 40 <http://www.aihw.gov.au/publication-detail/?id=60129544692>  The data can be meaningfully compared across reference periods, except for the Indigenous disaggregation. Caution should be used in comparing data by peer groups across reference years, as the number of hospitals classified as peer group A or B, or the peer group of a hospital, may vary over time.  Methodological variations also exist in the application of SEIFA to various data sets and performance indicators. Any comparisons of the SEIFA analysis for this indicator with other related SEIFA analysis should be undertaken with careful consideration of the methods used, in particular the SEIFA Census year, the SEIFA index used and the approach taken to derive quintiles and deciles.  The information presented for this indicator is based on the same data as published in, Australian hospital statistics 2011–12, Australian hospital statistics: elective surgery waiting times (report series) and the National Healthcare Agreement: performance report 2011–12.  The data reported for the 2011–12 and 2012–13 NEWSTDC are consistent with data reported for previous years for individual hospitals.  In addition, some 2011–12 data reported previously in these publications are different from the equivalent data published here because the hospitals classified as peer groups A and B were based on 2010–11, rather than 2011–12 peer groups. Caution should be exercised when interpreting the 2012–13 data as potential revisions to the 2012–13 NESWTDC data could occur following linking to the 2012–13 NHMD.  Analyses presented in Australian hospital statistics and previous National Healthcare Agreement performance reports may also differ slightly depending on whether the NESWTDC or linked NESWTDC/NHMD was used.  National level data disaggregated by Indigenous status for 2007–08 included data from NSW, Qld, WA, SA and NT. National level data disaggregated by Indigenous status for 2008–09, 2009–10 and 2010–11 included data from NSW, Victoria, Qld, WA, SA and NT. National level data disaggregated by Indigenous status for 2011–12 and subsequent years includes data from all eight states and territories. Therefore, data disaggregated by Indigenous status from 2007–08 is not comparable to 2008–09, 2009–10 and 2010–11, and data for 2011–12 and subsequent years are not comparable with data for 2010–11 and prior years.  When comparing data over time, linked data should not be compared with unlinked data. For example, the 2011–12 linked data supplied cannot be directly compared to the 2012–13 unlinked data supplied in this reporting cycle.  In 2011, the ABS updated the Socio-Economic Indices for Areas (SEIFA), based on the 2011 ABS Census of Population and Housing. The new SEIFA will be referred to as SEIFA 2011, and the previous SEIFA as SEIFA 2006. Data for 2007-08 through to 2010-11 reported for SEIFA quintiles and deciles are reported using SEIFA 2006 at the Statistical Local Area (SLA) level. Data for 2011-12 are reported using SEIFA 2011 at the SLA level. The AIHW consider the change from SEIFA 2006 to SEIFA 2011 to be a series break when applied to data supplied for this indicator, therefore SEIFA data for 2011-12 are not directly comparable with SEIFA data from previous reporting cycles. |
| **Interpretability** | Metadata information for the Elective Surgery Waiting Times (ESWT) National Minimum Data Set (NMDS) and ESWT Data Set Specification (DSS) are published in the AIHW’s online metadata repository, METeOR, and the National health data dictionary.  The National health data dictionary can be accessed online at:  <http://www.aihw.gov.au/publication-detail/?id=10737422826>  The Data Quality Statement for the NNAPEDCD can be accessed on the AIHW website at:  <http://meteor.aihw.gov.au/content/index.phtml/itemId/543809> |
| **Accessibility** | The AIHW provides a variety of products that draw upon the NESWTDC. Published products available on the AIHW website are the Australian hospital statistics suite of products with associated Excel tables.  These products may be accessed on the AIHW website <http://www.aihw.gov.au/hospitals/> |

### **Data Quality Statement — Indicator 21: Waiting times for emergency hospital care (measure 21 (a))**

Key data quality points:

* The scope of the data used to produce this indicator is non-admitted patients registered for care in emergency departments in public hospitals classified as either peer group A (Principal referral and Specialist women's and children's hospitals) or peer group B (Large hospitals). Most of the hospitals in peer groups A and B are in major cities. Therefore, disaggregation by remoteness, socioeconomic status and Indigenous status should be interpreted with caution.
* For 2011-12, the coverage of the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) collection is complete for public hospitals in peer groups A and B. It is estimated that 2012-13 has similar coverage, although final coverage cannot be calculated until the 2012-13 National Public Hospital Establishments Database (NPHED) data are available.
* The quality of Indigenous status data in the NNAPEDCD has not been formally assessed for completeness; therefore caution should be exercised when interpreting these data.
* Caution should be used in comparing these data with earlier years as the number of hospitals classified as peer groups A or B, and the peer group for a hospital, may vary over time.
* Remoteness data for 2011-12 and previous years are not directly comparable to remoteness data for 2012-13 and subsequent years.
* SEIFA data for 2010-11 and previous years are not directly comparable with SEIFA data for 2011-12, and SEIFA data for 2011-12 and previous years are not directly comparable with SEIFA data for 2012-13 and subsequent years.

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| **Outcome** | Australians receive appropriate high quality and affordable hospital and hospital related care |
| **Indicator** | Percentage of patients who are treated within national benchmarks for waiting times for each triage category in public hospital emergency departments. |
| **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 a type of visit of Emergency presentation.  Restricted to hospitals that were classified as either peer group A (Principal referral and Specialist women’s and children’s hospital) or peer group B (Large hospitals).  Exclusions: records 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. Records are also excluded if the waiting time was missing or otherwise invalid. |
| **Data source/s** | This indicator is calculated using data from the AIHW’s NNAPEDCD, 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 Australian Bureau of Statistics (ABS) Socio-Economic Indexes For Areas (SEIFA), Index of Relative Socio-Economic Disadvantage (IRSD) 2011 and Estimated Resident Population (ERP) by Statistical Local Area (SLA) as at 30 June 2011 (2011–12) or 30 June 2012 (2012–13). Each SLA in Australia is ranked and divided into quintiles and deciles in a population-based manner, such that each quintile has approximately 20 per cent of the population and each decile has approximately 10 per cent of the population.  For data by remoteness: ABS ERP as at 30 June 2011 (2011–12) or 30 June 2012 (2012–13), by remoteness areas, as specified in the Australian Standard Geographical Classification. |
| **Institutional environment** | The Australian Institute of Health and Welfare (AIHW) is a major national agency set up by the Australian Government under the Australian Institute of *Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia’s health and welfare. It is an independent statutory authority established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.  The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.  The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.  One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.  The *Australian Institute of Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988* (Cwlth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.  For further information see the AIHW website [www.aihw.gov.au](http://www.aihw.gov.au)  Data for the NNAPEDCD were supplied to the AIHW by state and territory health authorities under the terms of the National Health Information Agreement (see the following links):  <http://www.aihw.gov.au/nhissc/>  <http://meteor.aihw.gov.au/content/index.phtml/itemId/182135>  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. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation. |
| **Relevance** | The purpose of the NNAPEDCD 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 classified as either peer group A (Principal referral and Specialist women’s and children’s hospitals) or B (Large hospitals). In 2012–13, hospitals in peer groups A and B provided over 86 per cent of all public hospital emergency presentations.  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.  The analyses by remoteness and socioeconomic status are based on the statistical local area (SLA) of usual residence of the patient. However, data are reported by jurisdiction of presentation, regardless of the jurisdiction of usual residence. Hence, data represent the proportion of patients living in each remoteness area or Socio-Economic Indexes for Areas (SEIFA) population group (regardless of their jurisdiction of residence) seen within the benchmark time in the reporting jurisdiction. This is relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction.  The SEIFA categories for socioeconomic status represent approximately the same proportion of the national population, but do not necessarily represent that proportion of the population in each state or territory (each SEIFA decile or quintile represents 10 per cent and 20 per cent respectively of the national population). For 2011–12, the SEIFA scores for each SLA are derived from 2011 Census data and represent the attributes of the population in that SLA in 2011. For 2012–13, the SEIFA scores for each Statistical Area level 2 (SA2) are derived from 2011 Census data and represent the attributes of the population in that SA2 in 2011.  Other Australians includes separations for non-Indigenous people and those for whom Indigenous status was not stated. |
| **Timeliness** | The reference period for these data is 2011–12 and 2012–13. |
| **Accuracy** | For 2011–12, the coverage of the NNAPEDCD was 100 per cent in all jurisdictions for public hospitals in peer groups A and B. For 2012–13, the preliminary estimate of the proportion of emergency occasions of service reported to the NNAPEDCD was 100 per cent for public hospitals in peer groups A and B.  In the baseline year (2007–08), the Tasmanian North West Regional Hospital comprised the combined activity of its Burnie Campus and its Mersey Campus. This hospital was a Peer Group B hospital. There was then a change in administrative arrangements for Mersey and it became the only hospital in the country owned and funded by the Australian Government and, by arrangement, operated by the Tasmanian Government. This administrative change necessitated reporting of these campuses as separate hospitals from 2008-09 onwards. On its own the North West Regional Hospital (Burnie Campus only) is a Peer Group B hospital, whilst, on its own the Mersey Community Hospital is a Peer Group C hospital. Burnie and Mersey did not substantially change their activity, rather, it is simply a case that activity is now spread across two hospitals. For National Healthcare Agreement purposes, although it is a Peer Group C hospital, the Mersey Community Hospital continues to be included in reporting for Peer Group B hospitals to ensure comparability over time for Tasmania.  From 2009–10, the data for the Albury Base Hospital (previously reported in New South Wales hospital statistics) was reported in Victorian hospital statistics. This change in reporting arrangements should be factored into any analysis of data for New South Wales and Victoria.  States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on data. Data are checked for valid values, logical consistency and historical consistency. Where possible, data in individual data sets are checked against data from other data sets. Potential errors (including waiting time outliers) are queried with jurisdictions, and corrections and resubmissions may be made in response to these queries. The AIHW does not adjust data to account for possible data errors or missing or incorrect values.  The quality of Indigenous status data in the NNAPEDCD has not been formally assessed for completeness; therefore caution should be exercised when interpreting these data.  As this indicator is limited to public hospitals classified in peer groups A and B, most of the data relates to hospitals within major cities. Consequently, the data may not cover areas where the proportion of Indigenous Australians (compared with other Australians) is higher than average. Similarly, disaggregation by socioeconomic status and remoteness should be interpreted with caution.  Comparability across jurisdictions may be impacted by variation in the assignment of triage categories. |
| **Coherence** | The data reported for 2011–12 and 2012–13 are consistent with data reported for the NNAPEDCD for previous years for individual hospitals.  In addition, the data reported to the NNAPEDCD in previous years has been consistent with the numbers of emergency occasions of services reported to the National Hospital Establishments Database (NPHED) for each hospital for the same reference year.  Time series presentations may be affected by changes in the number of hospitals reported to the collection and changes in coverage.  The information presented for this indicator are calculated using the same methodology as data published in Australian hospital statistics 2011–12, Australian hospital statistics: emergency department care (report series) and the National Healthcare Agreement: performance report 2011–12.  However, 2011–12 data reported previously in these publications are different from the equivalent data published here because the hospitals classified as peer groups A and B were based on 2010–11, rather than 2011–12 peer groups.  Caution should be used in comparing data across reference years, as the number of hospitals classified as peer group A or B, or the peer group of a hospital, may vary over time.  Methodological variations also exist in the application of SEIFA to various data sets and performance indicators. Any comparisons of the SEIFA analysis for this indicator with other related SEIFA analysis should be undertaken with careful consideration of the methods used, in particular the SEIFA Census year, the SEIFA index used and the approach taken to derive quintiles and deciles.  National level data disaggregated by Indigenous status for 2007–08 included data from NSW, Qld, WA, SA and NT. National level data disaggregated by Indigenous status for 2008–09, 2009–10 and 2010–11 included data from NSW, Victoria, Qld, WA, SA and NT. National level data disaggregated by Indigenous status for 2011–12 and subsequent years includes data from all eight states and territories. Therefore, data disaggregated by Indigenous status from 2007–08 is not comparable to 2008–09, 2009–10 and 2010–11, and data for 2011–12 and subsequent years are not comparable with data for 2010–11 and prior years.  In 2011, the ABS updated the standard geography used in Australia for most data collections from the Australian Standard Geographical Classification (ASGC) to the Australian Statistical Geography Standard (ASGS). Also updated at this time were remoteness areas and the Socio-Economic Indices for Areas (SEIFA), based on the 2011 ABS Census of Population and Housing. The new remoteness areas will be referred to as RA 2011, and the previous remoteness areas as RA 2006. The new SEIFA will be referred to as SEIFA 2011, and the previous SEIFA as SEIFA 2006.  Data for 2007-08 through to 2011-12 reported by remoteness are reported for RA 2006. Data for 2012-13 are reported for RA 2011. The AIHW considers the change from RA 2006 to RA 2011 to be a series break when applied to data supplied for this indicator, therefore remoteness data for 2011-12 and previous years are not directly comparable to remoteness data for 2012-13 and subsequent years.  Data for 2007-08 through to 2010-11 reported for SEIFA quintiles and deciles are reported using SEIFA 2006 at the Statistical Local Area (SLA) level. Data for 2011-12 are reported using SEIFA 2011 at the SLA level. Data for 2012-13 are reported using SEIFA 2011 at the Statistical Area (SA) 2 level. The AIHW considers the change from SEIFA 2006 to SEIFA 2011, and the change from SLA to SA2 to be series breaks when applied to data supplied for this indicator. Therefore, SEIFA data for 2010-11 and previous years are not directly comparable with SEIFA data for 2011-12, and SEIFA data for 2011-12 and previous years are not directly comparable with SEIFA data for 2012-13 and subsequent years. |
| **Interpretability** | Metadata information for the Non-Admitted Patient Emergency Department Care (NAPEDC) National Minimum Data Set (NMDS) and the NAPEDC Data Set Specification (DSS) are published in the AIHW’s online metadata repository, METeOR, and the National health data dictionary.  The National health data dictionary can be accessed online at:  <http://www.aihw.gov.au/publication-detail/?id=10737422826>  The Data Quality Statement for the 2011–12 NNAPEDCD can be accessed on the AIHW website at:  <http://meteor.aihw.gov.au/content/index.phtml/itemId/529471> |
| **Accessibility** | The AIHW provides a variety of products that draw upon the NNAPEDCD. Published products available on the AIHW website are: Australian hospital statistics suite of products with associated Excel tables. These products may be accessed on the AIHW website at: <http://www.aihw.gov.au/hospitals/>. |

### **Data Quality Statement — Indicator 21: Waiting times for emergency hospital care (measure 21 (b))**

Key data quality points:

* The scope of the data used to produce this indicator is non-admitted patients registered for care in emergency departments in public hospitals reporting to the Non-admitted Patient Emergency Department Care Database (NAPEDC) National Minimum Data Set (NMDS) (Peer Groups A, B and other) as at August 2011 (when the National Health Reform Agreement National Partnership Agreement on Improving Public Hospital Services was signed).
* For 2011–12, coverage of the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) collection was about 84 per cent of emergency occasions of service in Australian public hospitals. For 2012–13, the preliminary estimate of the proportion of public emergency occasions of service that was also reported to the NNAPEDCD is 84 per cent.Caution should be used in comparing these data with earlier years as the number of reporting hospitals and the peer group for a hospital, may vary over time.

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| **Outcome** | Australians receive appropriate high quality and affordable hospital and hospital related care |
| **Indicator** | Percentage of presentations to public hospital emergency departments where the time from presentation to physical departure (ED Stay length) is less than or equal to four hours. |
| **Measure (computation)** | Waiting times for emergency department care: proportion completed within four hours are:  Calculation includes presentations with any type of visit to emergency department.  ED stay length is calculated by subtracting presentation time/date from physical departure time/date, which is recorded as per the business rules included in the NAPEDC NMDS 2012–13:  http://meteor.aihw.gov.au/content/index.phtml/itemId/474371  The percentage of presentations to public hospital emergency departments completed within four hours is calculated as:  *Numerator*: Number of ED presentations where ED stay is less than or equal to four hours.  *Denominator*: Number of ED presentations.  Calculation includes all presentations with an ED stay completed in the reporting period, including records where the presentation date/time is prior to the reporting period. Invalid records are excluded from the numerator and denominator. Invalid records are records for which:   * Length of stay < 0. * Presentation date or time missing. * Physical departure date or time missing. |
| **Data source/s** | This indicator is calculated using data from the Australian Institute of Health and Welfare’s (AIHW’s) NNAPEDCD, based on the National Minimum Data Set (NMDS) for Non-admitted patient emergency department care (NAPEDC). |
| **Institutional environment** | The Australian Institute of Health and Welfare (AIHW) is a major national agency set up by the Australian Government under the Australian Institute of *Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia’s health and welfare. It is an independent statutory authority established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.  The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.  The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.  One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.  The Australian Institute of *Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988 (Commonwealth),* ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.  For further information see the AIHW website [www.aihw.gov.au](http://www.aihw.gov.au).  Data for the NNAPEDCD were supplied to the AIHW by state and territory health authorities under the terms of the National Health Information Agreement (see the following links):  <http://www.aihw.gov.au/nhissc/>  <http://meteor.aihw.gov.au/content/index.phtml/itemId/182135>  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. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation. |
| **Relevance** | The purpose of the NNAPEDCD is to collect information on the characteristics of emergency department care for non-admitted patients registered for care in emergency departments in selected public hospitals classified as either peer group A (Principal referral and Specialist women’s and children’s hospitals) or B (Large hospitals). However, data were also provided by some states and territories for hospitals in peer groups other than A and B. In 2012–13, hospitals in peer groups A and B provided over 86 per cent of all public In 2012–13, hospitals in peer groups A and B provided over 86 per cent of all public hospital emergency presentations.  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.  Data are reported by jurisdiction of presentation, regardless of the jurisdiction of usual residence. |
| **Timeliness** | The reference period for these data is 2011–12 and 2012–13.  The financial year of 2011-12 is the first reporting period that these data are available according the agreed specification. |
| **Accuracy** | For 2011–12, coverage of the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) collection was about 84 per cent of emergency occasions of service in Australian public hospitals. For 2012–13, the preliminary estimate of the proportion of public emergency occasions of service that was also reported to the NNAPEDCD is 84 per cent.  In the baseline year (2007-08) for this indicator, the Tasmanian North West Regional Hospital comprised the combined activity of its Burnie Campus and its Mersey Campus. This hospital was a Peer Group B hospital. There was then a change in administrative arrangements for Mersey and it became the only hospital in the country owned and funded by the Australian Government and, by arrangement, operated by the Tasmanian Government. This administrative change necessitated reporting of these campuses as separate hospitals from 2008-09 onwards. On its own the North West Regional Hospital (Burnie Campus only) is a Peer Group B hospital, whilst, on its own the Mersey Community Hospital is a Peer Group C hospital. Burnie and Mersey did not substantially change their activity, rather, it is simply a case that activity is now spread across two hospitals. For National Healthcare Agreement purposes, although it is a Peer Group C hospital, the Mersey Community Hospital continues to be included in reporting for Peer Group B hospitals to ensure comparability over time for Tasmania.  From 2009–10, data for the Albury Base Hospital (previously reported in New South Wales hospital statistics) were reported in Victorian hospital statistics. This reporting arrangement should be factored into any analysis of data for New South Wales and Victoria.  States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on 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 queries. The AIHW does not adjust data to account for possible data errors or missing or incorrect values. |
| **Coherence** | The data reported for 2011–12 and 2012–13 are consistent with data reported for the NNAPEDCD for previous years for individual hospitals.  In addition, the data reported to the NNAPEDCD in previous years has been consistent with the numbers of emergency occasions of services reported to the National Hospital Establishments Database (NPHED) for each hospital for the same reference year.  Time series presentations may be affected by changes in the number of hospitals reported to the collection and changes in coverage.  The information presented for this indicator are calculated using the same methodology as data published in Australian hospital statistics 2011–12, Australian hospital statistics: emergency department care (report series) and the National Healthcare Agreement: performance report 2011–12. |
| **Interpretability** | Metadata information for the NAPEDC NMDS and the NAPEDC Data Set Specification (DSS) are published in the AIHW’s online metadata repository, METeOR, and the National health data dictionary.  The National health data dictionary can be accessed online at:  <http://www.aihw.gov.au/publication-detail/?id=10737422826>  The Data Quality Statement for the 2011–12 NNAPEDCD can be accessed on the AIHW website at:  <http://meteor.aihw.gov.au/content/index.phtml/itemId/529471> |
| **Accessibility** | The AIHW provides a variety of products that draw upon the NNAPEDCD. Published products available on the AIHW website are: Australian hospital statistics suite of products with associated Excel tables. These products may be accessed on the AIHW website at: <http://www.aihw.gov.au/hospitals/>. |

### **Data Quality Statement — Indicator 22: Healthcare associated infections**

Key data quality points:

* The indicator uses a definition of a patient episode of *Staphylococcus aureus* bacteraemia (SAB) agreed by all states and territories and used by all states and territories.
* There may be imprecise exclusion of private hospital and non-hospital patient episodes due to the inherent difficulties in determining the origins of SAB episodes.
* For some states and territories there is less than 100 per cent coverage of public hospitals. For those jurisdictions with incomplete coverage of public hospitals (in the numerator), only patient days for those hospitals that contribute data are included (in the denominator). Differences in the types of hospitals not included may impact on the accuracy and comparability of rates.
* The accuracy and comparability of the rates of SAB among jurisdictions and over time is also limited because the count of patient days (denominator) reflects the amount of admitted patient activity, but does not reflect the amount of non-admitted patient activity.
* The data for 2012-13 are comparable with those from 2011-12 except for Western Australia.
* The data for 2011-12 are comparable with those from 2010-11 except for Queensland.
* Western Australian data for 2010-11 and 2011-12 are not comparable with data from other jurisdictions.
* The patient day data may be preliminary for some hospitals/jurisdictions.

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| **Outcome** | Australians receive appropriate high quality and affordable hospital and hospital related care |
| **Indicator** | Healthcare associated infections |
| **Measure (computation)** | SAB patient episodes (as defined below) associated with acute care public hospitals.  Patient episodes associated with care provided by private hospitals and non-hospital healthcare are excluded.  The definition of an acute public hospital is ‘all public hospitals including those hospitals defined as public psychiatric hospitals in the Public Hospital Establishments NMDS’.  All types of public hospitals are included, both those focusing on acute care, and those focusing on non-acute or sub-acute care, including psychiatric, rehabilitation and palliative care.  Unqualified newborns are included in the indicator. Hospital boarders and posthumous organ procurement are excluded from the indicator.  A patient episode of SAB is defined as a positive blood culture for *Staphylococcus aureus*. For surveillance purposes, only the first isolate per patient is counted, unless at least 14 days has passed without a positive blood culture, after which an additional episode is recorded.  A *Staphylococcus aureus* bacteraemia will be considered to be healthcare-associated if: the first positive blood culture is collected more than 48 hours after hospital admission or less than 48 hours after discharge, OR, if the first positive blood culture is collected 48 hours or less after admission and one or more of the following key clinical criteria was met for the patient-episode of SAB:  1. SAB is a complication of the presence of an indwelling medical device (e.g. intravascular line, haemodialysis vascular access, CSF shunt, urinary catheter)  2. SAB occurs within 30 days of a surgical procedure where the SAB is related to the surgical site  3. An invasive instrumentation or incision related to the SAB was performed within 48 hours  4. SAB is associated with neutropenia (<1 x 109) contributed to by cytotoxic therapy  This definition of a patient episode of SAB was agreed by all states and territories and used by all states and territories for reporting for  2010-11 and subsequent years.  The *denominator* is number of patient days for public acute care hospitals (only for hospitals included in the surveillance arrangements).*Calculation* is 10 000 × (*Numerator* ÷ *Denominator*), presented as a number per 10 000 and number only.  *Coverage*: *Denominator* ÷ Number of patient days for all public hospitals in the State or Territory. |
| **Data source/s** | *Numerator*: State and Territory healthcare-associated infection surveillance data.  *Denominator*: State and Territory admitted patient data. |
| **Institutional environment** | The Australian Institute of Health and Welfare (AIHW) calculated the indicator from data provided by states and territories.  The AIHW is an independent statutory authority within the Health 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 associated 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 vary among the jurisdictions. |
| **Relevance** | This indicator is for patient episodes of SAB acquired, diagnosed and treated in public acute care hospitals. The definition of a public acute care hospital is ‘all public hospitals including those hospitals defined as public psychiatric hospitals in the Public Hospital Establishments NMDS’. All types of public hospitals are included, both those focusing on acute care, and those focusing on non-acute or sub-acute care, including psychiatric, rehabilitation and palliative care. The provision of ‘acute’ services varies among jurisdictions, so it is not possible to exclude ‘non-acute’ hospitals from the indicator in a way that would be uniform among the states and territories. Therefore all public hospitals have been included in the scope of the indicator so that the same approach is taken for each State and Territory, except for Western Australia where mental health beds are not included in 2010-11 or 2011-12 data.  The SAB patient episodes reported were associated with both admitted patient care and with non-admitted patient care (including emergency departments and outpatient clinics). No denominator is available to describe the total admitted and non-admitted patient activity of public hospitals. However, the number of patient days for admitted patient activity is used as the *denominator* to take into account the large differences between the sizes of the public hospital sectors among the jurisdictions. The accuracy and comparability of the SAB rates among jurisdictions and over time is limited because the count of patient days reflects the amount of admitted patient activity, but does not reflect the amount of non-admitted patient activity. The amount of hospital activity that patient days reflect varies among jurisdictions and over time because of variation in admission practices.  In 2012, the scope of the indicator was revised to include unqualified newborns. Data reported for 2010-11 and subsequent years include unqualified newborns, except for Western Australia where unqualified newborns are not included in 2010-11 or 2011-12 data. It is not possible to backcast the data for earlier years.  Only patient episodes associated with public acute care hospitals in each jurisdiction are counted. If a case is associated with care provided in another jurisdiction then it may be reported (where known) by the jurisdiction where the care associated with the SAB occurred.  Almost all patient episodes of SAB will be diagnosed when the patient is an admitted patient. However, the intention is that patient episodes are reported whether they were determined to be associated with admitted patient care or non-admitted patient care in public acute care hospitals.  The data presented have not been adjusted for any differences in  case-mix between the states and territories.  Analysis by state/territory is based on the location of the hospital. |
| **Timeliness** | The reference period for this data is 2012-13, with revised data provided for 2011-12. |
| **Accuracy** | For some states and territories there is less than 100 per cent coverage of public hospitals. For those jurisdictions with incomplete coverage of public hospitals (in the numerator), only patient days for those hospitals (or parts of hospitals) that contribute data are included (in the *denominator*). Differences in the types of hospitals not included may impact on the accuracy and comparability of rates.  For 2010-11 and previous years, data for Queensland include only patients aged 14 years and over.  Sometimes it is difficult to determine if a case of SAB is associated with care provided by a particular hospital. Counts therefore may not be precise where cases are incorrectly included or excluded. However, it is likely that the number of cases incorrectly included or excluded would be small.  It is possible that there will be less risk of SAB in hospitals not included in the SAB surveillance arrangements, especially if such hospitals undertake fewer invasive procedures than those hospitals which are included.  There may be imprecise exclusion of private hospital and non-hospital patient episodes due to the inherent difficulties in determining the origins of SAB episodes.  For 2010-11 and subsequent years, all states and territories used the definition of SAB patient episodes associated with acute care public hospitals as defined above.  The patient day data may be preliminary for some hospitals/jurisdictions.  Some states and territories have provided revised data for 2011-12, thus a revised table for 2011-12 is provided. |
| **Coherence** | National data for this indicator were first presented in the 2010 COAG Reform Council report. Since that report further work has been undertaken on data development for this indicator, including the definition of an episode of SAB and a suitable denominator, as well as the coverage of public hospitals. The most recent work in 2012 was to revise the scope of the indicator to include unqualified newborns. Data reported for 2010-11 and subsequent years include unqualified newborns, except for Western Australia where unqualified newborns are not included in 2010-11 and 2011-12 data. It is not possible to backcast the data for earlier years. Data for 2012-13, 2011-12 and 2010-11 are therefore not comparable with data for previous years.  Data for 2010-11 and 2011-12 are comparable, except for Queensland, where the 2010-11 data do not include patients aged 13 years and under, whereas the 2011-12 data include patients of all ages. Furthermore, for 2010-11 and 2011-12, Western Australian data do not include unqualified newborns or mental health beds, therefore Western Australian data are not comparable with data from other jurisdictions for these two years.  Data for 2011-12 and 2012-13 are comparable, except for Western Australia, where data for 2011-12 do not include unqualified newborns or mental health beds, whereas Western Australian data for 2012-13 include both unqualified newborns and mental health beds.  Western Australian data for 2012-13 are comparable with 2012-13 data from other jurisdictions.  Western Australian data is included in Australian totals for 2010-11 and 2011-12. Technically, the differing scope for 2010-11 and 2011-12 WA data result in Australian totals for 2010-11 and 2011-12 data which are not comparable with 2012-13 data, however, AIHW investigations indicate that the effect is minimal, and thus consider that Australian data are comparable over 2010-11, 2011-12 and 2012-13.  As 2008-09 data were provided prior to the development of agreed national definitions, by only five jurisdictions, and was limited to principal referral and large hospitals, these data are not comparable with 2009-10 data, except for Tasmania.  Some jurisdictions have previously published related data (see Accessibility above). |
| **Interpretability** | Jurisdictional manuals should be referred to for full details of the definitions used in healthcare-associated infection surveillance.  Definitions for this indicator are published in the performance indicator specifications. |
| **Accessibility** | The following states and territories publish data relating to healthcare-associated SAB in various report formats on their websites:  New South Wales: *Your Health Service* public website reports SAB by individual hospital.  <http://www.health.nsw.gov.au/hospitals/search.asp>  New South Wales: *Healthcare associated infections reporting* for 8 infection indicators by state.  <http://www.health.nsw.gov.au/quality/hai/index.asp>  Queensland: Queensland Health Hospital Performance website:  <http://www.health.qld.gov.au/performance/default.asp>  Western Australia: *Healthcare Associated Infection Unit* - Annual Report and aggregate reports.  <http://www.public.health.wa.gov.au/3/455/3/reports__healthcare_associated_infection_unit.pm>  South Australia: *Healthcare Associated Bloodstream* *Infection Report.*  <http://www.health.sa.gov.au/INFECTIONCONTROL/Default.aspx?PageContentID=18&tabid=147>  Tasmania: *Acute public hospitals healthcare associated infection surveillance report.*  <http://www.dhhs.tas.gov.au/peh/tasmanian_infection_prevention_and_control_unit/publications_and_guidelines> |

### **Data Quality Statement — Indicator 23: Unplanned hospital readmission rates**

Key data quality points:

* The National Hospital Morbidity Database (NHMD) is a comprehensive data set that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
* The indicator is an underestimate of all possible unplanned/unexpected readmissions because:
* it could only be calculated for public hospitals and for readmissions to the same hospital.
* episodes of non-admitted patient care provided in outpatient clinics or emergency departments which may have been related to a previous admission are not included.
* the unplanned and/or unexpected readmissions are limited to those having a principal diagnosis of a post-operative adverse event for which a specified International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) diagnosis code has been assigned. This does not include all possible unplanned/unexpected readmissions.
* Calculation of the indicator for Western Australia was not possible using data from the NHMD. Data for Western Australia were supplied by WA Health. The Australian rates and numbers do not include Western Australia.
* Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.
* SEIFA data for 2011-12 are not directly comparable with SEIFA data from previous reporting cycles.

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| **Outcome** | Australians receive appropriate high quality and affordable hospital and hospital related care. |
| **Indicator** | Unplanned/unexpected readmissions within 28 days of selected surgical admissions.  For the 2013 report, the National Health Information Standards and Statistics Committee (NHISSC), on behalf of Australian Health Ministers’ Conference, amended the title of this indicator in the NHISSC specifications to: Unplanned hospital readmission rates to better reflect how the indicator is calculated. Readmissions for this indicator are defined within 28 days from the end of the patient’s surgical episode of care. |
| **Measure (computation)** | Numerator: the 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; 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.  The *denominator* is limited to separations with a separation date between 1 July and 19 May in the reference year. |
| **Data source/s** | For all jurisdictions except Western Australia, this indicator is calculated by the Australian Institute of Health and Welfare (AIHW) using data from the NHMD, based on the national minimum data set (NMDS) for Admitted patient care.  For Western Australia, the indicator was calculated and supplied by WA Health and was not independently verified by the AIHW.  For data by socioeconomic status: calculated by AIHW using the Australian Bureau of Statistics (ABS) Socio-Economic Indexes For Areas (SEIFA), Index of Relative Socio-Economic Disadvantage (IRSD) 2011 and Estimated Resident Population (ERP) by Statistical Local Area (SLA) as at 30 June 2011. Each SLA in Australia is ranked and divided into quintiles and deciles in a population-based manner, such that each quintile has approximately 20 per cent of the population and each decile has approximately 10 per cent of the population.  For data by remoteness: each separation is allocated an ABS remoteness area, as specified in the Australian Standard Geographical Classification, based on the SLA of usual residence of the patient. |
| **Institutional environment** | The Australian Institute of Health and Welfare (AIHW) has calculated this indicator.  The AIHW is an independent statutory authority within the Health 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 received these data from public and private hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.  Data for the NHMD were supplied to the AIHW by state and territory health authorities under the terms of the National Health Information Agreement (see the following links):  <http://www.aihw.gov.au/nhissc/>  <http://meteor.aihw.gov.au/content/index.phtml/itemId/182135> |
| **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 essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's offshore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included.  The hospital separations data do not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.  The analyses by remoteness and socioeconomic status are based on the Statistical Local Area (SLA) of usual residence of the patient. The  Socio-Economic Indexes for Areas (SEIFA) categories for socioeconomic status represent approximately the same proportion of the national population, but do not necessarily represent that proportion of the population in each state or territory (each SEIFA decile or quintile represents 10 per cent and 20 per cent respectively of the national population). The SEIFA scores for each SLA are derived from 2011 Census data and represent the attributes of the population in that SLA in 2011.  Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence. Hence, rates represent the number of separations for patients living in each remoteness area or SEIFA population group (regardless of their jurisdiction of residence) divided by the total number of separations for people living in that remoteness area or SEIFA population group and hospitalised in the reporting jurisdiction. This is relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction.  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 event 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.  With regard to hysterectomy, there are three related procedures that are not defined for the indicator, and therefore have not been included in any National Healthcare Agreement (NHA) reporting (all years). These are (in ICD-10-AM 7th edition), 35750-00—Laparoscopically assisted vaginal hysterectomy; 35753-02—Laprascopically assisted vaginal hysterectomy with removal of adnexa; and 35653-00—Subtotal abdominal hysterectomy. For public hospitals, there were 1,743 separations in 2011–12 and 1,627 separations in 2010–11 that involved one of these procedures.  The calculation of the indicator is limited to public hospitals and to readmissions to the same hospital.  Other Australians includes separations for non-Indigenous people and those for whom Indigenous status was not stated. |
| **Timeliness** | The reference period for this data set is 2011–12. |
| **Accuracy** | For 2011–12 almost all public hospitals provided data for the NHMD, with the exception of all separations for a mothercraft hospital in the Australian Capital Territory. The exception was a mothercraft hospital in the Australian Capital Territory.  The majority of private hospitals provided data, with the exception of the private day hospital facilities in the Australian Capital Territory and the Northern Territory.  States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on receipt of data. Data are checked for valid values, logical consistency and historical consistency. Where possible, data in individual data sets are checked against 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 AIHW report Indigenous identification in hospital separations data: quality report (AIHW 2013) found that nationally, about 88 per cent of Indigenous Australians were identified correctly in hospital admissions data in the 2011–12 study period, and the ‘true’ number of separations for Indigenous Australians was about 9 per cent higher than reported. The report recommended that the data for all jurisdictions are used in analysis of Indigenous hospitalisation rates, for hospitalisations in total in national analyses of Indigenous admitted patient care. However, these data should be interpreted with caution as there is variation among jurisdictions in the quality of the Indigenous status data.  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.  For Western Australia the indicator was calculated and supplied by Western Australia Health.  To calculate this indicator, readmissions within the 2011–12 financial year had to be linked to an initial separation (which involved the specified surgery) that occurred within the 2011–12 financial year. The 19 May was specified as the cut-off date for the initial separation to exclude initial separations from the *denominator* for which a readmission may occur in the following financial year. The use of the cut-off date ensures that the numerator and *denominator* for this indicator are consistent.  Data on procedures are recorded uniformly using the Australian Classification of Health Interventions. Data on diagnoses are recorded uniformly using the ICD-10-AM.   * Cells have been suppressed to protect confidentiality where the presentation could identify a patient or a service provider or where rates are likely to be highly volatile, for example where the *denominator* is very small. The following rules were applied: * Rates were suppressed where the numerator was less than 5 and/or the *denominator* was less than 200. * Rates were suppressed where the numerator was zero and the *denominator* was less than 200. * Counts were suppressed when the number was less than 5. * Data for private hospitals in Tasmania, Australian Capital Territory and the Northern Territory were suppressed. |
| **Coherence** | The information presented for this indicator is calculated using the same methodology as data published in Australian hospital statistics 2011–12 and the National healthcare agreement: performance report 2011–12.  The data can be meaningfully compared across reference periods for all jurisdictions.  However, caution is required when analysing SEIFA over time for the reasons outlined above (see Relevance section). Methodological variations also exist in the application of SEIFA to various data sets and performance indicators. Any comparisons of the SEIFA analysis for this indicator with other related SEIFA analysis should be undertaken with careful consideration of the methods used, in particular the SEIFA Census year, the SEIFA index used and the approach taken to derive quintiles and deciles.  National level data disaggregated by Indigenous status for 2007–08 included data from NSW, Qld, WA, SA and NT. National level data disaggregated by Indigenous status for 2008–09, 2009–10 and 2010–11 included data from NSW, Victoria, Qld, WA, SA and NT. National level data disaggregated by Indigenous status for 2011–12 and subsequent years includes data from all eight states and territories. Therefore, data disaggregated by Indigenous status from 2007–08 is not comparable to 2008–09, 2009–10 and 2010–11, and data for 2011–12 and subsequent years are not comparable with data for 2010–11 and prior years.  In 2011, the ABS updated the Socio-Economic Indices for Areas (SEIFA), based on the 2011 ABS Census of Population and Housing. The new SEIFA will be referred to as SEIFA 2011, and the previous SEIFA as SEIFA 2006. Data for 2007-08 through to 2010-11 reported for SEIFA quintiles are reported using SEIFA 2006 at the Statistical Local Area (SLA) level. Data for 2011-12 are reported using SEIFA 2011 at the SLA level. The AIHW consider the change from SEIFA 2006 to SEIFA 2011 to be a series break when applied to data supplied for this indicator, therefore SEIFA data for 2011-12 are not directly comparable with SEIFA data from previous reporting cycles. |
| **Interpretability** | Supporting information on the quality and use of the NHMD are published annually in Australian hospital statistics (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to note 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 National Minimum Data Set (NMDS) for Admitted patient care is published in the AIHW’s online metadata repository, METeOR, and the National health data dictionary.  The National health data dictionary can be accessed online at:  <http://www.aihw.gov.au/publication-detail/?id=10737422826>  The Data Quality Statement for the National Hospital Morbidity Database can be accessed on the AIHW website at:  <http://meteor.aihw.gov.au/content/index.phtml/itemId/529483> |
| **Accessibility** | The AIHW provides a variety of products that draw upon the NHMD. 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).   These products may be accessed on the AIHW website at: <http://www.aihw.gov.au/hospitals/> |

### **Data Quality Statement — Indicator 25: Rate of community follow up within first seven days of discharge from a psychiatric admission**

Key data quality points:

* States and territories vary in their capacity to accurately track post-discharge follow up between hospital and community service organisations, due to the lack of unique patient identifiers or data matching systems.
* For National Healthcare Agreement (NHA) 2014 reporting, additional disaggregation by age, Indigenous status, remoteness and SEIFA deciles have been included for the first time.
* For public sector community mental health services, Victorian data is unavailable (for 2011-12) due to service level collection gaps resulting from protected industrial action during this period. Industrial action over the last 18 months in Tasmania has limited the available data quality and quantity of community data. Australian totals for 2011-12 should therefore be interpreted with caution.

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| **Outcome** | Australians receive appropriate high quality and affordable hospital and hospital related care |
| **Indicator** | Proportion of separations from the mental health service organisation’s acute psychiatric inpatient unit(s) for which a community ambulatory service contact, in which the consumer participated, was recorded in the seven days following that separation |
| **Measure (computation)** | The *numerator* is the number of in-scope separations from the mental health service organisation’s acute psychiatric inpatient unit(s) for which a community ambulatory service contact, in which the consumer participated, was recorded in the seven days following that separation.  The *denominator* is the number of in-scope separations for the mental health service organisation’s acute psychiatric inpatient unit(s).  *Calculation* is 100 x (Numerator ÷ *Denominator*) |
| **Data source/s** | State/territory admitted patient and community mental health care data. |
| **Institutional environment** | The tables for this indicator were prepared by the Australian Institute of Health and Welfare (AIHW) based on data supplied by State and Territory health authorities.  The AIHW is an independent statutory authority within the Health portfolio, which is accountable to the Parliament of Australia through the Minister for Health. For further information see the AIHW website.  AIHW drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) in consultation with State and Territory health authorities.  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 and public hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator.  Community mental health services and public 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 for publication in the *Report on government services 2014*. |
| **Relevance** | Estimates are based on all ‘in scope’ separations from state and territory psychiatric acute inpatient units, where ‘in scope’ is defined as those separations for which it is meaningful to examine community follow-up rates. The following separations were excluded: same day separations; overnight separations that occur through discharge/transfer to another hospital; statistical discharge – type change; left against medical advice/discharge at own risk and death.  Data for all years reflect full financial year activity – that is, all in scope separations from public sector acute psychiatric units between the period 1 July and 30 June for each financial year.  Community mental health contacts counted for determining whether follow-up occurred are restricted to those in which the consumer participated. These may be face-to-face or ‘indirect’ (e.g., by telephone), but not contacts delivered ‘on behalf of the client’ in which they did not participate, with the exception of the Northern Territory which includes all contacts, but advised that the impact on the indicator is believed to be marginal. Contacts made on the day of discharge are also excluded for all jurisdictions.  Only community mental health contacts made by state and territory public mental health services are included. Where responsibility for clinical follow-up is managed outside the state/territory mental health system (e.g., by private psychiatrists, general practitioners), these contacts are not included.  States and territories vary in their capacity to accurately track post-discharge follow up between hospital and community service organisations, due to the lack of unique patient identifiers or data matching systems. South Australia indicated that the data submitted were not based on unique patient identifier or data matching approaches. This factor can contribute to an appearance of lower follow-up rates for this jurisdiction.  In 2011, the ABS updated the standard geography used in Australia for most data collections from the Australian Standard Geographical Classification (ASGC) to the Australian Statistical Geography Standard (ASGS). Also updated at this time were remoteness areas and the  Socio-Economic Indices for Areas (SEIFA). The new remoteness areas are referred to as RA 2011. The new SEIFA are referred to as SEIFA 2011, and the previous SEIFA as SEIFA 2006. Data for 2011–12 are reported for RA 2011. Data for 2011–12 are reported using SEIFA 2011 at the Statistical Local Area level (an ASGC substate geographical unit).  Remoteness and socioeconomic status have been allocated using the SLA of the client at last contact. For 2011–12 data all jurisdictions have used the same concordance and proportionally allocated records to remoteness and Socio-Economic Indexes for Areas (SEIFA) categories with the following exception:   * NSW used postcode concordance (rather than SLA concordance) to allocate records to remoteness and SEIFA.   Remoteness and socioeconomic status have been allocated using the client’s usual residence, not the location of the service provider. State/territory is reported for the state/territory of the service provider. |
| **Timeliness** | The reference period for these data is 2011-12. |
| **Accuracy** | State and territory jurisdictions differ in their capacity to accurately track post-discharge follow up between hospital and community service organisations (see Relevance section above for further information). |
| **Coherence** | Specifications for this indicator were revised for the *National Healthcare Agreement* to align with specifications for the nationally agreed key performance indicators for public mental health services. Specifically, the revised indicator focuses on follow up care for people discharged from acute psychiatric units only, rather than discharges from all psychiatric units.  This indicator is currently reported in the *Report on government services*. It is also equivalent to the Key Performance Indicators for Australian Public Mental Health Services: MHS PI 12—Rates of post-discharge community care (which this new indicator is based on) and the Fourth National Mental Health Plan: NMHP PI 16—Rates of post-discharge community care.  There has been no major change to the methodology used to collect the data in 2011–12, therefore data is comparable across years.  However, one large Local Health District in New South Wales has incomplete community data, so 2011–12 data will be updated for the 2015 report.  For public sector community mental health services, Victorian data is unavailable (for 2011-12) due to service level collection gaps resulting from protected industrial action during this period. Industrial action over the last 18 months in Tasmania has limited the available data quality and quantity of community data. Australian totals for 2011-12 should therefore be interpreted with caution.   * All jurisdictions have used the same concordance and proportionally allocated records to remoteness and Socio-Economic Indexes for Areas (SEIFA) categories with the following exception: New South Wales used postcode concordance (rather than SLA concordance) to allocate records to remoteness and SEIFA. |
| **Interpretability** | Definitions for this indicator are published in the indicator specifications in [METeOR](http://meteor.aihw.gov.au/content/index.phtml/itemId/517630). |
| **Accessibility** | *Report on government services* available at: <http://www.pc.gov.au/gsp/rogs> |

### **Data Quality Statement — Indicator 26: Residential and community aged care places per 1000 population aged 70+ years**

Key data quality points

* The data used to calculate this indicator is from an administrative data collection designed for payment of subsidies to service providers and has 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.
* Remoteness data for 2012 and previous years are not directly comparable to remoteness data for 2013 and subsequent years.

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| **Outcome** | Older Australians receive appropriate high quality and affordable health and aged care services |
| **Indicator** | Operational residential and community aged care places per 1000 people aged 70 years or over (and Aboriginal and Torres Strait Islander people aged 50 years and over), excluding services funded through Home and Community Care (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 and the Innovative Care program provided in a residential aged care facility.  Community Aged Care places is a count of operational packages under the following programs: Community Aged Care Packages (CACP); Extended Aged Care at Home (EACH); EACH Dementia (EACHD); Transition Care Program (except when broken down into aged care region); Multi-Purpose Services; and places delivered under the Aboriginal and Torres Strait Islander Aged Care Strategy in the community as well as Innovative Care Programs (including Consumer Directed Care) provided in the community.  *Denominator*: Estimated population aged 70 years and over for the total population plus the estimated Indigenous population aged 50–69 years as at 30 June of the current reporting period.  Expressed as numerator only and rate (1000 × *numerator* ÷ *denominator*).  Rate (per 1000 population) calculated separately for residential and community aged care places. |
| **Data source/s** | *Numerator*: Australian Government Department of Social Services Aged Care 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 Social Services (DSS).  *Denominator*: For total population: For June 2013, preliminary population projections based on 2011 Census prepared for DSS by the Australian Bureau of Statistics (ABS) according to the assumptions set by DSS.  For Indigenous population: For June 2013, DSS Indigenous population projections were prepared from ABS Indigenous Experimental 2006 ERP data projected forward so as to align with ABS (2006 Census based) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* (ABS cat no 3238.0, series B) at the state by age level. Indigenous data from Census 2011 were used to proportionally split the projections at state by aged level into 2011 Remoteness Areas. The resulting projections of the Indigenous population were created by DSS and are not ABS projections. |
| **Institutional environment** | Approved services submit data to Medicare Australia to claim subsidies from the Australian Government. This data is provided to Department of Social Services (DSS) 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 data quality statement was developed by DSS and includes comments from the Australian Institute of Health and Welfare (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** | *Numerator*: The data includes all places offered by aged care services subsidised by the Australian Government under the programs identified above.  Residential places are those 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 2013, and includes Multi-Purpose Services and places delivered under the National Aboriginal and Torres Strait Islander Flexible Aged Care and Innovative Care Programs provided in a residential aged care facility.  Community care places are those allocated to an Aged Care Planning Region which were operational at 30 June 2013 and includes: Community Aged Care Package (CACP), Extended Aged Care at Home (EACH) and Extended Aged Care at Home Dementia (EACHD), and Multi-Purpose Services and places delivered under the National Aboriginal and Torres Strait Islander Flexible Aged Care and Innovative Care Programs (including Consumer Directed Care) provided in the community. Note that it does not include places allocated under the Transition Care Program only for Aged Care Planning Region, as it is not possible to disaggregate these places by Aged Care Planning Region.  This indicator does not include services funded through HACC. |
| **Timeliness** | *Numerator*: Based on a stocktake of aged care places which were operational at 30 June 2013. Data for the current reporting period 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 for the numerator in this indicator are consistent and comparable over time. This indicator is consistent with other publicly available information about aged care places.  Indigenous population projections have been calculated using a different method compared with that used in previous years. This will have a small effect on comparability with results from previous years.  In 2011, the ABS updated the standard geography used in Australia for most data collections from the Australian Standard Geographical Classification (ASGC) to the Australian Statistical Geography Standard (ASGS). Also updated at this time were remoteness areas, based on the 2011 ABS Census of Population and Housing. The new remoteness areas will be referred to as RA 2011, and the previous remoteness areas as RA 2006. Data for 2009 through to 2012 reported by remoteness were reported for RA 2006. Data for 2013 (reported this cycle) are reported for RA 2011. The AIHW considers the change from RA 2006 to RA 2011 to be a series break when applied to data supplied for this indicator, therefore remoteness data for 2012 and previous years are not directly comparable to remoteness data for 2013 and subsequent years. |
| **Interpretability** | Further information on definitions is available in the *Aged Care Act 1997* and the *Aged Care Principles*, in the *Residential Aged Care Manual 2009*, the draft *Community Packaged Care Guidelines 2007*, and *Transition Care Program* guidelines. |
| **Accessibility** | Aggregated data items are published in the Steering Committee for the Review of Government Service Provision's (SCRGSP’s) *Report on government services*, the Reports on the Operation of the *Aged Care Act 1997* prepared by DSS, and in the AIHW’s Aged care statistics series. |

### **Data Quality Statement — Indicator 27: Number of hospital patient days used by those eligible and waiting for residential aged care**

Key data quality points

* The National Hospital Morbidity Database (NHMD) is a comprehensive data set that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
* The indicator as presented is a proxy measure based on available data items in the NHMD. The indicator is not a count of patient days used by those eligible (as assessed and approved by an Aged Care Assessment Team (ACAT)) and waiting for residential aged care. The indicator as presented is the number of patient days (and proportion of all patient days) used by patients where the care type is 'Maintenance', a diagnosis was reported as 'Person awaiting admission to residential aged care service' and the separation mode was not 'Other (includes discharge to place of usual residence)'.
* There is some variation among jurisdictions in the assignment of care type categories.
* Numerators for remoteness and socioeconomic status are based on the reported area of usual residence of the patient, regardless of the jurisdiction of hospital. This is relevant if significant numbers of one jurisdiction's residents are treated in another jurisdiction.
* Interpretation of rates for jurisdictions should take into consideration cross-border flows, particularly in the Australian Capital Territory.
* SEIFA data for 2011-12 are not directly comparable with SEIFA data from previous reporting cycles.

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| **Outcome** | Older Australians receive appropriate high quality and affordable health and aged care services. |
| **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 ACAT and approved for residential aged care. |
| **Measure (computation)** | The numerator is the number of patient days used by patients who are waiting for residential aged care where the care type is Maintenance, a diagnosis was reported as Person awaiting admission to residential aged care service and the separation mode was not Other (includes discharge to place of usual residence). Includes overnight separations only.  The *denominator* is the total number of patient days (including overnight and same-day separations).  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 1 000 × (*numerator* ÷ *denominator*). |
| **Data source/s** | *Numerator and denominator:*  This indicator is calculated using data from the NHMD, based on the National Minimum Data Set (NMDS) for Admitted patient care.  Data for socioeconomic status was calculated by AIHW using the Australian Bureau of Statistics (ABS) Index of Relative Socio-Economic Disadvantage 2011 and ERP by statistical local area (SLA) as at 30 June 2011. Each SLA in Australia is ranked and divided into quintiles and deciles in a population-based manner, such that each quintile has approximately 20 per cent of the population and each decile has approximately 10 per cent of the population. |
| **Institutional environment** | The Australian Institute of Health and Welfare (AIHW) has calculated this indicator.  The Australian Institute of Health and Welfare (AIHW) is a major national agency set up by the Australian Government under the Australian Institute of *Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia’s health and welfare. It is an independent statutory authority established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.  The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.  The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.  One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.  The Australian Institute of *Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988* (Commonwealth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.  For further information see the AIHW website [www.aihw.gov.au](http://www.aihw.gov.au)  Data for the NHMD were supplied to the AIHW by state and territory health authorities under the terms of the National Health Information Agreement (see the following links):  <http://www.aihw.gov.au/nhissc/>  <http://meteor.aihw.gov.au/content/index.phtml/itemId/182135>  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. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation. |
| **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 essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's offshore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included.  The hospital separations data do not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.  This indicator is a proxy indicator.  Analyses by remoteness and socioeconomic status are based on the Statistical Local Area (SLA) of usual residence of the patient. The Socio-Economic Indexes for Areas (SEIFA) categories for socioeconomic status represent approximately the same proportion of the national population, but do not necessarily represent that proportion of the population in each state or territory (each SEIFA decile or quintile represents 10 per cent and 20 per cent respectively of the national population).  The SEIFA scores for each SLA are derived from 2011 Census data and represent the attributes of the population in that SLA in 2011.  In 2011, the ABS updated the Socio-Economic Indices for Areas (SEIFA), based on the 2011 ABS Census of Population and Housing. The new SEIFA will be referred to as SEIFA 2011, and the previous SEIFA as SEIFA 2006. Data for 2007-08 through to 2010-11 reported for SEIFA quintiles and deciles are reported using SEIFA 2006 at the Statistical Local Area (SLA) level. Data for 2011-12 are reported using SEIFA 2011 at the SLA level. The AIHW consider the change from SEIFA 2006 to SEIFA 2011 to be a series break when applied to data supplied for this indicator, therefore SEIFA data for 2011-12 are not directly comparable with SEIFA data from previous reporting cycles.  Patient days are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of residence. Hence, rates represent the number of patient days for patients living in each remoteness area or SEIFA population group (regardless of their jurisdiction of usual residence) divided by the total number of patient days for patients living in that remoteness area or SEIFA population group hospitalised in the reporting jurisdiction. This is relevant if significant numbers of one jurisdiction’s residents are treated in another jurisdiction (for example, the Australian Capital Territory).  Other Australians includes separations for non-Indigenous people and those for whom Indigenous status was not stated. |
| **Timeliness** | The reference period for these data is 2011–12. |
| **Accuracy** | For 2011–12, almost all public hospitals provided data for the NHMD, with the exception of all separations for a mothercraft hospital in the Australian Capital Territory.  The majority of private hospitals provided data, with the exception of the private day hospital facilities in the Australian Capital Territory and the Northern Territory.  States and territories are primarily responsible for the quality of the data they provide. However, the AIHW 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 against data from other data sets. Potential errors are queried with jurisdictions, and corrections and resubmissions may be made in response to these 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.  The NHMD does not include data on ACAT assessments.  The AIHW report Indigenous identification in hospital separations data: quality report (AIHW 2013) found that nationally, about 88 per cent of Indigenous Australians were identified correctly in hospital admissions data in the 2011–12 study period, and the ‘true’ number of separations for Indigenous Australians was about 9 per cent higher than reported. The report recommended that the data for all jurisdictions are used in analysis of Indigenous hospitalisation rates, for hospitalisations in total in national analyses of Indigenous admitted patient care. However, these data should be interpreted with caution as there is variation among jurisdictions in the quality of the Indigenous status data.  Cells have been suppressed to protect confidentiality where the presentation could identify a patient or a service provider or where rates are likely to be highly volatile, for example, where the *denominator* is very small. The following rules were applied:   * Counts less than 3 were suppressed. * Rates were suppressed where the numerator was less than 5 and/or the *denominator* was less than 1 000. * Rates which appear misleading (for example, because of cross border flows) were also suppressed. * Consequential suppression was applied where appropriate to protect confidentiality. |
| **Coherence** | The information presented for this indicator is calculated using the same methodology as data published in Australian hospital statistics 2011–12.  The data can be meaningfully compared across reference periods for all jurisdictions except Tasmania. Data for Tasmania for 2008–09 does not include two private hospitals that were included in 2007–08 and 2009–10 data reported in National Healthcare Agreement reports.  Methodological variations also exist in the application of SEIFA to various data sets and performance indicators. Any comparisons of the SEIFA analysis for this indicator with other related SEIFA analysis should be undertaken with careful consideration of the methods used, in particular the SEIFA Census year, the SEIFA index used and the approach taken to derive quintiles and deciles.  National level data disaggregated by Indigenous status for 2007–08 included data from NSW, Qld, WA, SA and NT. National level data disaggregated by Indigenous status for 2008–09, 2009–10 and 2010–11 included data from NSW, Victoria, Qld, WA, SA and NT. National level data disaggregated by Indigenous status for 2011–12 and subsequent years includes data from all eight states and territories. Therefore, data disaggregated by Indigenous status from 2007–08 is not comparable to 2008–09, 2009–10 and 2010–11, and data for 2011–12 and subsequent years are not comparable with data for 2010–11 and prior years. |
| **Interpretability** | Supporting information on the quality and use of the NHMD are published annually in Australian hospital statistics (technical appendixes), available in hard copy or on the AIHW website. Readers are advised to note 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 National Minimum Data Set (NMDS) for Admitted patient care is published in the AIHW’s online metadata repository, METeOR, and the National health data dictionary.  The National health data dictionary can be accessed online at:  <http://www.aihw.gov.au/publication-detail/?id=10737422826>  The Data Quality Statement for the National Hospital Morbidity Database can be accessed on the AIHW website at:  <http://meteor.aihw.gov.au/content/index.phtml/itemId/529483> |
| **Accessibility** | The AIHW provides a variety of products that draw upon the NHMD. 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).   These products may be accessed on the AIHW website at: <http://www.aihw.gov.au/hospitals/> |

### **Data Quality Statement — Indicator 28: Proportion of residential aged care services that are three year re-accredited**

Key data quality points

* The data are restricted to re-accreditations within the previous financial year.
* The data exclude those homes that are reviewed during a financial year for possible systemic failures.
* Remoteness data for 2011-12 are not directly comparable to remoteness data for 2012-13 and subsequent years.

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| **Outcome** | Older Australians receive appropriate high quality and affordable health and aged care services |
| **Indicator** | Proportion of residential aged care services that are three year re-accredited. |
| **Measure (computation)** | *Numerator*: Number of residential aged care facilities that received re-accreditation for three years during the financial year, decision as in effect at 30 June.  *Denominator*: Total number of residential aged care facilities that received re-accreditation decisions during the financial year.  Expressed as percentage (100 × *numerator* ÷ *denominator*). |
| **Data source/s** | Aged Care Standards and Accreditation Agency |
| **Institutional environment** | The data are from an administrative data collection designed for meeting the Accreditation Standards and a home’s responsibilities under the *Aged Care Act 1997*.  The tables for this indicator were prepared by the Department of Social Services (DSS) and quality-assessed by the Australian Institute of Health and Welfare (AIHW). The data quality statement was developed by DSS and includes comments from the AIHW. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. |
| **Relevance** | The data are restricted to services seeking re-accreditation. Each year there are more assessment contacts (including unannounced visits) than there are audits. Restricting this measure to ‘re-accreditation’ data excludes those homes which were subject to a review audit – that is, those homes which the regulator has sufficient concerns to decide that the provider may not be meeting the Accreditation Standards or its responsibilities under the *Aged Care Act 1997*.  Assessment contacts are necessarily limited in scope and hence how a home performs at a full audit is considered a more robust indicator. This indicator is a ‘point in-time’ assessment of performance and as accreditation generally follows a three-yearly cycle. The audit data can sometimes be up to three years old.  A limitation in the data is that they are only for re-accreditation decisions made during the financial year.  In 2012-13 there were 2 696 accredited residential aged care homes but only 1 139 re-accreditation decisions were made. In the previous year 1280 decisions were made. |
| **Timeliness** | The data are restricted to re-accreditations within the previous financial year. |
| **Accuracy** | The data used to calculate this indicator are from an administrative data collection designed for meeting the Accreditation Standards and a home’s responsibilities under the *Aged Care Act 1997*. The data are considered to be accurate.  The intent of the indicator is to provide a proxy for overall industry performance. The indicator shows how many homes are on the maximum period of accreditation (due to being consistently good performers). It is not relevant how many homes were assessed during the year. |
| **Coherence** | The data are used to report in the *Report on government services* and are coherent.  The 'accreditation period' only shows the decision in effect at 30 June of that year. The figures will not necessarily be consistent with the accreditation decisions made in the previous year because those decisions may not yet have taken effect, or may have been superseded. The data vary across years according to how many homes were due for assessment during the year. The comparison across reference periods of the number of homes assessed is not meaningful. The comparison across reference periods of the proportions of re-accredited homes is meaningful and comparable.  The measure excludes those homes where there are reasonable grounds to believe there may be significant and systemic failure. The possible decisions available following a review audit of this kind are:   * to revoke the service’s accreditation, * not revoke and not vary the period of accreditation, or * not revoke and to vary the period of accreditation.   ‘Re-accreditation’ is not a decision available following a review audit under the Accreditation Grant Principles 2011.  In 2011, the ABS updated the standard geography used in Australia for most data collections from the Australian Standard Geographical Classification (ASGC) to the Australian Statistical Geography Standard (ASGS). Also updated at this time were remoteness areas, based on the 2011 ABS Census of Population and Housing. The new remoteness areas will be referred to as RA 2011, and the previous remoteness areas as RA 2006. Data for 2011-12 (reported in the previous cycle) were reported for RA 2006. Data for 2012-13 (reported this cycle) are reported for RA 2011. The AIHW considers the change from RA 2006 to RA 2011 to be a series break when applied to data supplied for this indicator, therefore remoteness data for 2011-12 are not directly comparable to remoteness data for 2012-13 and subsequent years. |
| **Interpretability** | The data are restricted to re-accreditations within the previous financial year and exclude those homes that are reviewed during a financial year for possible systemic failures.  Terms used in the dataset may be ambiguous because a user may not understand that the data has limitations as a proxy measure of the industry’s performance.  The *Report on government services* includes footnotes and explanations on this measure |
| **Accessibility** | The data are collected by the Aged Care Standards and Accreditation Agency and are readily available. |

### **Data Quality Statement — Indicator 30: Elapsed times for aged care services**

Key data quality points

* The measure of 'elapsed time' is used as a proxy for demand for aged care services, however there are many factors that cannot be categorised as time spent 'waiting' and not all 'waiting' time is included in this measure.
* Remoteness data for 2011-12 are not directly comparable to remoteness data for 2012-13 and subsequent years.
* SEIFA data for 2012-13 and subsequent years are not directly comparable with SEIFA data for 2011-12.

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| **Outcome** | Older Australians receive appropriate high quality and affordable health and aged care services |
| **Indicator** | The elapsed time between an Aged Care Assessment Team (ACAT) approval and entry into a residential aged care service or commencement of a Community Aged Care Package (CACP), Extended Aged Care at Home (EACH) package or Extended Aged Care at Home Dementia (EACHD) package. |
| **Measure (computation)** | *Numerator*: Number of new aged care recipients who commence a service within the following elapsed time periods during the previous financial year:   * Within two days or less * Seven days or less * Less than one month * Less than three months * Less than nine months   *Denominator*: Total number of new aged care recipients during the previous financial year.  Expressed as percentage of people admitted by length of entry period and service type (100 × numerator ÷ denominator) calculated separately for each service type and elapsed time period. |
| **Data source/s** | Australian Government Department of Social Services’ Aged Care Assessment Program Minimum Data Set. Australian Government Department of Social Services’ Aged Care Data Warehouse. |
| **Institutional environment** | Approved service providers submit data to the Department of Human Services (DHS) to claim subsidies from the Australian Government for services delivered under the *Aged Care Act 1997* and *Aged Care Principles*.  These data are provided to the Department of Social Services (DSS) and are stored in the Ageing and Aged Care data warehouse.  The tables for this indicator were prepared by the DSS and quality-assessed by the Australian Institute of Health and Welfare (AIHW). The data quality statement was developed by the then DoHA and includes comments from the AIHW. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. |
| **Relevance** | The measure of ‘elapsed time’ is utilised because the period of time between the Aged Care Assessment Team (ACAT) approval and entry into residential care or commencement of community care may be influenced by factors that cannot be categorised as time spent ‘waiting’ and not all ‘waiting’ time is included. Factors that influence this indicator are:   * care placement offers that are not accepted * the availability of alternative community care, informal care and respite services * variations in care fee regimes that influence client choice of preferred service * building quality and perceptions about quality of care that influence client choice of preferred service. |
| **Timeliness** | The reference period for this data set is the previous financial year. |
| **Accuracy** | The elapsed time between an ACAT approval and entry into an aged care service is retrospective, i.e. the elapsed time is calculated once a person has obtained entry into an aged care service.  The data for elapsed time by State and Territory, and by Indigenous status, are derived from the location of the aged care service.  The data for elapsed time by Remoteness are derived from the recipient’s postcode at time of assessment and exclude some postcodes which cannot be matched to a Remoteness area.  Socio-Economic Indexes for Area (SEIFA) quintiles and deciles are derived from the recipient’s postcode at time of assessment. Recipient’s postcodes not found in the ABS’s SEIFA data are excluded.  The data for elapsed time by remoteness and SEIFA were sourced at a later date than the data for elapsed time by state/territory resulting in slightly different total numbers of admissions. The variance across the different breakdowns of this indicator is less than 0.3 per cent. |
| **Coherence** | The state/territory level data items used to construct this performance indicator are consistent and comparable over time. As noted in the Accuracy section above, there is variance between the state/territory level data items and the data for remoteness and SEIFA. This occurs for  2012-13 data and 2011-12 data (supplied in the previous reporting cycle).  For 2011-12 and subsequent years, cells have been suppressed to protect confidentiality where the presentation could identify an aged care recipient or where rates are likely to be highly volatile, for example where the denominator is very small. The following rules were applied:   * Rates were suppressed where the numerator was less than 5 and/or the denominator was less than 10. * Counts were suppressed when the number was less than 5. * Consequential suppression was applied.   In 2011, the ABS updated the standard geography used in Australia for most data collections from the Australian Standard Geographical Classification (ASGC) to the Australian Statistical Geography Standard (ASGS). Also updated at this time were remoteness areas and the Socio-Economic Indices for Areas (SEIFA), based on the 2011 ABS Census of Population and Housing.  The new remoteness areas will be referred to as RA 2011, and the previous remoteness areas as RA 2006. The new SEIFA will be referred to as SEIFA 2011, and the previous SEIFA as SEIFA 2006.  Data for 2011-12 (reported in the previous cycle) were reported for RA 2006. Data for 2012-13 (reported this cycle) are reported for RA 2011. The AIHW considers the change from RA 2006 to RA 2011 to be a series break when applied to data supplied for this indicator, therefore remoteness data for 2011-12 are not directly comparable to remoteness data for 2012-13 and subsequent years.  Data for 2011-12 (reported in the previous cycle) for SEIFA quintiles and deciles were reported using SEIFA 2006. Data for 2012-13 (reported this cycle) for SEIFA quintiles and deciles are reported using SEIFA 2011. The AIHW considers the change from SEIFA 2006 to SEIFA 2011 to be a series break when applied to data supplied for this indicator, therefore SEIFA data for 2012-13 and subsequent years are not directly comparable with SEIFA data for 2011-12. |
| **Interpretability** | The *Report on government services* includes footnotes and explanations on this measure. |
| **Accessibility** | The data for this indicator are also used to report in the *Report on government services.* |

### **Data Quality Statement — Indicator 32: Patient satisfaction/experience *(interim supplementary measure) (Patient Experience Survey)***

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| **Outcome** | Australians have positive health and aged care experiences which take account of individual circumstances and care needs |
| **Indicator** | Indicator 32: Patient satisfaction/experience |
| **Measure (computation)** | Measure: Nationally comparable information that indicates levels of patient satisfaction around key aspects of care they received.  Numerator:  32.1 - persons who saw a GP for their own health in the last 12 months reporting they waited longer than felt acceptable to get an appointment.  32.2 - persons who saw a GP for their own health in the last 12 months reporting they waited longer than felt acceptable to get an appointment.  32.3 - persons who were referred to a medical specialist in the last 12 months who waited longer than they felt acceptable to get an appointment.  32.4 - persons who were referred to a medical specialist in the last 12 months who waited longer than they felt acceptable to get an appointment.  32.5 - persons who saw a GP in the last 12 months reporting the GP always or often: listened carefully, showed respect, and spent enough time with them.  32.6 - persons who saw a GP in the last 12 months reporting the GP always or often: listened carefully, showed respect, and spent enough time with them.  32.7 - persons who saw a medical specialist in the last 12 months reporting the medical specialist always or often: listened carefully, showed respect, and spent enough time with them.  32.8 - persons who saw a medical specialist in the last 12 months reporting the medical specialist always or often: listened carefully, showed respect, and spent enough time with them.  32.9 - persons who saw a dental practitioner in the last 12 months reporting the dental practitioner always or often: listened carefully, showed respect, and spent enough time with them.  32.10 - persons who saw a dental practitioner in the last 12 months reporting the dental practitioner always or often: listened carefully, showed respect, and spent enough time with them.  32.11 - persons who had been to a hospital emergency department in the last 12 months reporting doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them.  32.12 - persons who had been to a hospital emergency department in the last 12 months reporting doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them.  32.13 - persons who had been to a hospital emergency department in the last 12 months reporting nurses always or often: listened carefully, showed respect, and spent enough time with them.  32.14 - persons who had been to a hospital emergency department in the last 12 months reporting nurses always or often: listened carefully, showed respect, and spent enough time with them.  32.15 - persons who had been admitted to a hospital in the last 12 months reporting doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them.  32.16 - persons who had been admitted to a hospital in the last 12 months reporting doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them.  32.17 - persons who have been admitted to a hospital in the last 12 months reporting nurses always or often: listened carefully, showed respect, and spent enough time with them.  32.18 - persons who have been admitted to a hospital in the last 12 months reporting nurses always or often: listened carefully, showed respect, and spent enough time with them.  32.19 - persons who saw a GP for their own health in the last 12 months reporting they waited longer than felt acceptable to get an appointment.  32.20 - persons who were referred to a medical specialist in the last 12 months who waited longer than they felt acceptable to get an appointment.  32.21 - persons who saw a GP in the last 12 months reporting the GP always or often: listened carefully, showed respect, and spent enough time with them.  32.22 - persons who saw a medical specialist in the last 12 months reporting the medical specialist always or often: listened carefully, showed respect, and spent enough time with them.  32.23 - persons who saw a dental practitioner in the last 12 months reporting the dental practitioner always or often: listened carefully, showed respect, and spent enough time with them.  32.24 - persons who had been to a hospital emergency department in the last 12 months reporting doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them.  32.25 - persons who had been to a hospital emergency department in the last 12 months reporting nurses always or often: listened carefully, showed respect, and spent enough time with them.  32.26 - persons who had been admitted to a hospital in the last 12 months reporting doctors or specialists always or often: listened carefully, showed respect, and spent enough time with them.  32.27 - persons who have been admitted to a hospital in the last 12 months reporting nurses always or often: listened carefully, showed respect, and spent enough time with them.  Denominator:  32.1 - persons who saw a GP for their own health in the last 12 months, excluding persons who were interviewed by proxy.  32.2 - persons who saw a GP for their own health in the last 12 months, excluding persons who were interviewed by proxy.  32.3 - persons who were referred to a medical specialist in the last 12 months, excluding persons who were interviewed by proxy.  32.4 - persons who were referred to a medical specialist in the last 12 months, excluding persons who were interviewed by proxy.  32.5 - persons who saw a GP for their own health in the last 12 months, excluding persons who were interviewed by proxy.  32.6 - persons who saw a GP for their own health in the last 12 months, excluding persons who were interviewed by proxy.  32.7 - persons who saw a medical specialist in the last 12 months, excluding persons who were interviewed by proxy.  32.8 - persons who saw a medical specialist in the last 12 months, excluding persons who were interviewed by proxy.  32.9 - persons who saw a dental professional in the last 12 months, excluding persons who were interviewed by proxy.  32.10 - persons who saw a dental professional in the last 12 months, excluding persons who were interviewed by proxy.  32.11 - persons who had been to a hospital emergency department in the last 12 months, excluding persons who were interviewed by proxy.  32.12 - persons who had been to a hospital emergency department in the last 12 months, excluding persons who were interviewed by proxy.  32.13 - persons who had been to a hospital emergency department in the last 12 months, excluding persons who were interviewed by proxy.  32.14 - persons who had been to a hospital emergency department in the last 12 months, excluding persons who were interviewed by proxy.  32.15 - persons who had been admitted to a hospital in the last 12 months, excluding persons who were interviewed by proxy.  32.16 - persons who had been admitted to a hospital in the last 12 months, excluding persons who were interviewed by proxy.  32.17 - persons who have been admitted to a hospital in the last 12 months, excluding persons who were interviewed by proxy.  32.18 - persons who have been admitted to a hospital in the last 12 months, excluding persons who were interviewed by proxy.  32.19 - persons who saw a GP for their own health in the last 12 months, excluding persons who were interviewed by proxy.  32.20 - persons who were referred to a medical specialist in the last 12 months, excluding persons who were interviewed by proxy.  32.21 - persons who saw a GP for their own health in the last 12 months, excluding persons who were interviewed by proxy.  32.22 - persons who saw a medical specialist in the last 12 months, excluding persons who were interviewed by proxy.  32.23 - persons who saw a dental professional in the last 12 months, excluding persons who were interviewed by proxy.  32.24 - persons who had been to a hospital emergency department in the last 12 months, excluding persons who were interviewed by proxy.  32.25 - persons who had been to a hospital emergency department in the last 12 months, excluding persons who were interviewed by proxy.  32.26 - persons who had been admitted to a hospital in the last 12 months, excluding persons who were interviewed by proxy.  32.27 - persons who have been admitted to a hospital in the last 12 months, excluding persons who were interviewed by proxy. |
| **Data source/s** | ABS Patient Experience Survey, 2012-13 |
| **Institutional environment** | Data Collector(s): The Patient Experience Survey is a topic on the Multipurpose Household Survey. It is 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](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument)  Collection authority: The *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*.  Data Compiler(s): Data is compiled by the Health section of the Australian Bureau of Statistics (ABS).  Statistical confidentiality is guaranteed under the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. The ABS notifies the public through a note on the website when an error in data has been identified. The data is withdrawn, and the publication is re-released with the correct data. Key users are also notified where possible. |
| **Relevance** | Level of Geography: Data is available by State/Territory, 2011 SEIFA and 2011 Remoteness (major cities, inner and outer regional, remote and very remote Australia).  Data Completeness: All data is available for this indicator from this source.  Indigenous Statistics: Indigenous data and associated data quality statements will be provided in a separate data supply. Due to differences in survey design and collection methodology, ABS advises that data from the Patient Experience survey is not comparable to data from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). As such, comparisons between Indigenous and the general population are not available for this indicator.  Socioeconomic status data: Data is available by the 2011 SEIFA index of disadvantage. There has been no significant impact from transitioning from 2006 SEIFA to 2011 SEIFA. Similarly, there has been no significant impact from transitioning from the 2006 remoteness classification to the 2011 remoteness classification.  Numerator/Denominator Source: Same data source.  Data for this indicator was collected for all persons in Australia, excluding the following people:   * members of the Australian permanent defence forces * diplomatic personnel of overseas governments, customarily excluded from census and estimated population counts * overseas residents in Australia * members of non-Australian defence forces (and their dependents) * people living in non-private dwellings such as hotels, university residences, boarding schools, hospitals, retirement homes, homes for people with disabilities, and prisons * people living in discrete indigenous communities.   The 2011-12 iteration of the Patient Experience survey was the first to include households in very remote areas, (although it still excluded discrete indigenous communities). The 2012-13 iteration continues to include data from very remote areas. The inclusion of very remote areas will serve to improve the coverage of the estimates, particularly for the Northern Territory. Small differences evident in the NT estimates between 2010-11 and 2011-12 may in part be due to the inclusion of households in very remote areas.  Data was self-reported for this indicator. Persons who were interviewed by proxy were excluded. |
| **Timeliness** | Collection interval/s: Patient Experience data is collected annually.  Data available: The 2012-13 data used for this indicator became available from 22 November 2013.  Referenced Period: July 2012 to June 2013.  There are not likely to be revisions to this data after its release. |
| **Accuracy** | Method of Collection: The data was collected by computer assisted telephone interview.  Data Adjustments: Data was weighted to represent the total in scope Australian population, and was adjusted to account for confidentiality and non-response.  Sample/Collection size: The sample for the 2012-13 patient experience survey was 30,749 fully-responding households. Note this is a substantial increase from the 2011-12 sample size of 26,437. This increase will improve the reliability of the data, particularly at finer levels of disaggregation.  Response rate: Response rate for the survey was 78.9 per cent  As data is drawn from a sample survey, the indicator is subject to sampling error, which occurs because a proportion of the population is used to produce estimates that represent the whole population. Rates should be considered with reference to their corresponding relative standard errors (RSEs) and 95 per cent confidence intervals. Estimates with a relative standard error between 25 per cent and 50 per cent should be used with caution, and estimates with a relative standard error over 50 per cent are considered too unreliable for general use.  This indicator generally has acceptable levels of sampling error and provides reliable data for most breakdowns. However, RSEs for remote/very remote breakdowns are mostly greater than 25 per cent and should either be used with caution or are considered too unreliable for general use. Similarly, data for the “other” remoteness category has high RSEs when cross classified by State. Caution should be used when interpreting these data.  The data for this indicator is attitudinal, as it collects whether people felt they waited too long to get an appointment with a GP or specialist, and whether the person felt the health professional in question spent enough time with them, listened carefully and showed them respect (the ‘patient satisfaction’ questions).  Data is used from personal interviews only (i.e. excluding proxy interviews).  Explanatory footnotes are provided for each table. |
| **Coherence** | Consistency over time: 2009 was the first year data was collected for this indicator.  Questions relating to acceptable waiting times for GPs were asked in 2009, 2010-11, 2011-12 and 2012-13. While the question wording itself did not change, the position in the survey (ie where the question was asked) changed in 2011-12 and again in 2012-13. There has been a noticeable contextual effect with this change in question ordering, and ABS recommends that this data item is not comparable over time. This has been footnoted in the relevant tables.  Similarly, questions relating to acceptable waiting times for Medical Specialists were asked in 2009, 2010-11, 2011-12 and 2012-13. While the question wording itself did not change, the position in the survey (ie where the question was asked) changed in 2011-12. There has been a noticeable contextual effect with this change in question ordering. As such, ABS recommends that 2012-13 data is comparable to 2011-12, but not before this (ie not comparable to 2010-11 or 2009). As a result, a time series can be started from 2011-12 onwards. This has been footnoted in the relevant tables.  Numerator/denominator: The numerator and denominator are directly comparable, one being a sub-population of the other.  The numerator and denominator are compiled from a single source.  Jurisdiction estimate calculation: Jurisdiction estimates are calculated the same way, although the exclusion of discrete indigenous communities in the sample will affect the NT more than it affects other jurisdictions.  Jurisdiction/Australia estimate calculation: All estimates are compiled the same way.  Collections across populations: Data is collected the same way across all jurisdictions.  The Patient Experience survey provides the only national data available for this indicator. At this stage, there are no other comparable data sources. |
| **Interpretability** | Context: This data was collected from a representative sample of the Australian population and questions were asked in context of the year prior to the survey. The data was collected over a twelve month period and therefore should minimise any seasonality effects in the data.  Other Supporting information: The ABS Patient Experience data is published in Patient Experiences in Australia: Summary of Findings,  2012-13 (cat. no. 4839.0). This publication includes explanatory and technical notes.  Socioeconomic status definition: The SEIFA Index of Relative Socio-economic Disadvantage uses a broad definition of relative socio-economic disadvantage in terms of people's access to material and social resources, and their ability to participate in society. While SEIFA represents an average of all people living in an area, it does not represent the individual situation of each person. Larger areas are more likely to have greater diversity of people and households.  Socioeconomic status derivation: The 2011 SEIFA index of relative  socio-economic disadvantage is derived from Census variables related to disadvantage, such as low income, low educational attainment, unemployment, and dwellings without motor vehicles.  Socioeconomic status deciles derivation: Deciles are based on an equal number of areas. A score for a collection district (CD) is created by adding together the weighted characteristics of that CD. The scores for all CDs are then standardised to a distribution where the average equals 1000 and roughly two-thirds of the scores lie between 900 and 1100.The CDs are ranked in order of their score, from lowest to highest. Decile 1 contains the bottom 10 per cent of CDs, Decile 2 contains the next 10 per cent of CDs and so on. Further information on SEIFA can be found in the ABS Technical paper [Socio-Economic Indexes for Areas 2011 (cat. No. 2033.0.55.001).](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/2033.0.55.001Main+Features12011?OpenDocument)  Any ambiguous or technical terms for the data are available from the Technical Note, Glossary and Explanatory Notes in Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0). |
| **Accessibility** | Data publicly available. Tables showing patients experiences with health professionals are available in Health Services: Patient Experiences in Australia, 2009 (cat. no. 4839.0.55.001), Patient Experiences in Australia: Summary of Findings, 2010-11, Patient Experiences in Australia: Summary of Findings, 2011-12 and Patient Experiences in Australia: Summary of Findings, 2012-13 (cat. no. 4839.0).  Data for this indicator is shown by age, sex, SEIFA and remoteness. Jurisdictional data is not currently publicly available but may be made available in the future.  Data is not available prior to public access.  Supplementary data is available. Additional data from the Patient Experience Survey is available upon request.  Access permission/Restrictions: Customised data requests may incur a charge.  Contact Details: For more information, please call the ABS National Information and Referral Service on 1300 135 070. |

### **Data Quality Statement — Indicator 32: Patient satisfaction/experience *(interim supplementary measure) (Australian Aboriginal and Torres Strait Islander Health Survey)***

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| **Outcome** | Australians have positive health and aged care experiences which take account of individual circumstances and care needs |
| **Indicator** | NHA 32 – Patient satisfaction/experience |
| **Measure (computation)** | *Numerator*: number of persons who saw a GP in the last 12 months who reported the GP always or often: listened carefully to them; showed respect; and spent enough time with them.  *Denominator*: total population of persons who saw a GP (for their own health) in the last 12 months. |
| **Data source/s** | The Australian Bureau of Statistics (ABS) 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) comprises three surveys — the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), the National Aboriginal and Torres Strait Islander Nutrition and Physical Activity Survey (NATSINPAS) and the National Aboriginal and Torres Strait Islander Health measurements Survey (NATSIHMS). Data for patient satisfaction/experience is sourced from the NATSIHS component of the AATSIHS. |
| **Institutional environment** | The NATSIHS was collected, processed and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework that includes the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. These ensure the independence from political influence and impartiality 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **Relevance** | Data are available by state/territory and by Remoteness Area for non-remote areas only (major cities, inner regional and outer regional).  The NATSIHS collected self-reported information on whether a person had seen a GP in the last 12 months for urgent medical care. This question was asked of all persons in non-remote areas only, excluding the following:   * non-Indigenous persons * non-Australian diplomats, diplomatic staff and members of their household * members of non-Australian Defence forces stationed in Australia and their dependents, and * overseas visitors.   Due to differences in survey design and collection methodology, ABS advises that data from the NATSIHS are not comparable with data from the Patient Experience Survey. Comparisons between Aboriginal and Torres Strait Islander people and the general population are therefore not available for this indicator. |
| **Timeliness** | The 2012-13 NATSIHS was conducted from April 2012 to February 2013. First results were released in November 2013. The previous NATSIHS was conducted in 2004-05. |
| **Accuracy** | The NATSIHS was conducted in all states and territories, including very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were excluded from the survey. The final response rate was 80 per cent. Results are weighted to account for non-response.  As they are drawn from a sample survey, data for the indicator are 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 the relative standard error (RSE) of the estimates. 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. |
| **Coherence** | The numerator and denominator are compiled from a single source and are directly comparable, one being a sub-population of the other.  The methods used to construct the indicator are consistent and comparable with other collections and with international practice.  The NATSIHS collected a range of other health-related information that can be analysed in conjunction with this indicator. |
| **Interpretability** | The data for the NATSIHS are available from the ABS website in the publication Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001). Other information from the survey is available on request. |
| **Accessibility** | Information on how to interpret and use the data appropriately is available from Explanatory Notes in Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13 (ABS cat. no. 4727.0.55.001) and the Australian Aboriginal and Torres Strait Islander Health Survey: Users’ Guide, 2012-13 (ABS cat. No. 4727.0.55.002). |

### **Data Quality Statement — Indicator 33: Full time equivalent employed health practitioners per 1000 population (by age group)**

Key data quality points:

* The rates have been calculated per 100,000 population for this indicator to assist with interpretation.
* Due to the differences in data collection, processing and estimation methods, including survey design and questionnaire, it is recommended that comparisons between workforce data from the National Health Workforce Data Set (NHWDS) and the previous Australian Institute of Health and Welfare (AIHW) Labour Force Survey be made with caution.
* Results for the indicator are estimates because the survey 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 estimates and any bias is likely to become more pronounced when response rates are low or when estimates are based on a small number of survey records. Care should be taken when drawing conclusions about the size of the differences between estimates.
* The 2011 and 2012 allied health workforce indicator data exclude provisional registrants.
* The 2012 dental, medical and nursing and midwifery workforce indicator data exclude provisional registrants.
* Data have been revised since the publication of Medical workforce 2010, Medical workforce 2011 and Nursing and midwifery workforce 2011, so these data will not match data previously published.
* The 2011 data for osteopaths in the allied health workforce has been revised since the publication of Allied health workforce 2012, so the data will not match data previously published.

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| **Outcome** | Australians have a sustainable health system |
| **Indicator** | Full time equivalent employed health practitioners per 1 000 population (by age group) |
| **Measure (computation)** | Workforce sustainability reports aged profiles for nurse and midwife, medical practitioner, dental practitioner and allied health practitioner workforces. It shows the numbers of each of these registered professions in ten year age brackets, both by jurisdiction and by region. |
| **Data source/s** | National Health Workforce Data Set: medical practitioners 2010, 2011 and 2012;  National Health Workforce Data Set: nurses and midwives 2011 and 2012;  National Health Workforce Data Set: dental practitioners 2011 and 2012;  National Health Workforce Data Set: allied health practitioners 2011 and 2012. |
| **Institutional environment** | The Australian Institute of Health and Welfare (AIHW) has calculated this indicator using estimates derived from the National Health Workforce Data Set (NHWDS). The NHWDS is developed through the collaboration of three agencies.  The Australian Health Practitioner Regulation Agency (AHPRA) is the organisation responsible for the implementation of the National Registration and Accreditation Scheme (NRAS) across Australia, including collecting registration data and administering the workforce surveys.  Health Workforce Australia is responsible for the development of the health workforce surveys.  The AIHW receives registration and survey data from the AHPRA. The registration and workforce survey data are combined, cleansed and adjusted for non-response to form NHWDS, and the findings reported by profession. AIHW is the data custodian of the NHWDS. These data are used for workforce planning, monitoring and reporting.  The AIHW is an independent statutory authority within the Health portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website. |
| **Relevance** | Medical practitioners, dental practitioners, nurses/midwives and allied health practitioners are required by law to be registered with their relevant national board to practise in Australia. All medical practitioners, dental practitioners, nurses/midwives and nominated allied health practitioners must complete the formal registration renewal form(s) to practise in Australia. This is the compulsory component of the renewal process. The exception is Aboriginal and Torres Strait Islander health practitioners in the allied health workforce; where those who are not required by their employer to use the title 'Aboriginal and Torres Strait Islander health practitioner', 'Aboriginal health practitioner' or 'Torres Strait Islander health practitioner' are not required to be registered, and can continue to work using their current titles (e.g. 'Aboriginal health worker', 'drug and alcohol worker' and 'mental health worker').  The health workforce surveys for each of these professions is voluntary and only practitioners who renew their registration receive a questionnaire for completion. New registrants will not receive a survey form until they renew their registration the following year, during the registration renewal period. Practitioners with limited registration are due for renewal on the anniversary of their first registration and can thus renew and complete a survey at any time through the year.  National Health Workforce Data Set: medical practitioners 2010, 2011 and 2012  The NHWDS: medical practitioners 2010, 2011 and 2012 contain registration details of all registered medical practitioners in Australia, at 30 September on the annual renewal date. Data were extracted from the AHPRA database at the end of November of the same year. The NHWDS also contains workforce data of respondents whose principal state of practice was not Queensland or Western Australia, obtained from the Medical Workforce Survey 2010. These states were excluded from the survey because not all registrations in these states expired prior to the national registration deadline. In 2011 and 2012, the NHWDS contains workforce data obtained from the Medical Workforce Survey for all states and territories.  National Health Workforce Data Set: dental practitioners 2011 and 2012  The NHWDS: dental practitioners 2011 and 2012 contain registration details of all registered dental practitioners in Australia, at 30 November on the annual renewal date. Data were extracted from the AHPRA database at the end of January the following year. In 2011 and 2012, the NHWDS contains workforce data obtained from the Dental Workforce Survey.  National Health Workforce Data Set: nurses and midwives 2011 and 2012  The NHWDS: nurses and midwives 2011 and 2012 contain registration details of all registered nurses/midwives in Australia at 31 May on the annual renewal date. Data were extracted from the AHPRA database at the end of November of the same year. In 2011 and 2012, the NHWDS contains workforce data obtained from the Nursing and Midwifery Workforce Survey.  National Health Workforce Data Set: allied health practitioners 2011 and 2012.  The NHWDS: allied health practitioners 2011 and 2012 contain registration details of all registered allied health practitioners in Australia, at 30 November on the annual renewal date. Data were extracted from the AHPRA database at the end of January the following year. The NHWDS also contains workforce data obtained from each profession-specific health workforce survey.  Indicator data for allied health practitioners are not comparable between 2011 and 2012 due to four additional professions joining the NRAS in 2012. For 2011, data was collected for seven professions: chiropractors, optometrists, osteopaths, pharmacists, physiotherapists, psychologists and podiatrists. For 2012, in addition to the seven in 2011, data was collected for Aboriginal and Torres Strait Islander health practitioners, Chinese medicine practitioners, medical radiation practitioners and occupational therapists.  Due to transitional arrangements with the migration of data from state and territory-based systems to NRAS, in 2012, many medical radiation practitioners in Queensland, Western Australia and Tasmania were not required to renew their registrations and, as a result did not complete a workforce survey. As a consequence, data for Queensland, Western Australia and Tasmania for this profession are excluded from the indicator data for allied health practitioners.  For the same reason, occupational therapists in Queensland, Western Australia and South Australia are excluded from the indicator data for allied health practitioners in 2012. |
| **Timeliness** | National Health Workforce Data Set:  The NHWDS for each of the registered professions will be produced annually during the national registration renewal process. Each profession will also be administered a Workforce Survey as part of the registration renewal process.  *—Medical practitioners 2010, 2011 and 2012*  The NHWDS: medical practitioners is produced annually from information collected by the national registration renewal process, conducted between 1 July and 30 September each year, including the collection of the Medical Workforce Survey. The period for the 2010 renewal process was extended to the end of January 2011. Despite this extension, there were still Queensland and Western Australia registrants with expiry dates after January. Therefore data from these states were not included in the 2010 data set.  *—Nurses and midwives 2011 and 2012*  The NHWDS: nurses and midwives is produced annually from information collected by the national registration renewal process, conducted between 1 April and 31 May each year, including the collection of the Nursing and Midwifery Workforce Survey. The period for the 2011 renewal process was extended to the end of June 2011 for Queensland and end of December 2011 for Western Australia registrants.  *—Dental practitioners 2011 and 2012*  The NHWDS: dental practitioners is produced annually from information collected by the national registration renewal process, conducted between 1 September and 30 November each year, including the collection of the Dental Workforce Survey. Practitioners with limited registration are due for renewal on the anniversary of their first registration and can thus renew and complete a survey at any time through the year.  *—Allied health practitioners 2011 and 2012*  The NHWDS: allied health practitioners is produced annually from information collected by the national registration renewal process, conducted between 1 September and 30 November each year, including the collection of the profession-specific workforce surveys. Practitioners with limited registration are due for renewal on the anniversary of their first registration and can thus renew and complete a survey at any time through the year. |
| **Accuracy** | Data manipulation and estimation processes  The registration and workforce survey data for each health profession are combined, cleansed and adjusted for non-response to form the National Health Workforce Data Set (NHWDS). 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 data have undergone imputation for item non-response and are weighted to the total number of registered practitioners to adjust for population non-response. It should be noted that both of these kinds of non-response is likely to introduce some bias in the estimates and any bias is likely to become more pronounced when response rates are low or when estimates are based on a small number of records. Care should be taken when drawing conclusions about the size of the differences between estimates.  As a result of the estimation method to adjust for non-response, numbers of medical practitioners, dental practitioners, nurses/midwives or allied health practitioners may have been in fractions, but have been rounded to whole numbers for this indicator. The full-time equivalent (FTE) rate calculations are based on rounded numbers.  Registration data from the National Registration and Accreditation Scheme (NRAS)  Registration details were migrated from the respective state and territory professional board (or council) for practitioners with registrations expiring after the official AHPRA closing date for their profession.  Some data items previously collected by the AIHW Labour Force Surveys are now collected by the NRAS. However, some data quality issues due to migrated data items from the respective state and territory health profession boards may have affected the weighting method.  Medical practitioners, dental practitioners, nurses/midwives and allied health practitioners who reside overseas have been included with practitioners whose state or territory of principal practice and state or territory of main job, respectively, could not be determined.  Health Workforce Survey  The online survey questionnaire does not include electronic sequencing of questions to automatically guide the respondent to the next appropriate question based on previous responses to questions. This resulted in a number of inconsistent responses.  The order of the response categories for some questions may have also impacted on the accuracy of the information captured. In addition, there was variation in some responses between the online and paper surveys.    NHWDS data by profession  The following should be noted when comparing state and territory indicator data:   * The data include employed professionals who did not state or adequately describe their state of principal practice and employed professionals who reside overseas. The national estimates include this group.   *National Health Workforce Data Set: medical practitioners 2010, 2011 and 2012*   * The overall response rate for 2010 (excluding Queensland and Western Australia) was 76.6 per cent. * The overall response rate for 2011 was 85.3 per cent. * The overall response rate for 2012 was 90.1 per cent.   *National Health Workforce Data Set: nurses and midwives 2011 and 2012*   * The overall response rate for 2011 was 85.1 per cent. * The overall response rate for 2012 was 93.3 per cent.   *National Health Workforce Data Set: dental practitioners 2011 and 2012*   * The overall response rate for 2011 was 88.3 per cent. * The overall response rate for 2012 was 92.2 per cent.   *National Health Workforce Data Set: allied health practitioners 2011 and 2012*   * The overall response rate for 2011 was 87.0 per cent. * The overall response rate for 2012 was 87.7 per cent. |
| **Coherence** | Health Workforce Survey—coherence with previous surveys  Labour force data published by the AIHW before the NRAS was established in July 2010, were the result of collated jurisdiction-level occupation-specific surveys. The current Health Workforce Survey gathers similar information from each professional group through a separate questionnaire, tailored slightly to take account of profession-specific responses to certain questions, e.g. work setting of main job.  For this indicator, the workforce surveys for medical practitioners, dental practitioners, nurses/midwives and allied health practitioners collect similar data items, but the methodology differs from previous years. The AHPRA is now the single source of registered practitioner data instead of eight state and territories bodies for each profession, and there is greater consistency between jurisdictions and years in the scope of registration information.  The scope and coverage of the Health Workforce Survey is also different from that of the previous series of AIHW Labour Force Surveys as not all jurisdictions surveyed all types of registered health practitioners.  If the location of principal practice recorded in the registration data was different from the corresponding details of their main job self-reported by practitioners in the survey, the location was derived hierarchically based on main job information and then on principal practice location then place of residence.  Date of birth is one of many data items previously collected by the AIHW Labour Force Surveys, which is now collected by the NRAS.  The three employment-related questions in the new survey are now nationally consistent, but vary from the previous AIHW Labour Force Survey. Due to the differences in data collection (including survey design and questionnaire), processing and estimation methods, it is recommended that comparisons between workforce data from the NHWDS and the previous AIHW Labour Force Survey be made with caution.  AIHW Published Numbers  For this indicator, the rates are based on practitioners employed in the medical, allied health and nursing and midwifery workforces, which is consistent with data published in AIHW's workforce reports. Except dental practitioner data are restricted to persons employed in the public sector and are thus not comparable to figures published elsewhere by the AIHW.  Registration data from the NRAS—coherence with published AHPRA/Board data  The NHWDS comprises the registration data extracted at a point in time from the NRAS, while the AHPRA/Board numbers include people registered in the previous 12 months, thereby including registrants whose registration terminated during that period (including short term registrants).  For 2011, the only source of published statistics about registered health professionals is the 2010–11 AHPRA annual report. From March 2012, each Board publishes the data on a quarterly basis.  *Medical practitioners in 2010, 2011 and 2012.*  The NHWDS numbers of registered medical practitioners for 2010 and 2011 are similar to data reported in the 2010–11 AHPRA annual report. For 2010, there were 84,516 registered practitioners for 2010, compared with 88,293 registered practitioners at 30 June 2011 in the AHPRA annual report.  For 2011, there were 87,790 registered medical practitioners in the NHWDS. Furthermore, the Medical Board of Australia in their quarterly data tables reported 91,354 for March 2012 and 91,645 for June 2012.  For 2012, there were 91,504 registered medical practitioners in the NHWDS, compared with 91,745 reported at December 2012 in the AHPRA quarterly data tables.  *Nurses/midwives in 2011 and 2012*  The NHWDS number of registered nurses and midwives for 2011 is similar to data reported in the 2010–11 AHPRA annual report, with 330,680 registered nurses and midwives in the NHWDS, compared with 332,185 registered nurses and midwives at 30 June 2011 in the AHPRA annual report. The Nursing and Midwifery Board of Australia in their quarterly data tables reported 341,189 for March 2012.  For 2012, there were 334,078 registered nurses and midwives in the NHWDS, compared with 343,703 reported at June 2012 in the 2011–12 AHPRA annual report.  *Dental practitioners in 2011 and 2012*  The NHWDS number of registered dental practitioners for 2011 is similar to data reported in the 2010–11 AHPRA annual report, with 18,660 registered practitioners in the NHWDS, compared with 18,319 registered dental practitioners at 30 June 2011 in the AHPRA annual report. The Dental Board of Australia in their quarterly data tables reported 18,902 for March 2012 and 19,087 for June 2012.  For 2012, there were 19,462 registered dental practitioners in the NHWDS, compared with 19,759 reported at December 2012 in the AHPRA quarterly data tables.  *Allied health practitioners in 2011 and 2012*  The NHWDS number of registered allied health practitioners for 2011 and 2012 are similar to data reported in the 2010–11 AHPRA annual report. For 2011, there were 91,587 registered practitioners in the NHWDS, compared with 91,318 registrations at 30 June 2011 in the AHPRA annual report.  For 2012, there were 126,788 registered allied health practitioners in the NHWDS, compared with 128,408 reported at December 2012 in the AHPRA quarterly data tables. |
| **Interpretability** | Explanatory information for the Medical Workforce Survey, Dental Workforce Survey and the Nursing and Midwifery Workforce Survey is contained in the published reports, supplementary detailed tables and data quality statements to the data set for each. For individual allied health professions, information about their workforce surveys is available in the *Allied health workforce 2012* report and data quality statement. This includes collection method, scope and coverage, survey response, imputation and weighting procedures, and assessment of data quality (including comparison with other data sources).  These are available via the AIHW website and readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. |
| **Accessibility** | Published products available on the AIHW website include workforce reports, survey questionnaires, user guides to the data sets and supplementary detailed tables. |

### **Data Quality Statement — Causes of Death**

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| **Indicator** | NHA 8 and 16 |
| **Measure (computation)** | Causes of Death |
| **Data source/s** | ABS Causes of death statistics are sourced from death 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. 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 causes 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.  Death records are provided electronically to the ABS by individual Registrars, on a monthly basis. Each death record contains both demographic data and medical information from the *Medical Certificate of Cause of Death*, where available. Information from coronial investigations are provided to the ABS through the National Coroners Information System (NCIS) |
| **Institutional environment** | This collection 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](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **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.  From the 2006 reference year, the scope of the collection is:   * all deaths registered in Australia for the reference year and which are received by the ABS by the end of the March quarter of the subsequent year; and * deaths registered prior to the reference year but not previously received from the Registrar, nor included in any statistics reported for an earlier period.   For example, records received by the ABS during the March quarter of 2011 which were initially registered in 2010 or prior (but not forwarded to the ABS until 2011) are assigned to the 2010 reference year. Any registrations relating to 2010 which are received by the ABS after the end of the March quarter are assigned to the 2011 reference year.  Data in the Causes of Death collection include demographic items, as well as causes of death information, which is coded according to the International Statistical Classification of Diseases and Related Health Problems (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 causes 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 by the ABS to code cause of death since 1997.  See [Causes of Death, Australia, 2011](http://www.abs.gov.au/ausstats/abs@.nsf/mf/3303.0) (cat. no. 3303.0) for further detail on scope and coverage of the collection. |
| **Timeliness** | Death records are provided electronically to the ABS by individual Registrars and the National Coroners Information System (NCIS) on a monthly basis, for compilation into aggregate statistics on an annual basis. One dimension of timeliness in causes of 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.  Causes of Death data are published annually, following the publication of Deaths, Australia (ABS cat 3302.0) in November of each year.  There is a focus on fitness for purpose when causes of death statistics are released. To meet user requirements for accurate causes of death data, it is necessary to obtain information from other administrative sources before all information for the reference period is available (e.g. information from finalisation of coronial proceedings to code an accurate cause of death). A balance therefore needs to be maintained between accuracy (completeness) of data and timeliness. The ABS provides the data in a timely manner, ensuring that all coding possible can be undertaken with accuracy prior to publication.  In addition, to address the issues which arise through the publication of causes of death data for open coroners’ cases, these data are now subject to a revisions process. This process enables the use of additional information relating to coroner certified deaths either 12 or 24 months after initial processing. For further information on the revisions process see Causes of Death, Australia, 2011 (cat.no. 3303.0) Explanatory Notes and Causes of Death Revisions 2009 and 2010 (Technical Note). See also Causes of Death Revisions 2006 (Technical Note) in Causes of Death, Australia, 2010 (cat. No. 3303.0). |
| **Accuracy** | Information on causes of death is obtained from a complete enumeration of deaths registered during a specified period, so is not subject to sampling error. However, causes of death data sources are subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data. The most significant of these errors are: mis-reporting of data items; deficiencies in coverage; incomplete records; and processing errors. Every effort is made to minimise non-sample error by working closely with data providers, running quality checks throughout the data processing cycle, training of processing staff, and efficient data processing procedures.  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.  Causes of death statistics are released with a view to ensuring that they are fit for purpose when released. Supporting documentation for causes of death statistics are published and should be considered when interpreting the data to enable the user to make informed decisions on the relevance and accuracy of the data for the purpose the user is going to use those statistics. To meet user requirements for timely data it is often necessary to obtain information from the administrative source before all information for the reference period is available (e.g. finalisation of coronial proceedings). A balance needs to be maintained between accuracy (completeness) of data and timeliness, taking account of the different needs of users.  All coroner certified deaths registered after 1 January 2006 are now subject to a revisions process. In this round of COAG reporting, 2007, 2008 and 2009 data is final, 2010 data is revised and 2011 data is preliminary. Data for 2010 and 2011 is subject to further revisions. Prior to 2006 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 enables the use of additional information relating to coroner certified deaths, as it becomes available over time. This results in increased specificity of the assigned ICD-10 codes.  Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Technical Note: Causes of Death Revisions 2009 and 2010 and in Causes of Death, Australia, 2011 (cat. no. 3303.0).  In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Aboriginal and Torres Strait Islander Australians.  The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010. Please note that there are differences between data output in the Causes of Death, Australia, 2010 publication (cat. No. 3303.0) and 2010 data reported for COAG, as this adjustment was not applied in the publication. For further details see Technical Note: Registration of outstanding deaths, Queensland 2010, from the Deaths, Australia, 2010 publication (cat. no. 3302.0) and Explanatory Note 103 in the Causes of Death, Australia, 2010 publication (cat. no. 3303.0).  Investigation conducted by the WA Registrar of Births, Deaths and Marriages indicated that some deaths of non-Indigenous people were wrongly recorded as deaths of Indigenous people in WA for 2007, 2008 and 2009. The ABS discussed this issue with a range of key stakeholders and users of Aboriginal and Torres Strait Islander deaths statistics. Following this discussion, the ABS did not release WA Aboriginal and Torres Strait Islander deaths data for the years 2007, 2008 and 2009 in the 2010 issue of Deaths, Australia publication, or in the 2011 COAG data supply. The WA Registry corrected the data and resupplied the corrected data to the ABS. These corrected data were then released by the ABS in spreadsheets attached to Deaths, Australia, 2010 (ABS, 2011) publication on 24 May 2012, and are included in this round of COAG reporting. |
| **Coherence** | The international standards and recommendations for the definition and scope of causes of deaths statistic in a vital statistics system are set out in the **Principles and Recommendations for a Vital Statistics System Revision 2**, published by the United Nations Statistical Division (UNSD). Consistent with the UNSD recommendations, the ABS defines a death as the permanent disappearance of all evidence of life at any time after live birth has taken place. In addition, the UNSD recommends that the deaths to be counted include all deaths "occurring in every geographic area and in every population group comprising the national area". For the purposes of Australia, this includes all deaths occurring within Australia as defined by the **Australian Statistical Geography Standard** (ASGS) that applies at the time.  Registration of deaths is compulsory in Australia under relevant state/territory legislation. However, each state/territory Registrar has its own death registration form. Most data items are collected in all states and territories and therefore statistics at a national level are available for most characteristics. In some cases, different wording of questions asked on the registration form may result in different answers, which may affect final figures.  Use of the supporting documentation released with the statistics is important for assessing coherence within the dataset and when comparing the statistics with data from other sources. Changing business rules over time and/or across data sources can affect consistency and hence interpretability of statistical output. The Explanatory Notes in each issue contains information pertinent to this particular release which may impact on comparison over time |
| **Interpretability** | Information on data sources, terminology, classifications and other technical aspects associated with death statistics can be found in Causes of Death, Australia, (cat. no 3303.0) in the Explanatory Notes, Appendices and Glossary on the ABS website. |
| **Accessibility** | Causes of death data are available in a variety of formats on the ABS website under the 3303.0 product family. 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 — Deaths**

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| **Indicator** | 7, 8, 16 |
| **Measure (computation)** | Deaths |
| **Data source/s** | ABS Death Statistics are 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. 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. |
| **Institutional environment** | This collection 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](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument). |
| **Relevance** | Death statistics are one of the components in the production of estimates of natural increase (the difference between numbers of births and deaths) used as a component of population change in the calculation of population estimates of Australia and the states and territories. The primary uses of population estimates are in the determination of seats in the House of Representatives for each state and territory, as well as in the distribution of Australian Government funds to state, territory and local governments. Population estimates are also used for a wide range of government, business and community decisions, both directly and indirectly, by contributing to a range of other social, health and economic indicators.  Death statistics are also essential in the analysis of morbidity and mortality in Australia. Trends in mortality are used in the development of assumptions of future levels of mortality for population projections.  Data refer to deaths registered during the calendar year shown, unless otherwise stated. Statistics on demographic characteristics of the deceased such as age at death, sex, place of usual residence, marital status, Indigenous status and country of birth are included.  Deaths data includes:   * any death which occurs in, or en route to Australia, including deaths of persons whose usual place of residence is overseas, and is registered with a state or territory Registry of Births, Deaths and Marriages.   Deaths data excludes:   * still births/fetal deaths (these are accounted for in perinatal death statistics published in Perinatal Deaths, Australia, cat. no. 3304.0, and previously, Causes of Death, Australia, cat. no. 3303.0); and * deaths of Australian residents which occur outside Australia. |
| **Timeliness** | 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.  Quarterly estimates of deaths on a preliminary basis are published five to six months after the reference period in Australian Demographic Statistics (cat. no. 3101.0), and revised 21 months after the end of each financial year. Annual estimates on a year of registration basis are published within eleven months of the end of the reference year in Deaths, Australia (cat. no. 3302.0).  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. |
| **Accuracy** | Information on deaths 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.  Sources of non-sample error include:   * completeness of an individual record at a given point in time; * completeness of the dataset (e.g. impact of registration lags, processing lags and duplicate records); * extent of coverage of the population (whilst all deaths are legally required to be registered, some cases may not be registered for an extended time, if at all); and * lack of consistency in the application of questions or forms used by data providers, both through time and between different jurisdictions.   Every effort is made to minimise error by working closely with data providers, the careful design of forms, training of processing staff, and efficient data processing procedures.  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.  In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Aboriginal and Torres Strait Islander Australians.  The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010. For further details see Technical Note: Registration of outstanding deaths, Queensland 2010, from the Deaths, Australia, 2010 publication (cat. no, 3302.0).  Investigation conducted by the WA Registrar of Births, Deaths and Marriages indicated that some non-Indigenous deaths were wrongly identified as Indigenous deaths in WA for 2007, 2008 and 2009. ABS discussed this issue with a range of key stakeholders and users of Aboriginal and Torres Strait Islander deaths statistics. Following this discussion, ABS has not released WA Aboriginal and Torres Strait Islander deaths data for the years 2007, 2008 and 2009 in the 2010 issue of *Deaths, Australia* publication. The WA Registry corrected the data and resupplied the corrected data to the ABS. These corrected data were then released by the ABS in spreadsheets attached to *Deaths, Australia, 2010* (ABS, 2011) publication on 24 May 2012, and are included in this round of COAG reporting. |
| **Coherence** | The international standards and recommendations for the definition and scope of deaths statistics in a vital statistics system are set out in the **Principles and Recommendations for a Vital Statistics System Revision 2**, published by the United Nations Statistical Division (UNSD). Consistent with the UNSD recommendations, the ABS defines a death as the permanent disappearance of all evidence of life at any time after live birth has taken place. In addition, the UNSD recommends that the deaths to be counted include all deaths "occurring in every geographic area and in every population group comprising the national area". For the purposes of Australia, this includes all deaths occurring within Australia in 2012 as defined by the **Australian Statistical Geography Standard** (ASGS).  Registration of deaths is compulsory in Australia under relevant state/territory legislation. However, each state/territory Registrar has its own death registration form. Most data items are collected in all states and territories and therefore statistics at a national level are available for most characteristics. In some cases, different wording of questions asked on the registration form may result in different answers, which may affect final figures.  Use of the supporting documentation released with the statistics is important for assessing coherence within the dataset and when comparing the statistics with data from other sources. Changing business rules over time and/or across data sources can affect consistency and hence interpretability of statistical output. |
| **Interpretability** | Deaths statistics are generally straightforward and easy to interpret. It should be noted, however, that changes in numbers of deaths over time can be due a number of factors including changes in mortality and changes in the size and age/sex structure of the population. For this reason, deaths data needs to be considered in relation to the size of the relevant population(s) through the use of mortality rates.  Information of mortality rates, as well as data sources, terminology, classifications and other technical aspects associated with death statistics can be found in Deaths Australia (cat. no 3302.0) in the Explanatory Notes, Appendices and Glossary on the ABS website. |
| **Accessibility** | Deaths data is available in a variety of formats on the ABS website under the 3302.0 product family. 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 — Estimated Resident Population**

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| **Indicator** | 7, 8, 16 |
| **Measure (computation)** | Estimated Resident Population (ERP) |
| **Data source/s** | Estimated Residential Population (ERP) statistics use data sourced from a variety of institutional environments. Much of the data is administrative  by-product data collected by other organisations for purposes other than estimating the population. Births and deaths statistics are extracted from registers administered by the various State and Territory Registrars of Births, Deaths and Marriages. Medicare Australia client address data is used to estimate interstate migration. Passenger card data and related information provided by the Department of Immigration and Citizenship (DIAC) is used to calculate Net Overseas Migration (NOM).  The ABS Census of Population and Housing and Post Enumeration Survey (PES) data are used to determine a base population from which ERP is calculated and to finalise all components of population change. |
| **Institutional environment** | This data is produced 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](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument). |
| **Relevance** | Estimates of the resident population (ERP) for the states and territories of Australia are published by sex and age groups. Estimates and projections of the Aboriginal and Torres Strait Islander population are also available. The ERP is the official measure of the population of states and territories of Australia according to a usual residence population concept. ERP is used for a range of key decisions such as resource and funding distribution and apportioning seats in the House of Representatives to each state and territory. |
| **Timeliness** | 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.  Commencing with data for September quarter 2006, revised estimates are released once more accurate births, deaths and NOM data becomes available. In the case of births and deaths, the revised data is compiled on a date of occurrence basis and is released 6 – 12months after the reference period. In the case of NOM, final data is based on actual traveller behaviour and is released 16 – 18 months after the reference period.  Final estimates are made available every 5 years after a Census and revisions are made to the previous intercensal period. Generally ERP data is not changed once it has been finalised unless there are compelling reasons to do so, as in June 2013 when data from September 1991 to June 2006 was revised (for more information on this recasting process, please see the feature article titled [Recasting 20 years of ERP](http://www.abs.gov.au/ausstats/abs@.nsf/Products/3101.0~Dec+2012~Feature+Article~Recasting+20+Years+of+ERP+(Feature+Article)?OpenDocument) in the December quarter 2012 issue of [Australian Demographic Statistics (cat. no. 3101.0)](http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/3101.0).  Releasing preliminary, revised and final ERP involves a balance between timeliness and accuracy. |
| **Accuracy** | 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 (see Institutional Environment).  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)](http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/B5BE54544A5DAFEFCA257061001F4540?OpenDocument) and [Population Estimates: Concepts, Sources and Methods, 2009 (cat. no. 3228.0.55.001).](http://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/3228.0.55.001)  After each Census the ABS uses the Census population count to update the original series of published quarterly population estimates since the previous Census. For example, 2011 Census results were used to update quarterly population estimates between the 2006 and 2011 Census. The PES is conducted soon after the Census to estimate the number of residents not included in the Census. Factoring the PES results into determining the ERP is a critical step in arriving at the most accurate determination of ERP possible. For more information on rebasing see the feature article in the December quarter 2012 issue of [Australian Demographic Statistics (cat. no. 3101.0).](http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0) |
| **Coherence** | ERP was introduced in 1981 and backdated to 1971 as Australia's official measure of population based on place of usual residence. ERP is derived from usual residence census counts, to which is added the estimated net census undercount and Australian residents temporarily overseas at the time of the Census (overseas visitors in Australia are excluded from this calculation). Before the introduction of ERP, the Australian population was based on unadjusted census counts on actual location basis. It is important to note this break in time series when comparing historical population estimates.  An improved method for calculating NOM was applied from September quarter 2006 onwards. The key change is the introduction of a '12/16 month rule' for measuring a person's residency in Australia replacing the '12/12 month rule'. This change results in a break in time series and therefore it is not advised that NOM data calculated using the new method is compared to data previous to this. For more information see [Information Paper: Improving Net Overseas Migration Estimation, 2009 (cat. no. 3412.0.55.001)](http://www.abs.gov.au/ausstats/abs@.nsf/mf/3412.0.55.001).  The births and deaths are not coherent with the data found in ABS births and deaths publications. This is because the revision cycle necessary to produce ERP results in a mix of preliminary births and deaths data, based on date of registration, and revised data which is a modelled estimate of births and deaths by date of occurrence. By contrast, the main tables of data in the births and deaths publications are based wholly on registration in the reference year, with some tables and analysis based wholly on date of occurrence data. |
| **Interpretability** | ERP is generally easy to interpret as the official measure of Australia's population (by state and territory) on a place of usual residence basis. However, there are still some common misconceptions. For example, a population estimate uses the term 'estimate' in a way which differs from the words’ common use. Generally the term estimate is used to describe a guess, or approximation. Demographers mean that they apply the demographic balancing equation by adding births, subtracting deaths and adding the net of overseas and interstate migration to a base population. Each of the components of ERP is subject to error, but ERP itself is not in any way a guess. It is what the population would be if the components are measured well.  Population estimation is also very different to sample survey-based estimation. This is because population estimation is largely based on a full enumeration of components. In the case of the population base, only the PES used sampled data to adjust for census net undercount. In the case of the components of population growth used to carry population estimates forward, Australia has a theoretically complete measure of each component.  Another example of a common misconception relates to the fact that the population projections are not predictions or forecasts. They are an assessment of what would happen to Australia's population if the assumed levels of different components of population change - births, deaths and migration - were to hold into the future. |
| **Accessibility** | ERP data is available in a variety of formats on the ABS website under the [3101.0](http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/3101.0) product family. The formats available free on the web are:   * The main features which has the key figures commentary, * A pdf version of the publication, * Time series spreadsheets on population change, components of change and interstate arrivals and departures, * A data cube (in Supertable format) containing quarterly interstate arrivals and departures data. |

### **Data Quality Statement — Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians**

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| **Indicator** | 7, 8, 16 |
| **Measure (computation)** | Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians |
| **Data source/s** | Australian Bureau of Statistics (ABS) estimates and projections of the Aboriginal and Torres Strait Islander (Indigenous) population of Australia are based on experimental population estimates derived from the most recent Census of Population and Housing and Post Enumeration Survey. Assumptions on past and future levels of the components of population change are applied to this base population in order to produce estimates (for earlier reference years) and projections (for future reference years).  Assumptions are derived from an analysis of data sourced from a variety of institutional environments. Much of this data is administrative  by-product data collected by other organisations. Assumptions on fertility and mortality are based on births and deaths statistics extracted from registers administered by the various State and Territory Registrars of Births, Deaths and Marriages. |
| **Institutional environment** | This data is produced 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](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument). |
| **Relevance** | Indigenous population estimates for years prior to the base population provide estimates on a temporally consistent basis, thus eliminating any inconsistencies in estimates due to the changing propensity to identify as Indigenous across censuses. Estimates are published for Australia and the states/territories, by five-year age group and sex.  Population projections inform on future changes in the Indigenous population of Australia, such as population growth/decline and changes in age structure, and are therefore used in a variety of key planning decisions. Projections are published for Australia, states/territories, Indigenous Regions and Remoteness Areas, by five-year age group and sex. Projected numbers of births and deaths are also published.  Assumptions have been formulated on the basis of past demographic trends, in conjunction with consultation with various individuals and government department representatives at the national and state/territory level. Consultation occurred between May and July 2009, after which the assumptions were finalised. |
| **Timeliness** | ABS Indigenous population estimates and projections are compiled and published once in each five year period; typically three years following the most recent census |
| **Accuracy** | Base population (2006 estimates)  The estimates and projections presented in this publication are based on results of the 2006 Census of Population and Housing, adjusted for net undercount as measured by the Post Enumeration Survey (PES). The goal of the census is to obtain a complete measure of the number and characteristics of people in Australia on census night and their dwellings.  The ABS conducts the PES shortly after the census to determine how many people were missed in the census and how many were counted more than once. For 2006, the net undercount of the Indigenous population was 59,200 persons. The extent of under-coverage of Indigenous Australians in the 2006 Census, the relatively small sample size of the PES to adjust for that under-coverage, and the number of records with unknown Indigenous status means that 2006 population estimates should be interpreted with caution, and are therefore labelled experimental.  *Population estimates*  Given the poor quality of historical Indigenous component data (births, deaths and migration), ABS Indigenous population estimates for non-Census years are produced by applying assumptions about past levels of Indigenous life expectancy at birth to the base population. As levels of these components are unknown, estimates should be treated with caution, particularly for the period 1986 to 1990.  Indigenous population estimates for 1986 to 2005 based on the 2006 Census supercede previously published estimates for this period.  Population projections  ABS Indigenous population projections are based on a number of assumptions on future levels of fertility, mortality and migration. They are not intended as predictions or forecasts, but are illustrations of growth and change in the Indigenous population that would occur if the assumptions were to prevail over the projection period.  While the assumptions are formulated on the basis of an assessment of past demographic trends, there is no certainty that any of the assumptions will be realised. In addition, the assumptions do not attempt to allow for non-demographic factors (such as major government policy decisions, economic factors, catastrophes, wars, epidemics or significant health treatment improvements) which may affect future demographic behaviour or outcomes. |
| **Coherence** | The estimates and projections presented in this publication are not consistent with estimates and projections based on 2001 or previous censuses. As the assumptions used in each successive set of Indigenous population estimates and projections incorporate recent trends, comparison of data across issues of this publication is not advised. |
| **Interpretability** | ABS population projections are not intended as predictions or forecasts, and should not be considered as such. Rather, they are illustrations of growth and change in the population that would occur if the assumptions were to prevail over the projection period.  The outputs on the ABS web site under the 3238.0 product family contain notes on the assumptions and methods used to produce the Indigenous population estimates and projections. It also contains Explanatory Notes and Glossary that provide information on the data sources, terminology, classifications and other technical aspects associated with these statistics. |
| **Accessibility** | ABS Indigenous population projections are available in a variety of formats on the ABS web site under the 3238.0 product family. The formats available are:   * Main Features, which contains commentary on key figures; * a .pdf version of the publication; * data cubes containing: * Indigenous population estimates and projections for Australia and the states and territories, by five-year age group (to 85 years and over) and sex, for all projection series (Series A to N); * Indigenous population projections for Indigenous Regions, by five-year age group (to 65 years and over) and sex; * Indigenous population projections for Remoteness Areas, by five-year age group (to 75 years and over) and sex. * data cubes containing population projections, components of change and summary statistics for Australia and the states and territories, Indigenous Regions and Remoteness Areas, for the two main projection series (Series A and B).   The ABS observes strict confidentiality protocols as required by the Census and Statistics Act, 1905. This may limit access to data at a detailed level. |

### **Data Quality Statement — Variability bands**

* Variability bands accompanying mortality data should be used for the purposes of comparisons at a point in time and over time. They should not be used for comparing mortality rates at a single point in time between jurisdictions as the variability bands and mortality rates do not take into account differences in under-identification of Indigenous deaths between jurisdictions.

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| **Indicator** | NHA 7, 8 and 16 |
| **Measure (computation)** | ‘Standard method’ for variability band computation: Rates derived from administrative data counts are not subject to sampling error but may still be subject to natural random variation, especially for small counts. A 95 per cent confidence interval for an estimate is a range of values which is very likely (95 times out of 100) to contain the true unknown value. Where the confidence intervals do not overlap it can be concluded that there is a statistically significant difference between the two estimates compared. This is the standard method used in AIHW publications for which formulas can be sourced from Breslow and Day (1987) in the publication ‘Statistical methods in cancer research’. Typically in the standard method, the observed rate is assumed to have natural variability in the numerator count (e.g. deaths, hospital visits) but not in the population denominator count. Variations in Indigenous death rates may arise from uncertainty in the recording of Indigenous status on the death registration forms (in particular, under-identifications of Indigenous deaths) and in the Census, from which population estimates are derived. These variations are not considered in this method. Also, the rate is assumed to have been generated from a Normal distribution ("Bell curve"). Random variation in the numerator count is assumed to be centred around the true value - i.e. there is no systematic bias.  Variability band: to be calculated using the standard method for estimating 95 per cent confidence intervals as used by the AIHW for administrative data as follows:  *Crude rate (CR):*            *I*  *i*  *d*  *CR*  *CR*  *CR*  *CI*  1  %  95  96  .  1  )  (  Where *d* = the number of deaths.  *Age-standardised rate (ASR):*    Where *wi* = the proportion of the standard population in age group *i.*  *di* = the number of deaths in age group *i.*  *ni* = the number of people in the population in age group *i.*  *Infant mortality rate (IMR):*    Where *d0* = the number of deaths aged less than 1 year. |
| **Data source/s** | *Numerator* : ABS Deaths collection, Causes of Death collection (3303.0),  *Denominator*: ABS Estimated Residential Population (3101.0), ABS Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians (3238.0), ABS Population Projections, Australia, 2006 to 2101 (cat. no. 3222.0), ABS Births Collection (3301.0)  These collections are 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. |
| **Institutional environment** | These collections are 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.](http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/10ca14cb967e5b83ca2573ae00197b65!OpenDocument) |
| **Relevance** | The ABS Deaths, Causes of Death and Perinatal Deaths collections include 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 and Perinatal Deaths collections 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 causes 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** | Death records are provided electronically to the ABS by individual Registrars and the National Coroners Information System on a monthly basis for compilation into aggregate statistics on an 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. |
| **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, causes of death data sources are subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data. Variability bands are applied to the data to give a 95 per cent confidence interval range around the estimated figure.  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.  In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Aboriginal and Torres Strait Islander Australians.  The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010.  Investigation conducted by the WA Registrar of Births, Deaths and Marriages indicated that some deaths of non-Indigenous people were wrongly recorded as deaths of Indigenous people in WA for 2007, 2008 and 2009. The ABS discussed this issue with a range of key stakeholders and users of Aboriginal and Torres Strait Islander deaths statistics. Following this discussion, the ABS did not release WA Aboriginal and Torres Strait Islander deaths data for the years 2007, 2008 and 2009 in the 2010 issue of Deaths, Australia publication, or in the 2011 COAG data supply. The WA Registry corrected the data and resupplied the corrected data to the ABS. These corrected data were then released by the ABS in spreadsheets attached to Deaths, Australia, 2010 (cat. no. 3302.0) publication on 24 May 2012, and are included in this round of COAG reporting.  Causes of death statistics are released with a view to ensuring that they are fit for purpose when released. Supporting documentation for causes of death statistics are published and should be considered when interpreting the data to enable the user to make informed decisions on the relevance and accuracy of the data for the purpose the user is going to use those statistics. To meet user requirements for timely data it is often necessary to obtain information from the administrative source before all information for the reference period is available (e.g. finalisation of coronial proceedings). A balance needs to be maintained between accuracy (completeness) of data and timeliness, taking account of the different needs of users.  All coroner certified deaths registered after 1 January 2006 are now subject to a revisions process. In this round of COAG reporting, 2007, 2008 and 2009 data is final, 2010 data is revised and 2011 data is preliminary. Data for 2010 and 2011 is subject to further revisions. Prior to 2006 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 enables the use of additional information relating to coroner certified deaths, as it becomes available over time. This results in increased specificity of the assigned ICD-10 codes.  Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Technical Note: Causes of Death Revisions 2009 and 2010 and in Causes of Death, Australia, 2011 (cat.no. 3303.0). |
| **Coherence** | The international standards and recommendations for the definition and scope of causes of deaths statistic in a vital statistics system are set out in the *Principles and Recommendations for a Vital Statistics System Revision 2*, published by the United Nations Statistical Division (UNSD). Consistent with the UNSD recommendations, the ABS defines a death as the permanent disappearance of all evidence of life at any time after live birth has taken place. In addition, the UNSD recommends that the deaths to be counted include all deaths "occurring in every geographic area and in every population group comprising the national area". For the purposes of Australia, this includes all deaths occurring within Australia in 2012 as defined by the *Australian Statistical Geography Standard* (ASGS).  Registration of deaths is compulsory in Australia under relevant state/territory legislation. However, each state/territory Registrar has its own death registration form. Most data items are collected in all states and territories and therefore statistics at a national level are available for most characteristics. In some cases, different wording of questions asked on the registration form may result in different answers, which may affect final figures.  Use of the supporting documentation released with the statistics is important for assessing coherence within the dataset and when comparing the statistics with data from other sources. Changing business rules over time and/or across data sources can affect consistency and hence interpretability of statistical output. The Explanatory Notes in each issue contains information pertinent to this particular release which may impact on comparison over time. |
| **Interpretability** | Information on some aspects of statistical quality may be hard to obtain as information on the source data has not been kept over time. This is related to the issue of the administrative rather than statistical purpose of the collection of the source data. Information on data sources, terminology, classifications and other technical aspects associated with death statistics can be found in Causes of Death, Australia, (cat. no 3303.0) in the Explanatory Notes, Appendices and Glossary on the ABS website. |
| **Accessibility** | Causes of death data are available in a variety of formats on the ABS website under the 3303.0 product family. 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. |

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## Acronyms and Abbreviations

AACR Australian Association of Cancer Registries

AATSIHS Australian Aboriginal and Torres Strait Islander Health Survey

ABS Australian Bureau of Statistics

ACAT Aged Care Assessment Team

ACD Australian Cancer Database

ACHI Australian Classification of Health Interventions

ACSQHC Australian Commission on Safety and Quality in Health Care

ACT Australian Capital Territory

AHMAC Australian Health Ministers’ Advisory Council

AHS Australian Health Survey

AIHW Australian Institute of Health and Welfare

ASGC Australian Standard Geographical Classification

ASGS Australian Statistical Geographical Standard

ASIB Australian Social Inclusion Board

Ausdiab Australian Diabetes, Obesity and Lifestyle

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

DALY disability-adjusted life years

DIAC Department of Immigration and Citizenship

DoHA Department of Health and Ageing

DQS Data Quality Statement

DVA Department of Veterans’ Affairs

EACH Extended Aged Care at Home

EACH-D Extended Aged Care at Home Dementia

ED emergency department

ERP ABS Estimated Resident Population

FTE full time equivalent

GDP Gross Domestic Product

GP general practitioner

HACC Home and Community Care

ICD International Classification of Diseases

ICD 10 International Statistical Classification of Diseases and Related Health Problems 10th Revision

ICD 10 AM International Statistical Classification of Diseases and Related Health Problems 10th Revision, Australian modification

IGA Intergovernmental Agreement

IRSD Index of Relative Socio-economic Disadvantage

K10 Kessler Psychological Distress Scale-10

K5 Kessler Psychological Distress Scale-5

MBS Medicare Benefits Schedule

MDS Minimum Data Set

MPS Multi-Purpose Service Program

MRSA Methicillin-resistant *Staphylococcus aureus*

MSSA Methicillin-sensitive *Staphylococcus aureus*

NA National Agreement

NAPEDC Non-admitted Patient Emergency Department Care

NATSIHS National Aboriginal and Torres Strait Islander Health Survey

NATSISS National Aboriginal and Torres Strait Islander Social Survey

NCIS National Coroners Information System

NCSCH National Cancer Statistics Clearing House

NESWTDC National Elective Surgery Waiting Times Data Collection

NHA National Healthcare Agreement

NHHRC National Health and Hospitals Reform Commission

NHIPPC National Health Information Standards and Statistics Committee

NHISSC National Health Information Standards and Statistics Committee

NHMD National Hospital Morbidity Database

NHMS National Health Measures Survey

NHS National Health Survey

NIRA National Indigenous Reform Agreement

NMD National Mortality Database

NMDS National Minimum Data Set

NNAPEDCD National Non-Admitted Patient Emergency Department Care Database

NOM net overseas migration

NP National Partnerships

NPDC National Perinatal Data Collection

NPHED National Public Hospital Establishment Database

NPESU National Perinatal Epidemiology and Statistics Unit.

NRAS National Registration and Accreditation Scheme

NSW New South Wales

NT Northern Territory

OECD Organisation for Economic Cooperation and Development

OGTTs Oral glucose tolerance tests

PBS Pharmaceutical Benefits Scheme

PC Productivity Commission

PES Post Enumeration Survey

PExS ABS Patient Experience Survey

PMHA Private Mental Health Alliance

PPH potentially preventable hospitalisations

Qld Queensland

RA Remoteness areas

RoGS Report on Government Services

RSE relative standard error

SA South Australia

SA 2 Statistical Area Level 2

SAB *Staphylococcus aureus* bacteraemia

SCFFR Standing Committee on Federal Financial Relations

SCRGSP Steering Committee for the Review of Government Services Provision

SEIFA Socio-Economic Index for Areas

SEIFA IRSD ABS Socio-Economic Index for Areas Index of Relative Socio-economic Disadvantage

SES socioeconomic status

SLA Statistical Local Area

SPP Special Purpose Payment

Tas Tasmania

TCP Transition Care Program

UNSD United Nations Statistical Division

VET vocational education and training

VHC Veterans’ Home Care

Vic Victoria

VII voluntary Indigenous identifier

WA Western Australia

WHO World Health Organisation

## 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, population subgroups 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. |
| **Data provider** | As used in this report, the data provider is the agency or organisation which supplies data to the SCRGSP. |
| **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). |
| **Relative standard error (RSE)** | The relative standard error (RSE) of a survey data estimate is a measure of the reliability of the estimate and depends on both the number of people giving a particular answer in the survey and the size of the population. The RSE is expressed as a percentage of the estimate. The higher the RSE, the less reliable the estimate. Relative standard errors for survey estimates are included in the attachment tables. See also ‘statistical significance’. |
| **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. |
| **Subjective health** | Self-assessed health status; a person’s general assessment of their own health |
| **Statistical significance** | Statistical significance is a measure of the degree of difference between survey data estimates. The potential for sampling error — that is, the error that occurs by chance because the data are obtained from only a sample and not the entire population — means that reported responses may not indicate the true responses.  Using the relative standard errors (RSE) of survey data estimates, it is possible to use a formula to test whether the difference is statistically significant. If there is an overlap between confidence intervals for different data items, it cannot be stated for certain that there is a statistically significant difference between the results. See ‘variability bands’ and ‘relative standard error’. |
| **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). |
| **Variability bands** | In the NAs a variability band gives a range of values which is very likely to contain the true unknown rate. Variability bands accompanying mortality data should be used for the purposes of comparisons at a point in time and over time (within a jurisdiction). They should not be used for comparing mortality rates at a single point in time between jurisdictions as the variability bands and mortality rates do not take into account differences in  under-identification of Indigenous deaths between jurisdictions. |

1. The Commonwealth Department of Health and Ageing (DoHA) became the Commonwealth Department of Health (DoH) following the change of Australian Government in September 2013. [↑](#footnote-ref-1)