
Data quality information — Primary and community health, chapter 11

Data Quality Information

Data quality information (DQI) has been prepared for the first time for the 2011 Report on Government Services. DQI provides information against the seven ABS data quality framework dimensions, for a selection of performance indicators in the Primary and community health chapter. DQI for additional indicators will be progressively introduced in future reports.

Where RoGS indicators align with National Agreement indicators, DQI has been sourced from the Steering Committee's reports on National Agreements to the COAG Reform Council.

Technical DQI has been supplied or agreed by relevant data providers. Additional Steering Committee commentary does not necessarily reflect the views of data providers.

DQI are available for the following performance indicators:

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Proportion of children receiving a fourth year developmental health check

Data quality information for this indicator has been sourced from the Steering Committee's report to the COAG Reform Council on the National Healthcare Agreement (data supplied by the AIHW) with additional Steering Committee comments.

Indicator definition and description

Element	Equity — access
Indicator	Proportion of children who have received a 4 year old development health check.
Measure (computation)	<p><u>Numerator</u>: The number of persons aged 3–5 years with an MBS claim for Items 709, 711, 701, 703, 705, 707 and 10986 (Healthy Kids Check) or 708 and 715 (Aboriginal and Torres Strait Islander Peoples Health Assessment) in the reference period.</p> <p><u>Denominator</u>: The population aged 4 years, estimated by the AIHW using ERP data from the ABS. It was calculated by multiplying the 0-4 years ERP in each disaggregation (Indigenous status and remoteness) by the percentage of children aged 4 in this age group nationally.</p> <p><u>Calculation</u>: $100 \times (\text{Numerator} \div \text{Denominator})$, presented as a percentage.</p>
Data source/s	<p><u>Numerator</u>: Australian Government Department of Health and Ageing Medicare Statistics data.</p> <p><u>Denominator</u>: For <u>total population</u>: Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at 30 June.</p> <p>For data <u>by Indigenous status</u>: ABS Indigenous Experimental Estimates and Projections (Indigenous Population) Series B as at 30 June.</p> <p>For data <u>by remoteness</u>: ABS ERP as at 30 June, by remoteness area, as specified in the Australian Standard Geographical Classification.</p>

Data Quality Framework Dimensions

Institutional environment	<p>The MBS claims data are an administrative by-product of Medicare Australia's administration of the Medicare fee-for-service payment systems. Medicare Australia collects the MBS data under the Medicare Australia Act 1973. This data is then regularly provided to the Department of Health and Ageing.</p> <p>The indicator was calculated by the Department of Health and Ageing, using a denominator supplied by the AIHW. The Department of Health and Ageing drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.</p>
Relevance	<p>The measure relates to specific identified Medicare services for which claims data are available. Medicare data allows disaggregation by the demographics of the person and area (based on postcode) using data held on the Medicare system.</p> <p>The MBS items included in this indicator do not cover all developmental health check activity such as that conducted through state and territory early childhood health assessments in preschools and community health centres.</p> <p>The figures for the Northern Territory exclude children receiving Northern Territory Emergency Response Child Health Checks.</p>

	<p>Data for total children was calculated using the total number of patients aged 3 to 5 years at the time of service with MBS Items 701, 703, 705, 707, 708, 709, 711, 715 or 10986.</p> <p>Data for Indigenous children included only those children aged 3 to 5 years receiving MBS Items 708 or 715.</p> <p>The analyses by state/territory and remoteness are based on postcode of residence of the client as recorded by Medicare Australia at the date the last service was received in the reference period. As clients may receive services in locations other than where they live, this data does not necessarily reflect the location in which services were received. Further, all MBS services received by clients who moved residences during the reference period are allocated to the postcode of their address at the date the last service was received.</p>
Timeliness	<p>MBS claims data are available within 14 days of the end of a month. The indicator relates to all claims processed in the 2009–10 financial year.</p>
Accuracy	<p>As with any administrative system a small degree of error may be present in the data captured.</p> <p>Medicare claims data used for statistical purposes is based on enrolment postcode of the patient. This postcode may not reflect the current postcode of the patient if an address change has not been notified to Medicare Australia.</p> <p>Financial-year data are based on the date on which a Medicare claim was processed by Medicare Australia, not when the service was rendered. The use of data based on when the claim was processed, rather than when the service was rendered, produces little difference in the total number of persons included in the numerator for the reference period.</p> <p>Children who received more than one type of health check are counted once only in the calculations for this indicator. Where an Indigenous child received more than one Aboriginal and Torres Strait Islander Peoples Health Assessment during the reference period, the child was only counted once in the numerator.</p> <p>Medicare data presented for Aboriginal and Torres Strait Islander Peoples Health Assessments have not been adjusted to account for known under-identification of Indigenous status in MBS data.</p> <p>Cells have been suppressed where rates are highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).</p>
Coherence	<p>The following changes to MBS items occurred on 1 May 2010, but are unlikely to impact time-series analysis.</p> <p>As of 1 May 2010, the Healthy Kids Check Item 709 has been replaced with four new MBS health assessment items (based on time and complexity) that cover all ages — Items 701 (brief), 703 (standard), 705 (long) and 707 (prolonged).</p> <p>Under these new reporting arrangements it is possible that health assessments for refugees and humanitarian entrants and for people with an intellectual disability (previously claimed under items 714, 718 or 719 and now claimed under the new MBS health assessment items) have been counted. This is likely to have little impact on the totals reported as the usage rates for these health assessments are low to extremely low for children aged 3–5 years.</p> <p>A Healthy Kids Check provided by a practice nurse or a registered Aboriginal health worker on behalf of a medical practitioner (previously item 711) has been retained under a new MBS item number — 10986. The change to the MBS item number does not impact time series analysis.</p> <p>The Aboriginal and Torres Strait Islander Child Health Check (previously</p>

item 708) has been replaced by the Aboriginal and Torres Strait Islander People's Health Assessment (715) that has no designated time or complexity requirements and covers all ages. The change to the MBS item number does not impact time series analysis.

Interpretability

Medicare claims statistics are available at <http://www.health.gov.au/internet/main/publishing.nsf/Content/Medicare+Statistics-1> and https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml.

Accessibility

Information is available for MBS Claims data from <http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1>.

Data Gaps/Issues Analysis

Key data gaps /issues

The Steering Committee notes the following issues:

- Data do not include developmental health check activity conducted outside the MBS, for example, in preschools and community health centres. Accordingly, the indicator understates developmental health check activity.
- No adjustment was made to this indicator to account for under-identification of Indigenous children in Medicare data.

GP Waiting times

Data quality information for this indicator has been sourced from the Steering Committee's report to the COAG Reform Council on the National Healthcare Agreement (data supplied by the ABS) with additional Steering Committee comments.

Indicator definition and description

Element	Effectiveness — access
Indicator	GP Waiting Times
Measure (computation)	<u>Definition</u> Length of time a patient needs to wait to see a GP for an urgent appointment. <u>Numerator</u> Number of people 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, more than 24 hours). <u>Denominator</u> 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. <u>Computation</u> : $100 \times (\text{Numerator} \div \text{Denominator})$.
Data source/s	Patient Experience Survey, ABS.

Data Quality Framework Dimensions

Institutional environment	<p>The Patient Experience Survey is a topic on the Multipurpose Household Survey, 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.</p> <p>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, is available on the ABS website www.abs.gov.au.</p>
Relevance	<p>The 2009 Patient Experience Survey collected information on whether people had needed to see a GP for an urgent medical appointment in the last 12 months. Those that had were asked how long they had waited between making the appointment and actually seeing the GP for urgent medical care on the most recent occasion.</p> <p>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 for a cold would not be considered urgent.</p>
Timeliness	<p>Patient Experience data is collected annually. The 2009 data used for this indicator became available in July 2010. The reference period for the 2009 survey was July to December 2009.</p>
Accuracy	<p>The Patient Experience Survey is conducted in all States and Territories excluding very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were also not included in the survey. The exclusion of persons usually resident in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population.</p>

The 2009 Patient Experience Survey response rate was 88 per cent. Data are weighted to account for non-response.

As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a portion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the statistical methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.

Coherence

2009 was the first year data were collected for this indicator. At this stage, there are no other comparable data sources.

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 estimates are calculated the same way, although the exclusion of very remote communities in the sample will affect the NT more than it affects other jurisdictions as people usually resident in very remote areas account for about 2 per cent of the population in all States and Territories except for the NT, where they account for 24 per cent.

Interpretability

See ABS 2010 *Health Services: Patient Experiences in Australia, 2009*, Cat. no. 4839.0.55.001 (available on the ABS website, www.abs.gov.au) for an overview of the results from the Patient Experience Survey. Spreadsheets can be downloaded from the ABS website and a confidentialised unit record file will be available early in 2011. Data must be confidentialised for privacy reasons.

Additional data from the Patient Experience Survey is available upon request.

Accessibility

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 ABS Patient Experience data is published in ABS 2010 *Health Services: Patient Experiences in Australia, 2009* (Cat. no. 4839.0.55.001). Any ambiguous or technical terms for the data are available from the Technical Note, Glossary and Explanatory Notes in ABS 2010 *Health Services: Patient Experiences in Australia, 2009* (Cat. no. 4839.0.55.001).

Data Gaps/Issues Analysis

Key data gaps /issues

The Steering Committee notes the following issues:

- Revisions to the Patient Experience Survey are expected ahead of its next release and may affect time series reporting.
- The Patient Experience Survey excludes very remote areas which affects the comparability of NT data.
- Data are based on waiting times for self-defined urgent medical care.
- Disaggregation of this indicator by Indigenous status is a priority.

People deferring treatment due to financial barriers

Data quality information for this indicator has been sourced from the Steering Committee's report to the COAG Reform Council on the National Healthcare Agreement (data supplied by the ABS) with additional Steering Committee comments.

Indicator definition and description

Element	Effectiveness — access
Indicator	People deferring access to GPs or prescribed medications due to cost.
Measure (computation)	<p><u>Measure a:</u></p> <p><u>Definition</u> Proportion of people that required GP treatment but deferred that treatment due to cost.</p> <p><u>Numerator:</u> Number of people who delayed seeing or did not see a GP at any time in the last 12 months due to cost.</p> <p><u>Denominator:</u> People aged 15 years or over.</p> <p><u>Computation:</u> $100 \times (\text{Numerator} \div \text{Denominator})$.</p> <p><u>Measure b:</u></p> <p><u>Definition:</u> Proportion of people that deferred purchase of prescribed medicines due to cost.</p> <p><u>Numerator:</u> Number of people who delayed getting or did not get prescribed medication at any time in the last 12 months due to cost.</p> <p><u>Denominator:</u> People aged 15 years or over who had received a prescription for medication in the last 12 months.</p> <p><u>Computation:</u> $100 \times (\text{Numerator} \div \text{Denominator})$.</p>
Data source/s	Patient Experience Survey, ABS.

Data Quality Framework Dimensions

Institutional environment	<p>The Patient Experience Survey is a topic on the Multipurpose Household Survey, 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.</p> <p>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, is available on the ABS website, www.abs.gov.au.</p>
Relevance	<p>The 2009 Patient Experience Survey collected information from all respondents about whether there had been a time that they had delayed seeing or not seen a GP in the 12 months prior to the survey due to the cost. Respondents who reported having been prescribed medication in the last 12 months were asked whether there had been a time in the last 12 months when they delayed getting or did not get medication due to cost.</p>
Timeliness	<p>Patient Experience data is collected annually. The 2009 data used for this indicator became available in July 2010. The reference period for the 2009 survey was July to December 2009.</p>
Accuracy	<p>The Patient Experience Survey is conducted in all States and Territories excluding very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were also not included in the survey. The exclusion of persons usually resident in very</p>

remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population.

The 2009 Patient Experience Survey response rate was 88 per cent. Data are weighted to account for non-response.

As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a portion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the statistical methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.

Coherence

2009 was the first year data were collected for this indicator. At this stage, there are no other comparable data sources.

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 estimates are calculated the same way, although the exclusion of very remote communities in the sample will affect the NT more than it affects other jurisdictions as people usually resident in very remote areas account for about 2 per cent of the population in all States and Territories except for the NT, where they account for 24 per cent.

Interpretability

See ABS 2010 *Health Services: Patient Experiences in Australia, 2009*, Cat. no. 4839.0.55.001 for an overview of the results from the Patient Experience Survey. Spreadsheets can be downloaded from the ABS website and a confidentialised unit record file will be available early in 2011. Data must be confidentialised for privacy reasons.

Additional data from the Patient Experience Survey is available upon request.

Accessibility

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 ABS Patient Experience data is published in ABS 2010 *Health Services: Patient Experiences in Australia, 2009* (Cat. no. 4839.0.55.001). Any ambiguous or technical terms for the data are available from the Technical Note, Glossary and Explanatory Notes in ABS 2010 *Health Services: Patient Experiences in Australia, 2009* (Cat. no. 4839.0.55.001).

Data Gaps/Issues Analysis

Key data gaps /issues

The Steering Committee notes the following issues:

- Revisions to the Patient Experience Survey are expected ahead of its next release and may affect time series reporting.
- The Patient Experience Survey excludes very remote areas which affects the comparability of NT data.
- Disaggregation of this indicator by Indigenous status is a priority.

Potentially avoidable GP-type presentations to emergency departments

Data quality information for this indicator has been sourced from the Steering Committee's report to the COAG Reform Council on the National Healthcare Agreement (data supplied by the AIHW) with additional Steering Committee comments.

Indicator definition and description

Element	Effectiveness — access
Indicator	Attendances at public hospital emergency departments that could have potentially been avoided through the provision of appropriate non-hospital services in the community.
Measure (computation)	<p>The number of presentations to public hospital emergency departments in hospitals that were classified as either peer group A (principal referral and specialist women's and children's hospitals) or peer group B (large hospitals), with a type of visit of emergency presentation (or not reported for South Australia only) that:</p> <ul style="list-style-type: none">• were allocated a triage category of 4 or 5• did not arrive by ambulance or police or correctional vehicle• were not admitted to the hospital or referred to another hospital• did not die.
Data source/s	<p>This indicator is calculated using data from the AIHW's NNAPEDCD, based on the National Minimum Data Set for Non-admitted patient emergency department care (NAPEDC).</p> <p>For data by remoteness: ABS ERP as at 30 June 2008, by remoteness areas, as specified in the Australian Standard Geographical Classification.</p>

Data Quality Framework Dimensions

Institutional environment	<p>The Australian Institute of Health and Welfare (AIHW) has calculated this indicator.</p> <p>The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.</p> <p>The data were supplied to the Institute by state and territory health authorities. The state and territory health authorities received these data from public hospitals. States and territories use these data for service planning, monitoring and internal and public reporting. Hospitals may be required to provide data to states and territories through a variety of administrative arrangements, contractual requirements or legislation.</p> <p>States and territories supplied these data under the terms of the National Health Information Agreement, available online at http://www.aihw.gov.au/committees/simc/final_nhia_signed.doc.</p>
Relevance	<p>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 that were classified as either peer group A (principal referral and specialist women's and children's hospitals) or B (large hospitals). In 2008-09, hospitals in peer groups A and B provided approximately 69 per cent of all public hospital accident and emergency occasions of service. It is estimated that in 2009-10, hospitals in peer groups A and B provided a similar proportion of all public hospital accident and emergency occasions of service.</p> <p>The definition is considered a reasonable starting approximation of the population that should be receiving service in the primary care sector. The</p>

indicator includes only peer group A (principal referral and specialist women's and children's hospitals) and peer group B (large hospitals).

Analysis by state/territory and remoteness is based on the reported area of usual residence of the patient.

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.

Timeliness

The reference period for this performance indicator is 2009-10.

Accuracy

The coverage of the NNAPEDCD for 2009-10 is estimated to be 100 per cent in all jurisdictions for public hospitals in peer groups A and B, based on 2008-09 coverage. However, final coverage cannot be calculated until 2009-10 NPHEd data are available.

Caution should be used in interpreting 2009-10 data from the NNAPEDCD as they have not been subjected to the usual level of confirmation with establishment-level data provided in the NPHEd. The NPHEd data includes information on the number of accident and emergency occasions of service for each public hospital, and comparison of the number of records in NNAPEDCD and NPHEd is an important step in data validation.

In addition, the hospitals classified as peer groups A and B were based on the 2008-09 peer groups. 2009-10 peer groups cannot be assigned until the National Hospital Morbidity Database is finalised and total level of admitted patient activity quantified. Therefore, these data may not include hospitals that will be assigned to peer groups A or B for the first time in 2009-10 (and may include hospitals that will be assigned to a lower peer group).

For 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 New South Wales' and Victoria's levels of activity.

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

The quality of the data reported for Indigenous status in emergency departments has not been formally assessed for completeness; therefore, caution should be exercised when interpreting these data.

As this indicator is limited to public hospitals which were classified in peer groups A and B, most of the data relates to hospitals within major cities. Consequently, the coverage may not include areas where the proportion of Indigenous people (compared with other Australians) may be higher than average. Similarly, disaggregation by remoteness should be interpreted with caution.

Comparability across jurisdictions may be impacted by variation in the assignment of triage categories.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider) or where rates are likely to be highly volatile (for example, the denominator is very small).

Coherence

The information presented for this indicator is calculated using the same methodology as data published in *Australian Hospital Statistics 2008-09*, the *National Healthcare Agreement: Baseline performance report 2008-09* and

Australian hospital statistics 2009-10: emergency department care and elective surgery waiting times.

As these data may not include hospitals that will be assigned to peer groups A or B for the first time in 2009-10 (and may include hospitals that will be assigned to a lower peer group), the results published here may differ to 2009-10 equivalent data published at a later date.

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 classification for a hospital, may vary over time.

Accessibility The AIHW provides a variety of products that draw upon the NNAPEDCD data. Published products available on the AIHW website include *Australian hospital statistics*, and associated Excel tables.

Data are also included on the MyHospitals website.

Interpretability Supporting information on the quality and use of the NNAPEDCD are published annually in *Australian hospital statistics* (Chapter 5 and technical appendixes), available in hard copy or on the AIHW website. Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator. Supporting information includes discussion of coverage that might affect interpretation of the published data. Metadata information for the NAPEDC NMDS are published in the AIHW's online metadata repository — METeOR, and the National health data dictionary.

Data Gaps/Issues Analysis

Key data gaps /issues The Steering Committee notes the following issues:

- Coverage of the data collection is estimated to be complete for public hospitals in peer groups A and B, which provide approximately 69 per cent of all emergency department services. Most hospitals in peer groups A and B are in major cities. Therefore, disaggregation by remoteness and Indigenous status should be interpreted with caution. Further development work is required to enable reporting of data that are representative of all hospitals.
- Data are preliminary and may be revised following routine verification processes and the final assignment of hospitals to peer groups when 2009-10 National Public Hospital Establishments Database (NPHEd) data are available.
- Assessing and improving the quality of Indigenous status reporting is a priority.
- The number of potentially avoidable GP-type presentations to emergency departments does not allow comparisons across states and territories or remoteness status. The Steering Committee recommends examining the possibility of reporting this indicator as a rate.

Management of diabetes

Data quality information for this indicator has been sourced from the Steering Committee's report to the COAG Reform Council on the National Healthcare Agreement (data supplied by the AIHW) with additional Steering Committee comments.

Indicator definition and description

Element	Effectiveness — appropriateness
Indicator	Proportion of people with diabetes mellitus who have received a Medicare Benefits Schedule (MBS) annual cycle of care.
Measure (computation)	<u>Definition</u> Proportion of people with diabetes mellitus who have received a MBS annual cycle of care. <u>Numerator</u> Number of people with a completed MBS diabetes annual cycle of care. <u>Denominator</u> Number of people diagnosed with Type 1 and Type 2 diabetes in the community. <u>Computation</u> : $100 \times (\text{Numerator} \div \text{Denominator})$.
Data source/s	<u>Numerator</u> Australian Government Department of Health and Ageing Medicare Statistics data. <u>Denominator</u> The National Diabetes Services Scheme (NDSS), an administrative database that provides counts of people known to have diabetes (through certification of diagnosis by a doctor or diabetes educator) who access NDSS services. <u>For data by remoteness</u> : ABS ERP as at 30 June 2009, by remoteness area, as specified in the Australian Standard Geographical Classification.

Data Quality Framework Dimensions

Institutional environment	<u>MBS</u> The MBS claims data are an administrative by-product of Medicare Australia's administration of the Medicare fee-for-service payment systems. Medicare Australia collects the MBS data under the Medicare Australia Act 1973. These data are then regularly provided to the Department of Health and Ageing. <u>NDSS</u> The NDSS is a subsidy scheme administered by Diabetes Australia Ltd, since its establishment in 1987, on behalf of the Australian Government Department of Health and Ageing. At the point of registration with the Scheme, people provide demographic data, details of the type of diabetes they have and how it is treated. This information is held on a central database by Diabetes Australia Ltd and is uploaded monthly. Diabetes Australia Ltd is a national federated body supporting people with diabetes and professional and research bodies concerned with the treatment and prevention of diabetes; see http://www.diabetesaustralia.com.au/en/About-Diabetes-Australia/ . The tables for this indicator were prepared by the Department of Health and Ageing and quality-assessed by the AIHW. The Department of Health and
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Ageing drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.

Relevance

MBS

The measure relates to specific identified Medicare services.

This measure does not include claims that are reimbursed through the Department of Veterans' Affairs (DVA). For 2009-10, it is estimated that DVA clients comprised less than 4 per cent of clients who received a GP annual cycle of care. The DVA, AIHW and DOHA have been working collaboratively to achieve alignment of DVA and MBS data and it is anticipated that DVA data will be included for the next reporting cycle.

The analyses by state/territory and remoteness are based on postcode of residence of the client as recorded by Medicare Australia at the date of last service received in the reference period. As clients may receive services in locations other than where they live, these data do not necessarily reflect the location in which services were received. Further, all MBS services received by clients who moved residences during the reference period are allocated to the postcode of their address at the date the last service was received.

There were a small number of records with a postcode that was invalid or did not map to a remoteness area (less than 0.005 per cent). These records were excluded from the analysis.

NDSS

The number of registrants on the NDSS can be counted to estimate diabetes prevalence. However, registration is voluntary and therefore it is likely that a proportion of people with diagnosed diabetes are not registered with the Scheme. Diabetes Australia estimates that the NDSS covers 80 per cent to 90 per cent of people with diagnosed diabetes.

NDSS data allow for disaggregation by area (based on postcode). As with the MBS data, there was a small number of records with a postcode that was invalid or did not concord to a remoteness area (less than 0.1 per cent).

The indicator aggregates people with Type 1 and Type 2 diabetes (as using data linkage to disaggregate the data would raise Privacy Act concerns). However, while people with type 1 diabetes are significantly more likely to require a care plan, type 2 diabetes comprises around 85 per cent of all records. Consequently, aggregating data does not give an accurate proportion of persons with each type of diabetes who have an MBS annual cycle of care.

The denominator includes only Type 1 and Type 2 diabetes. Therefore, 4434 people diagnosed with 'other diabetes' were excluded in the 2009-10 data and 5235 people excluded in the 2008-09 data for this reason.

Timeliness

MBS

The MBS data used in this indicator relate to all claims processed in the financial reference year.

NDSS

NDSS data are updated continuously. Data are available on a monthly basis from Diabetes Australia Ltd. The NDSS data used for this indicator relate to all registrants as at 30 June.

Accuracy

MBS

As with any administrative system a small degree of error may be present in the data captured.

Medicare claims data used for statistical purposes are based on enrolment postcode of the patient. This postcode may not reflect the current postcode of the patient if an address change has not been notified to Medicare Australia.

Financial-year data are based on the date on which a Medicare claim was processed by Medicare Australia, not when the service was rendered. The use of data based on when the claim was processed rather than when the service was rendered produce little difference in the total number of persons included in the numerator term for the reference period.

NDSS

The AIHW estimates the number of duplicate records in the NDSS to be small (only 0.3 per cent of records from a subset of NDSS data as at June 2008). A small number of people who no longer have diabetes or who have died are likely to still be in the database.

The NDSS requires certification of a diagnosis of diabetes before an individual can register. This eliminates any self-report bias, but excludes those people with undiagnosed diabetes.

The NDSS may underestimate the prevalence of diabetes in remote areas due to a shortage of doctors/diabetes educators needed to approve registration application.

Postcodes (used for disaggregation by remoteness area) relate to the registrant's place of residence as recorded at the point of registration. This is likely to be accurate, as registrants have an incentive to update this information if and when they move so as to ensure products supplied to them under the NDSS are delivered to their correct place of residence.

Cells have been suppressed to protect confidentiality (where the presentation could identify a patient or a single service provider), where rates are likely to be highly volatile (for example, the denominator is very small).

Coherence The reference period is not consistent across the data sources — the MBS data relate to all claims processed over the financial year, while the NDSS data include all registrants on the database at a point in time (30 June).

Interpretation of rates over time should not be undertaken as the prevalence estimate (denominator) increases each year with the increased coverage of the NDSS.

Accessibility MBS

Medicare claims statistics are available at https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml.

Disaggregation by remoteness Area is not publicly available elsewhere.

NDSS NDSS data are not publicly accessible.

Interpretability Information is available for MBS Claims data from <http://www.health.gov.au/internet/mbsonline/publishing.nsf/content/medicare-benefits-schedule-mbs-1>.

Further information on the NDSS is available at <http://www.ndss.com.au>.

Data Gaps/Issues Analysis

Key data gaps The Steering Committee notes the following issues:

/issues

- This indicator appears reliable at a national level. However comparisons between jurisdictions and population groups may be problematic due to different population structures (including relative prevalence of Type 1 and Type 2 diabetes) which have not been accounted for in the calculation of this indicator.
- The NDSS gives the best available approximation of people with diagnosed diabetes in Australia in 2009-10 but it does not cover all people with diabetes and its uptake is lower in remote areas.
- Disaggregation of this indicator by Indigenous status is a priority.

Indigenous identification in MBS data is voluntary and the data significantly underestimate Indigenous utilisation.

- Requirements for the MBS annual cycle of care item are based on but not identical to RACGP clinical guidelines for the management of type 2 diabetes.
- It would be useful to report this indicator separately for type 1 and type 2 diabetes.

Management of asthma

Data quality information for this indicator has been sourced from the Steering Committee's report to the COAG Reform Council on the National Healthcare Agreement (data supplied by the ABS) with additional Steering Committee comments.

Indicator definition and description

Element	Effectiveness — appropriateness
Indicator	Proportion of people with asthma who have a written asthma action plan.
Measure (computation)	<u>Definition</u> Proportion of people with asthma who have a written asthma action plan. <u>Numerator</u> Estimated number of persons with asthma with a written asthma action plan. <u>Denominator</u> Estimated number of persons with asthma. <u>Computation</u> : $100 \times (\text{Numerator} \div \text{Denominator})$.
Data source/s	The denominator and numerator for this indicator use ABS National Health Survey (NHS) data, which is weighted to benchmarks for the total NHS in-scope population derived from the Estimated Resident Population (ERP). For information on NHS scope and coverage, see the ABS <i>National Health Survey Users Guide</i> (Cat. no. 4363.0.55.001) on the ABS website, www.abs.gov.au . Estimates for Indigenous persons are drawn from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which was benchmarked to the estimated Indigenous population (adjusted for the scope of the survey).

Data Quality Framework Dimensions

Institutional environment	The NHS and NATSIHS are collected, processed, and published by the Australian Bureau of Statistics (ABS). The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.
Relevance	<p>The NHS 2007-08 asked all respondents whether they had ever been told by a doctor or nurse that they have asthma, whether symptoms were present or they had taken treatment in the 12 months prior to interview, and whether they still had asthma. Those who answered yes to these questions were asked whether they had "a written asthma action plan, that is, written instructions of what to do if your asthma is worse or out of control". A very small number of respondents who were sequenced around these questions may have reported current long-term asthma in response to later general questions about medical conditions. These persons are included in and contribute to estimates of the prevalence of asthma, but information about written action plans was not collected from them.</p> <p>In the 2004-05 NATSIHS, non-remote respondents who answered yes to the questions about having asthma were asked about written asthma action plans.</p> <p>In both the 2004-05 NHS and NATSIHS, respondents were asked simply if they had "a written asthma action plan". If they queried the interviewer about what to include, they were told to include management plans developed in</p>

consultation with a doctor, cards associated with peak flow meters and medication cards distributed through chemists. In 2007, if respondents queried the interviewer, they were asked to include plans that were worked out in consultation with a doctor, but not cards associated with peak flow meters or medications cards handed out by chemists.

Ideally this indicator would relate to the proportion of people with moderate to severe asthma, as people with only very mild asthma are unlikely to require planned care. Consequently, there is no clear direction of improvement in this indicator: a lower proportion of people with asthma with an asthma care plan may simply mean that those people with asthma have less severe asthma (which would actually be a positive outcome).

Timeliness	<p>The NHS is conducted every three years over a 12 month period. Results from the 2007-08 NHS were released in May 2009.</p> <p>The NATSIHS is conducted every six years. Results from the 2004-05 survey were released in April 2006.</p>
Accuracy	<p>The NHS is conducted in all States and Territories, excluding very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were also not included in the survey. The exclusion of persons usually resident in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population. The 2007-08 NHS response rate was 91 per cent. NHS data are weighted to account for non-response.</p> <p>The NATSIHS is conducted in all States and Territories and includes remote and non-remote areas. The 2004-05 sample was 10,000 persons/5200 households, with a response rate of 81 per cent of households.</p> <p>As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the scientific methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.</p> <p>As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the scientific methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.</p>
Coherence	<p>Questions used in the 2007-08 NHS to collect data for this indicator are consistent with the questions recommended for use by the Australian Centre for Asthma Monitoring (ACAM). Changes to the NHS since 2004-05 to better align questions and concepts with the ACAM recommendations mean that data for this indicator is not comparable over time.</p> <p>The NHS and NATSIHS collect a range of other health-related information (for example, information on smoking) that can be analysed in conjunction with data on asthma and asthma plans.</p>
Accessibility	<p>See <i>National Health Survey, Summary of Results</i> (ABS Cat. no. 4364.0) for an overview of results from the NHS, and <i>National Health Survey: State</i></p>

tables (ABS Cat. no. 4362.0) for State and Territory specific tables. See the *National Aboriginal and Torres Strait Islander Health Survey* (Cat. no. 4715) for an overview of results from the NATSIHS. Other information from these surveys is also available on request.

Interpretability

Information to aid interpretation of the data is available from the *National Health Survey User Guide*, and the *National Aboriginal and Torres Strait Islander Health Survey User Guide* on the ABS website.

Many health-related issues are closely associated with age, therefore data for this indicator have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the States and Territories and the Indigenous and non-Indigenous population. Age standardised rates should be used to assess the relative differences between groups, not to infer the rates that actually exist in the population.

Data Gaps/Issues Analysis

Key data gaps /issues

The Steering Committee notes the following issues:

- The data provide relevant information on the proportion of asthmatics who have an asthma management plan. However, there is no information about the severity of the condition and people with mild asthma are unlikely to require a written plan.
- NATSIHS data are only collected every six years. An assessment of the relative speed of change in outcomes is required to determine whether more regular data collection is necessary.
- The NHS does not include people living in very remote areas which affects the comparability of the NT results.
- Data are not comparable between Indigenous and non-Indigenous people because of different years of the data collections and different interpretations of what is a 'written' plan.

Patient satisfaction

Data quality information for this indicator has been sourced from the Steering Committee's report to the COAG Reform Council on the National Healthcare Agreement (data supplied by the ABS) with additional Steering Committee comments.

Indicator definition and description

Element	Quality — responsiveness
Indicator	Patient satisfaction/experience around key aspects of care they received.
Measure (computation)	<p><u>Measure a:</u> <u>Definition</u></p> <p>Proportion of people receiving a prescription for medication from a GP in the previous 12 months where reasons for the prescription were provided.</p> <p><u>Numerator</u> Number of people who received a prescription for medication in the previous 12 months where the GP provided reasons for giving the most recent prescription.</p> <p><u>Denominator</u> Number of people who received a prescription for medication in the previous 12 months.</p> <p><u>Measure b:</u> <u>Definition</u></p> <p>Proportion of people who had a pathology or imaging test in the previous 12 months where the referring health professional explained the reasons for the most recent test.</p> <p><u>Numerator</u> Number of people who had a pathology or imaging test in the last 12 months where the referring health professional explained the reasons for the most recent test.</p> <p><u>Denominator</u> Number of people who were referred to their most recent pathology or imaging test by a health professional.</p> <p><u>Computation (a and b):</u> $100 \times (\text{Numerator} \div \text{Denominator})$.</p>
Data source/s	Patient Experience Survey, ABS

Data Quality Framework Dimensions

Institutional environment	<p>The Patient Experience Survey is a topic on the Multipurpose Household Survey, 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.</p> <p>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, is available on the ABS website, www.abs.gov.au.</p>
Relevance	<p>There are a number of elements that can contribute to a person's satisfaction with medical care that they have received. The measures chosen for this indicator represent, in part, people's experiences in relation to access and the provision of information about their treatment. Access to and communication with health professionals, have been shown by many researchers (eg., the Picker Institute) to be important elements of patient satisfaction/experience.</p> <p>Respondents to the Patient Experience Survey were asked whether they had been prescribed medication or referred for a pathology or imaging test in the last 12 months. Those that had been were asked whether the reasons for those actions had been explained to them.</p>

	<p>Respondents who reported having seen a GP in the last 12 months were asked whether there had been a time in the last 12 months that they had waited longer than they felt acceptable to get an appointment to see a GP.</p>
Timeliness	<p>Patient Experience data is collected annually. The 2009 data used for this indicator became available in July 2010. The reference period for the 2009 survey was July to December 2009.</p>
Accuracy	<p>The Patient Experience Survey is conducted in all States and Territories excluding very remote areas. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were also not included in the survey. The exclusion of persons usually resident in very remote areas has a small impact on estimates, except for the Northern Territory, where such persons make up a relatively large proportion of the population.</p> <p>The 2009 Patient Experience Survey response rate was 88 per cent. Data are weighted to account for non-response.</p> <p>As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a portion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated as it is calculated based on the statistical methods used to design surveys. Rates should be considered with reference to their Relative Standard Error (RSE). Estimates with RSEs between 25 per cent and 50 per cent should be used with caution. Estimates with RSEs greater than 50 per cent are generally considered too unreliable for general use.</p>
Coherence	<p>2009 was the first year data were collected for this indicator. At this stage, there are no other comparable data sources.</p> <p>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.</p> <p>Jurisdiction estimates are calculated the same way, although the exclusion of very remote communities in the sample will affect the NT more than it affects other jurisdictions as people usually resident in very remote areas account for about 2 per cent of the population in all States and Territories except for the NT, where they account for 24 per cent.</p>
Accessibility	<p>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.</p> <p>The ABS Patient Experience data is published in ABS 2010 <i>Health Services: Patient Experiences in Australia, 2009</i> (Cat. no. 4839.0.55.001). Any ambiguous or technical terms for the data are available from the Technical Note, Glossary and Explanatory Notes in ABS 2010 <i>Health Services: Patient Experiences in Australia, 2009</i>. (Cat. no. 4839.0.55.001).</p>
Interpretability	<p>See ABS 2010 <i>Health Services: Patient Experiences in Australia, 2009</i>, Cat. no. 4839.0.55.001 for an overview of the results from the Patient Experience Survey. Spreadsheets can be downloaded from the ABS website and a confidentialised unit record file will be available early in 2011. Data must be confidentialised for privacy reasons.</p> <p>Additional data from the Patient Experience Survey is available upon request.</p>

Data Gaps/Issues Analysis

Key data gaps /issues

The Steering Committee notes the following issues:

- Only the communication and access aspects of care are reported. Reporting patient experience of additional key aspects of care is a priority.
- Excludes people living in very remote areas which affects the comparability of NT results.
- Disaggregation of this indicator by Indigenous status is a priority.
- The Patient Experience Survey is expected to be revised ahead of its next release. This may affect time series reporting.

Child immunisation coverage (at 5 years of age)

Data quality information for this indicator has been sourced from the Steering Committee's report to the COAG Reform Council on the National Healthcare Agreement (data supplied by the AIHW) with additional Steering Committee comments.

Indicator definition and description

Element	Outcome
Indicator	Child immunisation coverage — proportion of children aged 60 months to less than 63 months who are fully vaccinated.
Measure (computation)	<p><u>Definition</u></p> <p>Proportion of children aged 5 years who are fully vaccinated.</p> <p><u>Numerator</u> Number of children aged 5 years who have been fully vaccinated according to the National Immunisation Program Schedule (NIPS).</p> <p><u>Denominator</u> Number of children aged 5 years on the Australian Childhood Immunisation Register.</p> <p><u>Computation:</u> $100 \times (\text{Numerator} \div \text{Denominator})$, presented as a rate per 100 children aged 5 years.</p>
Data source/s	<p>The Australian Childhood Immunisation Register (ACIR).</p> <p>For <u>data by remoteness</u>: ABS ERP, by remoteness areas, as specified in the Australian Standard Geographical Classification.</p>

Data Quality Framework Dimensions

Institutional environment	<p>The ACIR is administered and operated by Medicare Australia for the Australian Government Department of Health and Ageing (DoHA). Medicare Australia provides DoHA with quarterly coverage reports at the national and state level.</p> <p>Immunisations are notified to Medicare Australia by a range of immunisation providers including General Practitioners, Councils, Aboriginal Medical Services, State and Territory Health departments.</p> <p>For information on the institutional environment of the ACIR, including the legislative obligations of the ACIR, financing and governance arrangements, and mechanisms for scrutiny of ACIR operations, please see http://www.medicareaustralia.gov.au/public/services/acir/index.jsp.</p> <p>The tables for this indicator were prepared by Medicare Australia and quality-assessed by the Department of Health and Ageing and the AIHW. The Department of Health and Ageing drafted the initial data quality statement (including providing input about the methodology used to extract the data and any data anomalies) and then further comments were added by the AIHW, in consultation with the Department. The AIHW did not have the relevant datasets required to independently verify the data tables for this indicator. For further information see the AIHW website.</p>
Relevance	<p>The ACIR records details of vaccinations given to children under seven years of age who live in Australia, however reporting for the Australian Healthcare Agreement is only for children aged five years, which for this report, are children born between 1 January 2005 and 31 March 2005.</p> <p>The data reported here uses the ACIR definition of fully-immunised children for coverage reporting; that is, children who have received all age appropriate immunisations for Diphtheria, Tetanus, Pertussis, Hepatitis B, Poliomyelitis, <i>Haemophilus influenzae</i> type b, Measles, Mumps and Rubella.</p>

	<p>There are possible gaps in coverage due to unknown vaccination status of children less than 5 years migrating to Australia. The extent of this is not currently quantifiable.</p> <p>The analyses by State/Territory remoteness and socioeconomic status are based on postcode of residence of the child as recorded on ACIR. As children may receive vaccinations in locations other than where they live, this data does not necessarily reflect the location in which services were received.</p>
Timeliness	<p>A minimum 3 month lag period is allowed for late notification of immunisations to the Register. Data have been presented for children born between 1 January 2005 and 31 March 2005.</p>
Accuracy	<p>Vaccination coverage rates calculated using ACIR data are believed to underestimate actual vaccination rates because of under-reporting by immunisation providers. However, the extent of any under-reporting has not been estimated.</p> <p>Programs such as the General Practice Immunisation Incentive (GPII) and provider incentive payments have helped minimise under-reporting by providing a financial incentive to report clean and accurate data.</p> <p>The data contains minimal if any duplication of immunisations, as children are identified via their Medicare number. Approximately 99 per cent of children are registered with Medicare by 12 months of age.</p> <p>The ACIR covers virtually all children, particularly because participation in the ACIR is via an 'opt-out' arrangement.</p> <p>ACIR is considered to have high levels of Indigenous identification (estimated to be 95 per cent in 2005).</p> <p>Medicare Australia used tables and concordance files to construct rates by remoteness and socioeconomic status.</p>
Coherence	<p>The definitions of numerators and denominators have been consistent since the inception of the ACIR in 1996.</p>
Accessibility	<p>Information contained within the indicator for disaggregation by Indigenous status and remoteness are not currently publicly accessible. Current total percentage and total numbers however can be viewed on Medicare Australia's web site.</p> <p>Medicare Australia publishes current immunisation coverage from the ACIR on its website, www.medicareaustralia.gov.au. Authorised immunisation providers can access detailed reports via a secured area of the Medicare Australia web site.</p> <p>Immunisation coverage data derived from the ACIR have been reported in <i>Communicable Disease Intelligence</i> since early 1998. Data for 3 key milestone ages (12 months, 24 months and 5 years (6 years prior to 2008)), nationally and by jurisdiction are published quarterly.</p>
Interpretability	<p>Further information on the ACIR can be found at http://www.medicareaustralia.gov.au/public/services/acir/index.jsp.</p> <p>Information on the National Immunisation Program and vaccinations can be found at http://www.immunise.health.gov.au.</p>

Data Gaps/Issues Analysis

Key data gaps /issues	<p>The Steering Committee notes the following issues:</p> <ul style="list-style-type: none"> • The quality of Indigenous identification is considered to be high (estimated to be 95 per cent in 2005). • Data have been reported using the ACIR definition of fully-immunised children; that is, children who have received all age appropriate immunisations.
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- The data used to calculate this indicator are from an administrative data collection — the Australian Childhood Immunisation Register (ACIR) — for which there is an incentive payment for notification, and there are further incentives for parents to have their child's vaccination status up to date. The Register is linked to the Medicare enrolment register, and approximately 99 per cent of children are registered with Medicare by 12 months of age.

Participation rates for women in cervical screening

Data quality information for this indicator has been drafted by the AIHW, with additional Steering Committee comments.

Indicator definition and description

Element	Outcome
Indicator	Participation rates for women in cervical screening.
Measure (computation)	<p><u>Definition</u> This indicator presents the number of women aged 20 years or over screened in a 2 year period as a proportion of the eligible female population and age-standardised to the Australian standard population, at 30 June 2001 for women aged 20–69 years and for women aged 20 years or over.</p> <p>The eligible female population is the average of the Australian Bureau of Statistics (ABS) estimated resident female population for the 2 year reporting period. This population is adjusted for the estimated proportion of women who have had a hysterectomy using national hysterectomy fractions derived from the 2001 National Health Survey.</p> <p><u>Numerator</u> Total number of women aged 20 years or over who were screened in the 2 year period.</p> <p><u>Denominator</u> Total number of women aged 20 years or over adjusted to exclude the estimated number of women who have had a hysterectomy, using national hysterectomy fractions.</p> <p><u>Computation/s:</u> $100 \times (\text{Numerator} \div \text{Denominator})$ and age-standardised to the Australian population at 30 June 2001.</p>
Data source/s	<p><u>Numerator</u> State and territory cervical cytology registers.</p> <p><u>Denominator</u> ABS estimated resident population (ERP) for females aged 20 years or over, adjusted using ABS Hysterectomy fraction derived from the ABS' 2001 National Health Survey (NHS).</p>

Data Quality Framework Dimensions

Institutional environment	<p>The National Cervical Screening Program (NCSP) is a joint program of the Australian Government and State and Territory governments. The target age group is women aged 20–69 years.</p> <p>Cervical cytology registries in each state and territory are maintained by jurisdictional Program managers. Data are supplied to the registries from pathology laboratories. Data from cervical cytology registers are provided to the Australian Institute of Health and Welfare (AIHW) annually in an aggregated format.</p> <p>The NCSP is monitored annually. Results are compiled and reported at the national level by the AIHW in an annual <i>Cervical screening in Australia</i> report. The Institute is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website (www.aihw.gov.au).</p>
Relevance	<p>The data used to calculate this indicator are accurate and of high quality. The cervical cytology registers collect information on all Pap tests undertaken in Australia except where women advise the clinician they do not wish to have their data collected. The use of ERP based on Census data for denominators provide the most comprehensive data coverage possible. The data are entirely appropriate for this indicator.</p> <p>For participation by state and territory, the numerator is the number of women</p>

	<p>aged 20 years or over screened in each state and territory in 2008 and 2009, except for Victoria and the ACT where data are for residents (and some immediate border residents) of the jurisdiction only. Data are supplied as aggregated data by each state and territory. The denominator is the average of the 2008 and 2009 ABS ERP for women aged 20 years or over in each State and Territory, adjusted to exclude the estimated number of women who have had a hysterectomy, using national hysterectomy fractions.</p> <p>Caution is required when examining differences across states and territories of Australia due to the substantial differences in population, area, geographic structure, policies and other factors.</p>
Timeliness	Data available for the 2011 ROGS report are based on the two-year calendar period 1 January 2008 to 31 December 2009. Data are presented as a rate for the two-year period to reflect the recommended screening interval.
Accuracy	<p>This indicator is calculated on data that have been supplied to the AIHW by individual state and territory registers. Prior to publication, the results of analyses are referred back to states and territories for checking and clearance. Any errors found by states and territories are corrected once confirmed. Thus participation by state and territory, based on the state or territory in which the woman was screened, is both robust and readily verified. Women are counted only once in the two-year period 1 January 2008 to 31 December 2009, even if they were screened more than once during this period. All women screened in each state and territory are included in order to present the most accurate national picture of cervical screening. This may lead to a very small amount of double-counting, since one woman could be screened, and therefore counted, in two different jurisdictions over this two-year period. However, any effects of double-counting are negligible. Women who opt off the cervical cytology register are not included in the participation data, but this is thought to only exclude around 1 per cent of all women screened.</p> <p>No cell suppression was required for the data presented.</p> <p>The Estimated Resident Population and 2001 National Health Survey (used to adjust population data for the proportion of women who have had a hysterectomy) are provided by the ABS.</p>
Coherence	Some of these data are published annually in Program monitoring reports prepared by the AIHW. The most recent of these reports is the <i>Cervical screening in Australia 2007-2008</i> data report, published in 2010. Data for 2008–2009 will not be published until 2011.
Accessibility	The NCSP annual reports are available via the AIHW website where they can be downloaded free of charge.
Interpretability	While numbers of women screened are easy to interpret, calculation of age-standardised rates with allowance for the proportion of the population who have had a hysterectomy is more complex and the concept may be confusing to some users. Information on how and why age-standardised rates have been calculated and how to interpret them as well as the hysterectomy fraction is available in all AIHW NCSP monitoring reports, for example, <i>Cervical screening in Australia 2006-2007</i> .

Data Gaps/Issues Analysis

Key data gaps The Steering Committee notes the following issues:

/issues

- Hysterectomy fractions are derived from the 2001 National Health Survey.
- Women are allocated to the state or territory in which they are screened.