National Health Performance Authority Healthy Communities: Percentage of women who gave birth and had at least one antenatal visit in the first trimester, 2010–2011

Identifying and definitional attributes

Metadata item type: Indicator Indicator type: Indicator

Short name: Percentage of women who gave birth and had at least one antenatal visit in the first

trimester, 2010-2011

METEOR identifier: 583479

Registration status: • National Health Performance Authority (retired), Retired 01/07/2016

Description: The number of women who gave birth and had at least one antenatal visit in the first

trimester, expressed as a percentage of all women who gave birth.

An <u>antenatal care visit</u> is an intentional encounter between a pregnant woman and a midwife or doctor to assess and improve maternal and fetal well-being throughout pregnancy and prior to labour. An antenatal care visit does not include a visit where the sole purpose of contact is to confirm the pregnancy only, or those contacts that occurred during the pregnancy that related to other non-pregnancy

related issues (see Female—number of antenatal care visits, total N[N])

Indicator set: National Health Performance Authority: Healthy Communities: 2011–

National Health Performance Authority (retired), Retired 01/07/2016

Collection and usage attributes

Computation description:

First trimester is defined as within the first 13 weeks of pregnancy.

Births include both live births and stillbirths of at least 20 weeks gestation or 400 grams birth weight.

The percentages of women who gave birth and had at least one antenatal visit in the first trimester are calculated at Medicare Local catchment and Medicare Local peer group levels for:

- All women who gave birth during the two calendar years from 1 January 2010 to 31 December 2011
- Aboriginal and Torres Strait Islander women who gave birth during the two calendar years from 1 January 2010 to 31 December 2011.

Analysis by Medicare Local catchment and Medicare Local peer group is based on Statistical Local Area (SLA) of usual residence of the mother, irrespective of where the birth occurred.

Women who gave birth at any time during the two calendar years from 1 January 2010 to 31 December 2011 are included. Therefore, women who gave birth more than once during the two-year period are counted for each birth.

Women whose gestation at first antenatal visit was unknown or not stated are excluded.

Australian non-residents and residents of external territories are excluded.

State and territory differences in definitions and methods used for data collection affect the comparability of these data across state and territory jurisdictions and lower levels of geography within these jurisdictions. The following caveats apply to the data for 2010 and 2011:

- In Western Australia, gestational age at the first antenatal visit is reported by birth hospital, therefore data may not be available for women who attend their first antenatal visit outside the birth hospital
- In Tasmania, data on duration of pregnancy at the first antenatal visit was not reported by hospitals still using the paper-based form for collection of NPDC data, so these data should be interpreted with caution
- In the Australian Capital Territory, the first hospital antenatal clinic visit is often reported as the first antenatal visit and, in many cases, earlier antenatal care provided by the woman's GP is not reported.

Computation:

(Numerator ÷ Denominator) x 100

Reliability of percentages

National Perinatal Data Collection (NPDC) data are based on administrative data and therefore are not subject to sampling error. However, when the counts on which percentages have been calculated are small, the percentages may be subject to natural random variation. To quantify the random variation associated with NPDC data, variability bands were calculated using the standard method for calculating 95% confidence intervals for percentages:

$$CI(P)_{95\%} = P \pm 100 \times 1.96 \times \sqrt{\frac{\frac{P}{100} (1 - \frac{P}{100})}{n}}$$

where P = the percentage of women who gave birth and had at least one antenatal visit in the first trimester; and

n = the number of women who gave birth.

Suppression of estimates

The variability bands were used to calculate the Relative Standard Error (RSE) for each estimate and this information was used as one of the criteria for suppression of estimates.

Results were suppressed for confidentiality where the numerator was less than 5 and for reliability where the denominator was less than 100. Additional suppression rules based on the limits for RSE were developed and applied to ensure robust reporting of these data at small areas. For a dichotomous proportion, RSE has been defined as the ratio of the standard error and the minimum of the estimate and its complement (100% - estimate). Data were suppressed where the RSE was 33% or greater or the variability band width was 33% or greater.

For all women, the number of women who gave birth between 1 January 2010 and 31 December 2011 and had at least one antenatal in the first trimester.

For Aboriginal and Torres Strait Islander women, the number of Aboriginal and Torres Strait Islander women who gave birth between 1 January 2010 and 31 December 2011 and had at least one antenatal in the first trimester.

Numerator:

Numerator data elements:

Data Element / Data Set

<u>Pregnancy—estimated duration (at the first visit for antenatal care), completed weeks N[N]</u>

Data Source

AlHW National Perinatal Data Collection (NPDC)

NMDS / DSS

Perinatal NMDS 2010-2011

Data Element / Data Set

Pregnancy—estimated duration (at the first visit for antenatal care), completed weeks N[N]

Data Source

AlHW National Perinatal Data Collection (NPDC)

NMDS / DSS

Perinatal NMDS 2011-12

Guide for use

Data source type: Administrative by-product data

Include women who gave birth in the two calendar years between 1 January 2010 and 31 December 2011 and whose estimated pregnancy gestation at the first antenatal visit was less than 14 completed weeks, i.e. value < 14.

Denominator:

For all women, the number of women who gave birth between 1 January 2010 and 31 December 2011 and had a known gestation at first antenatal visit.

For Aboriginal and Torres Strait Islander women, the number of Aboriginal and Torres Strait Islander women who gave birth between 1 January 2010 and 31 December 2011 and had a known gestation at first antenatal visit.

Denominator data elements:

Data Element / Data Set

<u>Pregnancy—estimated duration (at the first visit for antenatal care), completed weeks N[N]</u>

Data Source

AlHW National Perinatal Data Collection (NPDC)

NMDS / DSS

Perinatal NMDS 2010-2011

Data Element / Data Set

Pregnancy—estimated duration (at the first visit for antenatal care), completed weeks N[N]

Data Source

AlHW National Perinatal Data Collection (NPDC)

NMDS / DSS

Perinatal NMDS 2011-12

Guide for use

Data source type: Administrative by-product data

Include women who gave birth in the two calendar years between 1 January 2010 and 31 December 2011 and whose estimated pregnancy gestation at the first antenatal visit was known i.e. value ? 99.

Disaggregation:

The percentages of women who gave birth and had at least one antenatal visit in the first trimester are calculated at Medicare Local catchment and Medicare Local peer group levels for:

- All women who gave birth during the two calendar years from 1 January 2010 to 31 December 2011
- Aboriginal and Torres Strait Islander women who gave birth during the two calendar years from 1 January 2010 to 31 December 2011.

For 2007–2011, Indigenous status of mother is derived from <u>Person—Indigenous status</u>, code N.

For 2010 and 2011, Medicare Local catchment is derived from <u>Person—area of usual residence</u>, <u>geographical location code</u> (ASGC 2009) <u>NNNNN</u> and <u>Person—area of usual residence</u>, <u>geographical location code</u> (ASGC 2010) <u>NNNNN</u>.

Medicare Locals plan and fund health services in communities across Australia. They help to ensure patients can access the care they need, particularly when a variety of health workers are involved in providing treatments. A Medicare Local catchment refers to the geographic area of a Medical Local (see <u>Administrative health region—Medicare Local identifier, code AANNN</u>)

Medicare Local peer groups are the grouping of the 61 Medicare Locals into seven peer groups, which allows Medicare Locals to be compared to other Medicare Locals with similar characteristics, and to the average for their peer group (see <u>Administrative health region—Medicare Local peer group, code N</u>). This grouping was undertaken by the National Health Performance Authority using statistical cluster analysis of 2006 Census based socioeconomic status for each Medicare Local and, 2006 Census based Remoteness Area categories (ABS cat. no. 2039.0). Additional information on the average distance to the closest large city and major hospital (A1 public hospital peer group classification, 2010–11) contributed to the assignment of Medicare Locals to peer groups. Groupings were tested for face validity with a stakeholder group. The National Health Performance Authority has created 7 peer groups: Metro 1 to 3, Regional 1 and 2 and Rural 1 and 2. See <u>Healthy Communities: Australians' experiences with primary health care in 2010–11, Technical Supplement for more information</u>.

Disaggregation data elements:

-Data Element / Data Set-

Person—Indigenous status, code N

Data Source

AlHW National Perinatal Data Collection (NPDC)

NMDS / DSS

Perinatal NMDS 2010-2011

Data Element / Data Set-

Person—Indigenous status, code N

Data Source

AlHW National Perinatal Data Collection (NPDC)

NMDS / DSS

Perinatal NMDS 2011-12

Data Element / Data Set

Person—area of usual residence, geographical location code (ASGC 2009) NNNNN

Data Source

AlHW National Perinatal Data Collection (NPDC)

NMDS / DSS

Perinatal NMDS 2010-2011

Data Element / Data Set-

Data Source

AlHW National Perinatal Data Collection (NPDC)

NMDS / DSS

Perinatal NMDS 2011-12

Guide for use

Data source type: Administrative by-product data

Used for disaggregation of data by Medicare Local catchment.

Data are attributed to the Medicare Local catchment in which the mother usually resided at the time of the birth, irrespective of where the birth occurred.

Women who could not be allocated to a Medicare Local catchment because their Statistical Local Area (SLA) of usual residence was not stated or was not valid are excluded.

Data Element / Data Set

Administrative health region—Medicare Local identifier, code AANNN

Guide for use

Aggregated data on the percentage of women who gave birth and had at least one antenatal visit in the first trimester are reported by Medicare Local catchment for:

- All women who gave birth during the two calendar years from 1 January 2010 to 31 December 2011
- Aboriginal and Torres Strait Islander women who gave birth during the two calendar years from 1 January 2010 to 31 December 2011.

Data Element / Data Set

Administrative health region—Medicare Local peer group, code N

Guide for use

Aggregated data on the percentage of women who gave birth and had at least one antenatal visit in the first trimester are reported by Medicare Local peer group for:

- All women who gave birth during the two calendar years from 1 January 2010 to 31 December 2011
- Aboriginal and Torres Strait Islander women who gave birth during the two calendar years from 1 January 2010 to 31 December 2011.

Comments:

The most recent data currently available from the AlHW National Perinatal Data Collection are for the 2011 calendar year.

Information is included in the AlHW National Perinatal Data Collection for all live births and stillbirths of at least 400 grams birthweight or at least 20 weeks gestation in Australia, including births in hospitals, in birth centres and in the community.

Representational attributes

Representation class: Percentage

Data type: Real
Unit of measure: Person
Format: NN.N

Indicator conceptual framework

Framework and dimensions:

PAF-Effectiveness

- PAF-Appropriateness
- PAF-Effectiveness of access
- PAF-Quality
 - PAF-Capability
 - PAF-Continuity
 - PAF-Responsiveness
 - PAF-Safety
- PAF-Sustainability

Data source attributes

Data sources: Data Source

AlHW National Perinatal Data Collection (NPDC)

Frequency

Calendar years ending 31 December each year

Data custodian

Australian Institute of Health and Welfare

Accountability attributes

Reporting requirements: National Health Performance Agreement-Performance and Accountability Framework

Source and reference attributes

Submitting organisation: National Health Performance Authority

Origin: Healthy Communities

Reference documents: National Health Performance Authority-Performance and Accountability Framework

Healthy Communities: Child and maternal health in 2009–2012, Technical Supplement.

Available from:

http://www.myhealthycommunities.gov.au/Content/publications/downloads

/NHPA HC Report Child and maternal health Technical Supplement July 2014.pdf

Relational attributes

Related metadata references:

See also Administrative health region—Medicare Local identifier, code AANNN

• National Health Performance Authority (retired), Retired 01/07/2016

See also Administrative health region—Medicare Local peer group, code N

• National Health Performance Authority (retired), Retired 01/07/2016

See also <u>National Healthcare Agreement: PI 33-Women with at least one antenatal visit in the first trimester of pregnancy, 2012</u>

• Health, Retired 25/06/2013