Indigenous Better Cardiac Care measure: 3.5-Hospitalised acute myocardial infarction events that ended with death of the patient, 2016

Exported from METEOR (AIHW's Metadata Online Registry)

Indigenous Better Cardiac Care measure: 3.5-Hospitalised acute myocardial infarction events that ended with death of the patient, 2016

Identifying and definitional attributes

Metadata item type:	Indicator
Indicator type:	Indicator
Short name:	3.5-Mortality rates for hospitalised acute myocardial infarction (AMI), 2016
METEOR identifier:	657036
Registration status:	Health!, Standard 17/08/2017
Description:	Proportion of hospitalised AMI events among patients aged 35 and over that ended in death, by Aboriginal and Torres Strait Islander status.
Rationale:	This measure falls within Priority area 3 of the Better Cardiac Care project—guideline-based therapy for acute coronary syndrome (ACS). This priority area is based on the premise that all Aboriginal and Torres Strait Islander people with ACS should receive guideline-based therapy. ACS is a broad spectrum of acute clinical presentations, ranging from unstable angina to AMI. The *National Heart Foundation of Australia/Cardiac Society of Australia and NewZealand guidelines for the management of acute coronary syndromes* are described in Aroney et al. (2006), Aroney et al. (2008) and Chew et al. (2011). AMI refers to a heart attack that has caused some death of heart muscle. Improvements in treatment for people with AMI reduce the mortality rate over both the short and long term (Ong & Weeramanthri 2000; Tideman et al. 2014). • In-hospital, 30-day and 12-month mortality rates for people admitted to hospital with a primary diagnosis of AMI, by Aboriginal and Torres Strait Islander status. Full reporting against this indicator is not possible using available data. Specifically, data are not available on 30-day and 12-month mortality following hospitalisation. The reported measure excludes people aged under 35 due to small numbers.
Indicator set:	Better Cardiac Care measures for Aboriginal and Torres Strait Islander people (2016) Health!, Standard 17/08/2017

Collection and usage attributes

Population group age from:	35 years

Computation description: Number of hospitalised AMI events among people aged 35 and over that ended with the death of the patient, divided by the number of hospitalised AMI events among people aged 35 and over, and multiplied by 100.

Data are presented as a percentage.

Crude rates are calculated for Indigenous Australians.

Age-standardised rates are calculated for comparisons between Indigenous and non-Indigenous Australians, and for analysis of change over time.

Data are based on financial years.

Definitions:

Hospitalised AMI event—in the context of this measure, refers to an episode of care for an admitted patient with a principal diagnosis of AMI (see definition below), a care type of 'acute care', an urgency of admission of 'emergency', and a separation mode that was not equal to 'transferred to (an)other acute hospital'.

*Hospitalisation (**separation**)*—an episode of care for an admitted patient that 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 care type (for example, from acute care to palliative care).

Acute myocardial infarction (AMI)—commonly used to mean a heart attack, but more correctly refers only to those heart attacks that have caused some death of heart muscle. Identified as those separations with a principal diagnosis of ICD-10-AM code I21 (8th edn.).

Computation: Crude rate: (Numerator ÷ Denominator) x 100.

Age-standardised rate: calculated using the direct method, and the Australian standard population as at 30 June 2001.

Numerator: Number of admitted patient separations in the reference period among people aged 35 and over with a principal diagnosis of AMI, a care type of 'acute care', an urgency of admission of 'emergency', and a separation mode of 'died'.

Numerator data elements:

Data Element / Data Set

Episode of admitted patient care—admission date, DDMMYYYY

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Used together with date of birth for calculation of age.

Data source type: Administrative by-product data

Data Element / Data Set

Episode of admitted patient care—admission urgency status, code N

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Episode of admitted patient care—separation mode, code N

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Person—date of birth, DDMMYYYY

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Used together with date of admission for calculation of age.

Data source type: Administrative by-product data

Data Element / Data Set

Hospital service—care type, code N[N]

Data Source

National Hospital Morbidity Database (NHMD)

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Episode of care—principal diagnosis, code (ICD-10-AM 8th edn) ANN{.N[N]}

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Denominator:

Number of admitted patient separations in the reference period among people aged 35 and over with a principal diagnosis of AMI, a care type of 'acute care', an urgency of admission of 'emergency', and a separation mode not equal to 'transferred to (an)other acute hospital'.

Denominator data elements:

Data Element / Data Set

Episode of admitted patient care—admission date, DDMMYYYY

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Episode of admitted patient care—admission urgency status, code N

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Episode of admitted patient care—separation mode, code N

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Person—date of birth, DDMMYYYY

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Hospital service—care type, code N[N]

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Episode of care—principal diagnosis, code (ICD-10-AM 8th edn) ANN{.N[N]}

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Disaggregation:

Current period (2009–14) by:

- Indigenous status
- Indigenous status, sex and age group (35–44, 45–54, 55–64, 65+)
- Indigenous status and remoteness area.

Time series (2005–08, 2008–11 and 2011–14), New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined by:

- Indigenous status.

Disaggregation data elements:

Data Element / Data Set

Episode of admitted patient care—admission date, DDMMYYYY

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Used together with date of birth for calculation of age.

Data source type: Administrative by-product data

Data Element / Data Set

Person—date of birth, DDMMYYYY

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Used together with admission date for calculation of age.

Data source type: Administrative by-product data

Data Element / Data Set

Person—sex, code N

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Person—Indigenous status, code N

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Person—area of usual residence, statistical area level 2 (SA2) code (ASGS 2011) N(9)

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2013-14

Guide for use

Used for disaggregation by remoteness area.

Data source type: Administrative by-product data

Comments:

General:

The data for this measure are drawn from the Australian Institute of Health and Welfare NHMD. For 2016 reporting, the most recent data available are for 2013–14. With the exception of time trends, data are reported for the 5-year period 2009–14 to enable disaggregation of the data by the variables of interest. For the time trend analysis, data are reported for three 3-year periods (that is, 2005–08, 2008–11 and 2011–14). People aged under 35 were excluded due to small numbers.

For 2016 reporting, data are presented for 6 jurisdictions for which the quality of Indigenous identification is considered adequate for the years reported—for details, see the 'Indigenous identification' section that follows.

In-hospital death rates may be affected by different approaches to pre- and post-hospital care (for example, more deaths occurring before reaching the hospital, or more deaths following discharge from hospital); thus data for this measure should be interpreted in the context of overall cardiac mortality.

Indigenous identification:

While there is some under-identification of Indigenous Australians in the NHMD, data for all states and territories are considered to have adequate Indigenous identification from 2010–11 onwards (AIHW 2013). For 2016 reporting, the analysis for this measure includes data for years before 2010–11. Therefore, analysis for this measure is limited to the 6 jurisdictions that were assessed by the AIHW as having adequate identification of Indigenous Australians from 2004–05 onwards—namely, New South Wales, Victoria, Queensland, Western Australia, South Australia and public hospitals in the Northern Territory (AIHW 2010). About 95% of the Australian Indigenous population live in these 6 jurisdictions (AIHW 2015b).

With the exception of data from hospitals in Western Australia, hospitalisations where the person's Indigenous status was not stated were excluded from analyses that compare Indigenous and non-Indigenous rates. For hospitals in Western Australia, records with an unknown Indigenous status are reported as non-Indigenous, so are included in the 'non-Indigenous' data in these analyses.

Estimation of hospitalised AMI events:

Data from the NHMD pertain to hospitalisations (not individuals), and it is not possible to group associated hospitalisations together without data linkage. To reduce the double-counting of people with an AMI who were transferred to another hospital for further diagnosis or treatment, the analyses for the reported measure exclude hospitalisations ending in transfer to (an)other acute hospital. In this way, only the last hospitalisation for AMI event is generally counted.

Comparisons by jurisdiction:

No comparison by state and territory is provided. Data on in-hospital deaths by state and territory are not comparable due to different practices of recording deaths in admitted patient data. As well, as mentioned above, in-hospital death rates may be affected by different approaches to pre- and post-hospital care.

Representational attributes

Representation class: Percentage

Data type: Real

Unit of measure: Episode

Format: N[NN].N

Data source attributes

Data sources:

Data Source

National Hospital Morbidity Database (NHMD)

Frequency

Annual

Data custodian

Australian Institute of Health and Welfare

Accountability attributes

Reporting requirements: Annual reporting by the Australian Institute of Health and Welfare (AIHW 2015a, 2016).

Organisation responsible for providing data: Australian Institute of Health and Welfare

Further data development / collection required: Data development is required to fully report on the agreed measure. Data are not available on 30-day and 12-month mortality following hospitalisation. As well, data from the NHMD pertain to hospitalisations (not individuals), and it is not possible to group associated hospitalisations together without data linkage.

Release date: 24/11/2016

Source and reference attributes

Submitting organisation: Australian Institute of Health and Welfare

Origin: AIHW 2016. Better Cardiac Care measures for Aboriginal and Torres Strait Islander people: second national report 2016. Cat. no: IHW 169. Canberra: AIHW

Reference documents:

ACCD (Australian Consortium for Classification Development) 2013a. The Australian Classification of Health Interventions (ACHI). 10th edn. Adelaide: Independent Hospital Pricing Authority, Lane Publishing.

ACCD 2013b. The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian modification (ICD-10-AM). 10th edn. Adelaide: Independent Hospital Pricing Authority, Lane Publishing.

AIHW (Australian Institute of Health and Welfare) 2010. Indigenous identification in hospital separations data: quality report. Health services series no. 35. Cat. no. HSE 85. Canberra: AIHW.

AIHW 2013. Indigenous identification in hospital separations data: quality report. Cat. no. IHW 90. Canberra: AIHW.

AIHW 2015a. Better Cardiac Care measures for Aboriginal and Torres Strait Islander people: first national report 2015. Cat. no. IHW 156. Canberra: AIHW.

AIHW 2015b. The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples 2015. Cat. no. IHW 147. Canberra: AIHW.

AIHW 2016. Better Cardiac Care measures for Aboriginal and Torres Strait Islander people: second national report 2016. Cat. no: IHW 169. Canberra: AIHW.

Aroney C, Aylward P, Chew D, Huang N, Kelly A, White H et al. 2008. 2007 addendum to the National Heart Foundation of Australia/Cardiac Society of Australia and New Zealand guidelines for the management of acute coronary syndromes 2006. Medical Journal of Australia 188:302–3.

Aroney C, Aylward P, Kelly A, Chew D & Clune E (on behalf of the Acute Coronary Syndrome Guidelines Working Group) 2006. Guidelines for the management of acute coronary syndromes 2006. Medical Journal of Australia 184:S2–9.

Chew D, Aroney C, Aylward P, Kelly A, White H, Tideman P et al. 2011. 2011 addendum to the National Heart Foundation of Australia/Cardiac Society of Australia and New Zealand guidelines for the management of acute coronary syndromes (ACS) 2006. Heart, Lung and Circulation 20:487–502.

Ong M & Weeramanthri T 2000. Delay times and management of acute myocardial infarction in Indigenous and non-Indigenous people in the Northern Territory. Medical Journal of Australia 173:201–4.

Tideman P, Tirimacco R, Senior D, Setchell J, Huynh L, Tavella R et al. 2014. Impact of a regionalised clinical cardiac support network on mortality among rural patients with myocardial infarction. Medical Journal of Australia 200:157–60.

Relational attributes

Related metadata references:

See also Indigenous Better Cardiac Care measure: 3.1-Hospitalised ST-segment-elevation myocardial infarction events treated by percutaneous coronary intervention, 2016
Health!, Standard 17/08/2017

See also Indigenous Better Cardiac Care measure: 3.3-Hospitalised acute coronary syndrome events that included diagnostic angiography or definitive revascularisation procedures, 2016
Health!, Standard 17/08/2017