6.9 Average length of stay for stroke patients aged 65 years and over, major and large public hospitals, 2012–13

Exported from METEOR (AIHW's Metadata Online Registry)

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Identifying and definitional attributes

Metadata item type:	Indicator
Indicator type:	Indicator
Short name:	Stroke average length of stay in hospital by peer group, 65 years and over, 2012-13
Synonymous names:	ALOS stroke
METEOR identifier:	601266
Registration status:	National Health Performance Authority (retired), Retired 01/07/2016 Australian Commission on Safety and Quality in Health Care, Standard 23/11/2016
Description:	Average (mean) length of stay (number of days) for multi-day stay stroke patients aged 65 years and over, major and large public hospitals, 2012-13
Indicator set:	Australian Atlas of Healthcare Variation National Health Performance Authority (retired), Retired 01/07/2016 Australian Commission on Safety and Quality in Health Care, Standard 23/11/2016

Collection and usage attributes

Population group age from:	65 years and over

Computation description: Presented as the average number of days, by hospital

Only hospitals in the major and large peer groups and which had at least 10 separations were included in the analysis. For more information about these peer groups see /content/index.phtml/itemId/584666

To calculate the average length of stay the key unit that records information about a patient's stay in hospital is called an 'episode of admitted patient care'. This records information about the patient and the care they received in hospital, including:

- Sex
- Diagnosis
- Procedure type
- Date of admission and
- Date of separation/discharge.

Exclusions:

The average length of stay indicator relates only to acute patients with a multi-day, or overnight, stay. The following episodes of care are excluded from all reported measures:

- Same day episodes, i.e. patients admitted and discharged on the same day
- Episodes for non-acute care
- Episodes where the patient died Episodes where the patient transferred to another facility within 2 days.

Outlier removal:

Episodes determined to be extreme long stay outliers were removed. Outlier bounds are derived for each AR-DRG. The method selected for deriving national level outlier bounds uses the inter-quartile ranges as the guide for outlier exclusion. The method of detecting extreme outliers (mEO) is as follows:

$mEO = Q_3 + k^*(Q_3-Q_1)$

Where

Q_1 equals the 25^{th} percentile value

Q_3 equals the 75^{th} percentile value

k equals non-negative values of a constant.

Sensitivity analysis was conducted to identify k and resulted in k=10 being selected.

Computation: Numerator ÷ denominator

Numerator: Number of overnight bed days at major and large public hospitals attributable to stroke in patients aged 65 years and over in 2012-13.

Numerator data elements:

Data Element / Data Set

Person—date of birth, DDMMYYYY

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2012-13

Guide for use

Data source type: Administrative by-product data

Used to calculate 65 years and over age group.

Data Element / Data Set

Episode of admitted patient care—length of stay (including leave days), total N[NN]

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2012-13

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Episode of care—additional diagnosis, code (ICD-10-AM 7th edn) ANN{.N[N]}

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2012-13

Guide for use

Inclusion codes for Principal diagnosis and sequenced as one of the first two additional diagnoses:

ICD-10-AM (7th edn) code	Description
I61.0	Intracerebral haemorrhage in hemisphere, subcortical
I61.1	Intracerebral haemorrhage in hemisphere, cortical
I61.2	Intracerebral haemorrhage in hemisphere, unspecified
I61.3	Intracerebral haemorrhage in brain stem
I61.4	Intracerebral haemorrhage in cerebellum
I61.5	Intracerebral haemorrhage, intraventricular
I61.6	Intracerebral haemorrhage, multiple localised
I61.8	Other intracerebral haemorrhage
I61.9	Intracerebral haemorrhage, unspecified
I62.9	Intracranial haemorrhage (non-traumatic), unspecified
I63.0	Cerebral infarction due to thrombosis of precerebral arteries
I63.1	Cerebral infarction due to embolism of precerebral arteries
I63.2	Cerebral infarction due to unspecified occlusion or stenosis of precerebral arteries
I63.3	Cerebral infarction due to thrombosis of cerebral arteries
I63.4	Cerebral infarction due to embolism of cerebral arteries

I63.5	Cerebral infarction due to unspecified occlusion or stenosis of cerebral arteries
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic
I63.8	Other cerebral infarction
I63.9	Cerebral infarction, unspecified
I64	Stroke, not specified as haemorrhage or infarction, Cerebrovascular accident NOS

Data source type: Administrative by-product data

Data Element / Data Set

Episode of care—principal diagnosis, code (ICD-10-AM 7th edn) ANN{.N[N]}

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2012-13

Denominator:

Number of multi-day stays in hospital for people aged 65 years and over attributable to a stroke for a major or large public hospital.

Denominator data elements:

Data Element / Data Set

Episode of care—additional diagnosis, code (ICD-10-AM 7th edn) ANN{.N[N]}

NMDS / DSS

Admitted patient care NMDS 2012-13

Guide for use

Inclusion codes for Principal diagnosis and sequenced as one of the first two additional diagnoses:

ICD-10-AM (7th edn) code	Description
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I64	Stroke, not specified as haemorrhage or infarction, Cerebrovascular accident NOS

Data Element / Data Set

Episode of care—principal diagnosis, code (ICD-10-AM 7th edn) ANN{.N[N]}

NMDS / DSS

Admitted patient care NMDS 2012-13

Disaggregation:

Disaggregation is by:

- Australian public hospital
- Hospital peer group (major and large only). For more information about the hospital peer groups see /content/index.phtml/itemId/584666

Disaggregation data elements:

Data Element / Data Set

Establishment—organisation identifier (state/territory), NNNNN

Data Source

National Hospital Morbidity Database (NHMD)

NMDS / DSS

Admitted patient care NMDS 2012-13

Guide for use

Data source type: Administrative by-product data

Used for disaggregation by Statistical Areas Level 3.

Data Element / Data Set

Hospital—hospital peer group, modified code N

Representational attributes

Representation class: Mean (average)

Data type: Time period

Unit of measure: Time (e.g. days, hours)

Format: Days, rounded to 1dp

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: Australian Commission of Safety and Quality in Health Care's Atlas of Healthcare Variation, released November 2015

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

Accountability: Australian Commission of Safety and Quality in Health Care

Source and reference attributes

Submitting organisation: National Health Performance Authority