3.9 Average length of stay for hip fracture patients aged 65 years and over, major and large public hospitals, 2012–13

Exported from METEOR (AIHW's Metadata Online Registry)

3.9 Average length of stay for hip fracture patients aged 65 years and over, major and large public hospitals, 2012–13

Identifying and definitional attributes

Metadata item type:	Indicator
Indicator type:	Indicator
Short name:	Hip fracture average length of stay in hospital by peer group, 65 years and over, 2012-13
Synonymous names:	ALOS fractured hip
METEOR identifier:	601268
Registration status:	Australian Commission on Safety and Quality in Health Care, Standard 23/11/2016 National Health Performance Authority (retired), Retired 01/07/2016
Description:	Average (mean) length of stay (number of days) for multi-day stay hip fracture patients aged 65 years and over, major and large public hospitals, 2012–13

Indicator set:	Australian Atlas of Healthcare Variation
	    Australian Commission on Safety and Quality in Health Care, Standard 23/11/2016
	    National Health Performance Authority (retired), Retired 01/07/2016

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 25th percentile value

Q_3 equals the 75th 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 hip fracture in patients aged 65 years and over.
Numerator data elements:	

┌─ **Data Element / Data Set** ─────────────────────────────────┐

[Episode of admitted patient care—length of stay (excluding 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

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┌─ **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 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 and Additional diagnosis:

ICD-10-AM (7th edn) code	Description
S72.00	Fracture of neck of femur, part unspecified
S72.01	Fracture of intracapsular section of femur.
S72.02	Fracture of upper epiphysis (separation) of femur
S72.03	Fracture of subcapital section of femur
S72.04	Fracture of midcervical section of femur
S72.05	Fracture of base of neck of femur
S72.08	Fracture of other parts of neck of femur
S72.10	Fracture of trochanteric section of femur, unspecified
S72.11	Fracture of intertrochanteric section of femur
S72.2	Subtrochanteric fracture

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 fractured hip 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]}](#)

Guide for use

Inclusion codes for Principal and Additional diagnosis:

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S72.00	Fracture of neck of femur, part unspecified
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S72.05	Fracture of base of neck of femur
S72.08	Fracture of other parts of neck of femur
S72.10	Fracture of trochanteric section of femur, unspecified
S72.11	Fracture of intertrochanteric section of femur
S72.2	Subtrochanteric fracture

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]}](#)

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 used 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 public hospital

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

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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