

CEC eChartbook Portal Extract

Falls

Fall-related injury hospitalisation



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Suggested citation: Clinical Excellence Commission [access date]. eChartbook Portal: Safety and Quality of Healthcare in New South Wales. Sydney: Clinical Excellence Commission. Available at: <http://www.cec.health.nsw.gov.au/echartbook/acute-and-other-services-indicators/falls-related-hospitalisations>. Accessed (insert date of access).

Contributors:

Content: CEC NSW Falls Prevention Program

Data analysis by: CEC eChartbook team

Edited by: CEC eChartbook team

Any enquiries or comments about this publication should be directed to:

André Jenkins, Director, Information Management

Clinical Excellence Commission, Locked Bag 8, Haymarket NSW 1240.

Phone: (02) 9269 5500 Email: CEC-echartbook@health.nsw.gov.au

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PDF File created: Wednesday, 16 May 2018

FALL-RELATED INJURY HOSPITALISATIONS

Fall-related hospitalisations

Why is this important? In 2016/17, there were:

Fall-related total hospitalisations

- All ages: 87,597 a rate of 961/100,000 population (compared with 82,357 a rate of 916/100,000 population in 2015/16)
- 65 years and over : 54,213 a rate of 4,162/100,000 population (compared with 50,455 a rate of 3,936/100,000 population in 2015/16)

Fall-related injury total hospitalisations

- All ages: 69,637 a rate of 772/100,000 population (compared with 66,199 a rate of 744/100,000 population in 2015/16)
- 65 years and over: 40,889 a rate of 3,126/100,000 population (compared with 38,487 a rate of 2,993/100,000 population in 2015/16)

Fall-related deaths

In 2015, there were:

- All ages: 757 a rate of 7.4/100,000 population
- 65 years and over: 696 a rate of 52.7/100,000 population

Between 2013/14 and 2016/17 the rate of fall-related hospitalisations for people 65 years and over has steadily increased from 3,830 to 4,162/100,000 population. The greatest increase was in people aged 85 years and over (HealthStats NSW).

The fall-related hospitalisations with injury in primary diagnosis were used for this report. Older people had the highest rates, with more than half of all fall-related hospitalisations with injury were of patients aged 65 years or over.

Rates of overnight hospitalisations for falls among persons aged 65 years and over have been increasing for the last 15 years for both males and females. While rates for females were consistently higher over this period compared with males, there was a greater increase in rates over the period for males (59 per cent increase) compared with females (32 per cent increase). This represents an overall burden of injury from falls on the hospital system which is influenced not only by the rate of new injuries from falls in the community

but also from factors such as the medical consequences of these falls. (HealthStats NSW). Patients may also require long periods of rehabilitation after acute care.

In a recent study it was reported that there were 314,041 occasions of fall-related ambulance use by older adults and 331,311 fall-related hospitalisations, of which 69 per cent (n = 227,753) were for injurious falls. Fractures accounted for 57 per cent of injurious hospitalisations. Slips and trips were the most common mechanism of falls requiring hospitalisation (52 per cent). Residents of aged care facilities had a greater proportion of fall injury hospitalisations compared with people living in the community (85% and 65%, respectively), (Paul et al 2017).

Findings: Chart FL01 shows that the age-standardised rate for fall-related injury hospitalisations in NSW residents aged 65 years and over, increased from 2,890 per 100,000 population in 2012-13 to 3,126 in 2016-17. The rates of fall-related injury hospitalisation varied across local health districts (LHDs). In 2016-17, rates ranged from 2,422 separations per 100,000 in Hunter New England LHD to 3,563 in Northern Sydney LHD. A similar hospitalisation pattern was observed for males and females (Charts FL02 & FL03). For male residents of NSW, the rate increased from 2,328 per 100,000 population in 2012-13 to 2,650 in 2016-17. During this time, rates for females increased from 3,314 to 3,516 per 100,000 population.

Implications: Effective strategies to prevent falls-related injuries include:

- Identifying and managing risk factors for falls and falls-related injury (including osteoporosis) among older people at risk of falls
- Preventing the development of fall risk factors, through the promotion of appropriate physical activity (balance and strength exercises) and nutrition (including vitamin D and calcium supplementation, where appropriate), medication and vision review.

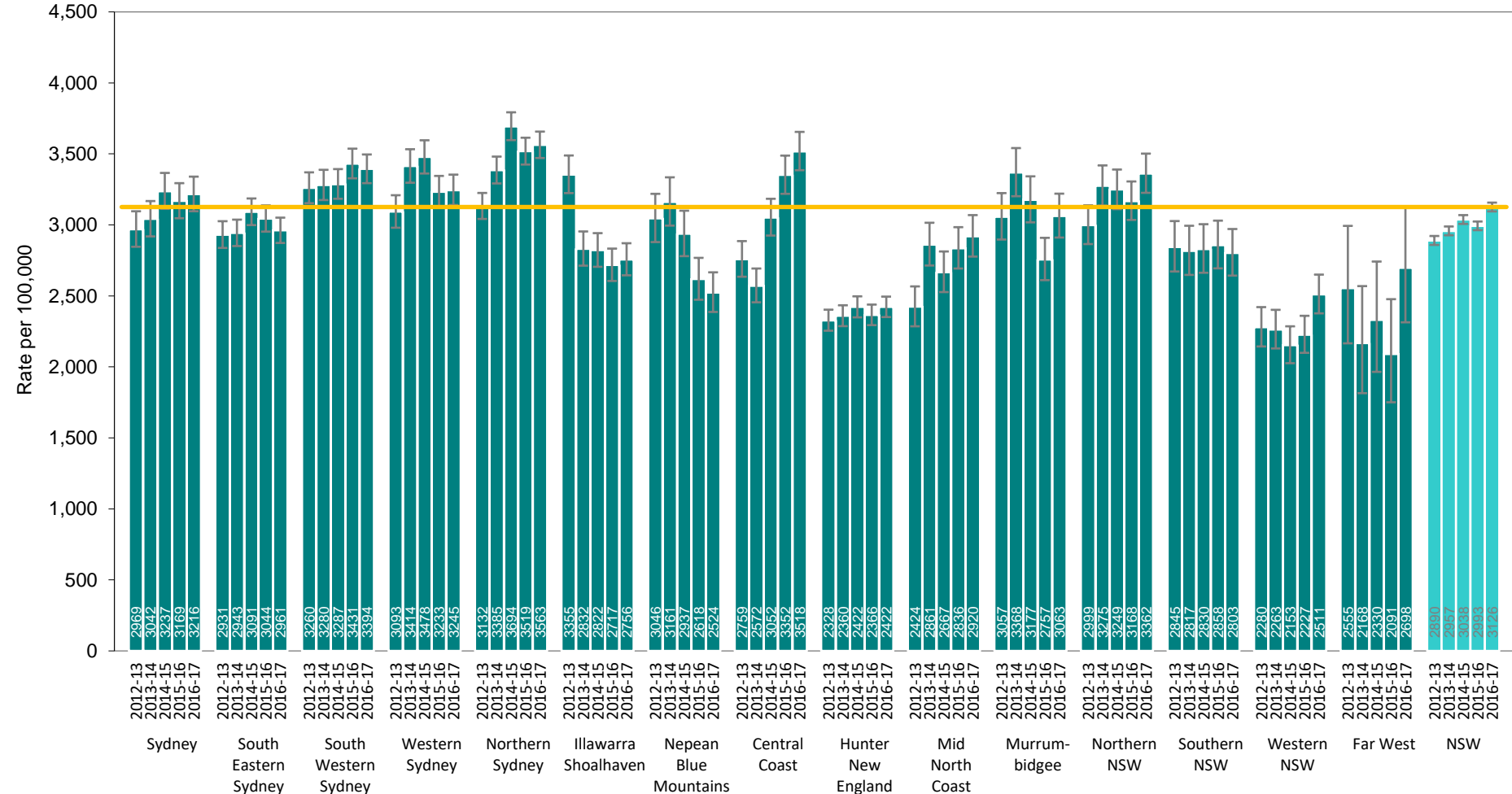
- Health services implementing opportunistic identification and integrate the management/ referral of people with high risks (past history of falls and presence of balance and gait abnormalities).
- Integrated care pathways with community health & primary care settings for multidisciplinary follow-up.

What we don't know: Better information is needed about the patient journey beyond the hospital, following a fall. More robust data is needed about falls occurring in residential aged care facilities and other health care facilities, which are not included in the NSW Admitted Patient Data Collection.

References:

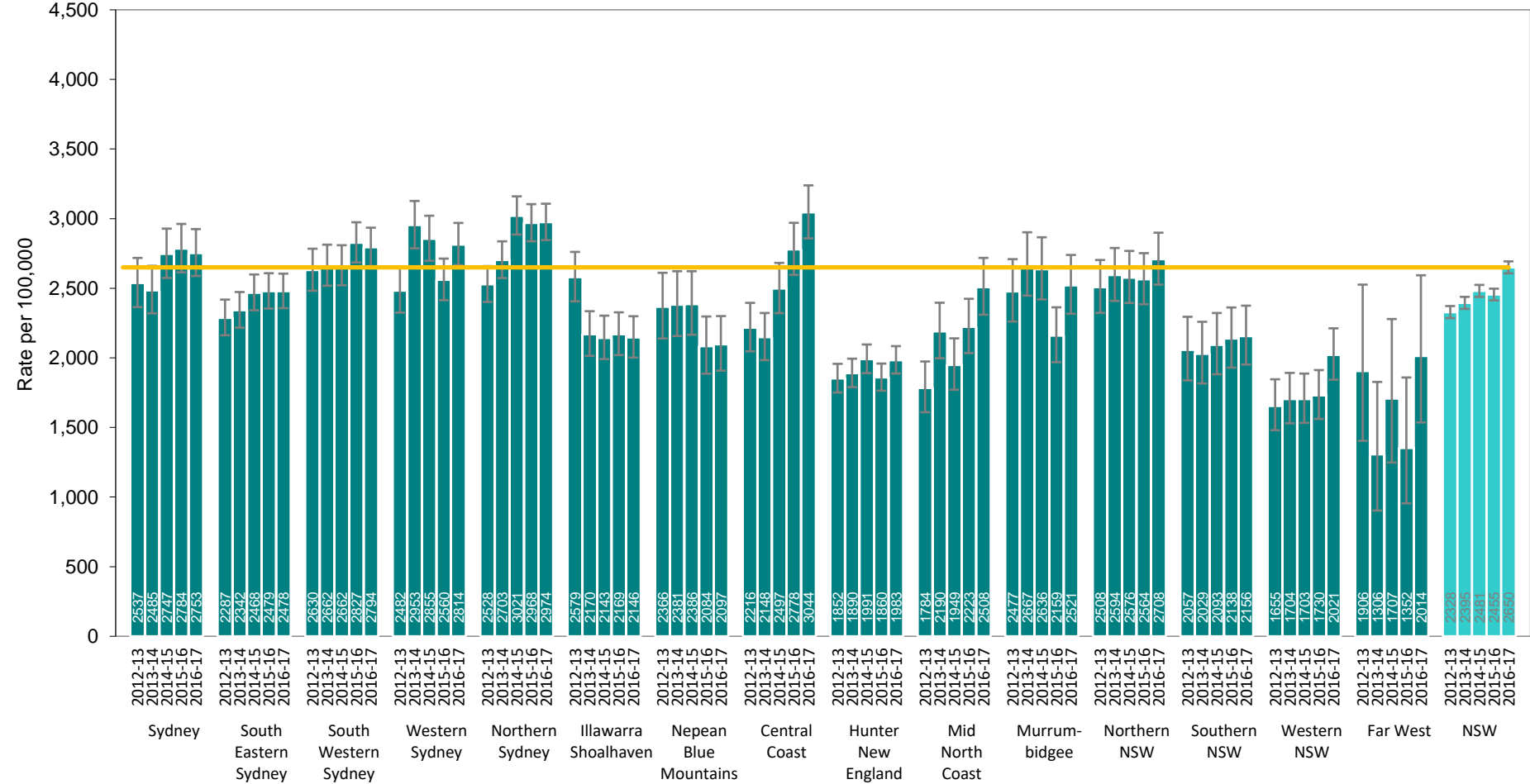
- [1] Centre for Epidemiology and Evidence. HealthStatistics New South Wales. Sydney: NSW Ministry of Health. Available at: http://nswstatsearch.clients.funnelback.com/s/search.html?collection=nsw_health_statistics&query=falls Accessed 16 May 2018.
- [2] Paul S, Harvey LA, Ryan T, Qiang L, Boufous S, Priddis A, Tiedemann A, Clemson L, Lord SR, Muecke, S, Close JCT, Lo S, Sherrington C. Trends in fall-related ambulance use and hospitalisation among older adults in NSW from 2006 to 2013: a retrospective, population-based study. Public Health Research and Practice, 2017 October 2107; Vol. 27(4):e27341701

Chart FL01 – Age standardised fall-related injury hospital separations rate
 Rate per 100,000 population for persons aged 65 years and over by LHD, NSW, 2012-13 to 2016-17



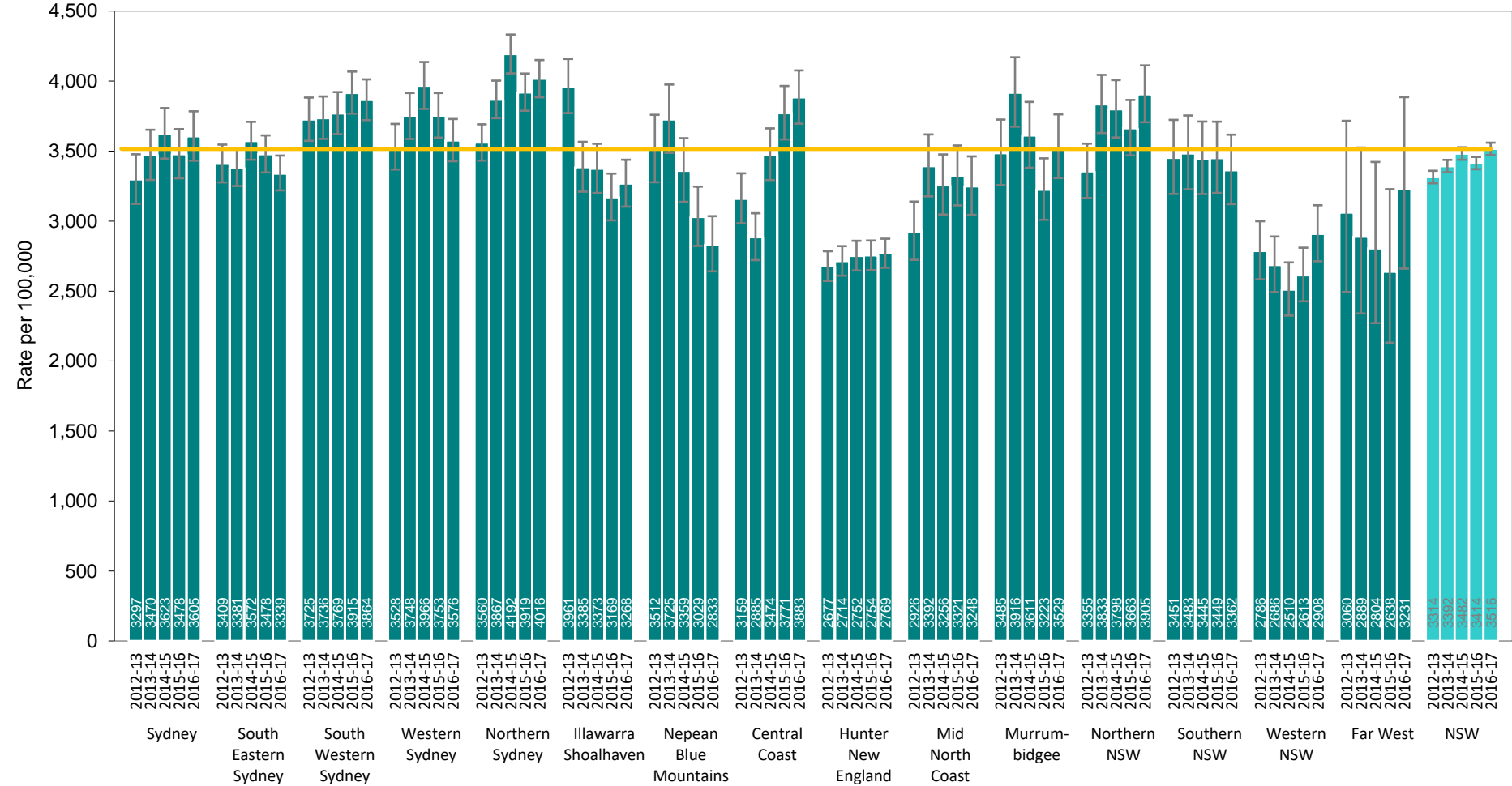
Source: Centre for Epidemiology and Evidence. HealthStats NSW. Sydney: NSW Ministry of Health. Available at: www.healthstats.nsw.gov.au. Accessed (16-May-2018).

Chart FL02 - Age standardised fall-related injury hospital separations rate for males
 Rate per 100,000 population for males aged 65 years and over by LHD, NSW, 2012-13 to 2016-17



Source: Centre for Epidemiology and Evidence. HealthStats NSW. Sydney: NSW Ministry of Health. Available at: www.healthstats.nsw.gov.au. Accessed (16-May-2018).

Chart FL03 - Age standardised fall-related injury hospital separations rate for females
 Rate per 100,000 population for females aged 65 years and over by LHD, NSW, 2012-13 to 2016-17



Source: Centre for Epidemiology and Evidence. HealthStats NSW. Sydney: NSW Ministry of Health. Available at: www.healthstats.nsw.gov.au. Accessed (16-May-2018).

Data Definitions

Chart:	FL01
Admin Status:	Current, Jun 2017
Indicator Name:	Fall-related injury hospitalisations, persons aged 65 years and older
Description:	Age standardised fall-related injury hospital separations per 100,000 population for all persons aged 65 years and over, by local health district of residence, 2012-13 to 2016-17
Dimension:	Appropriateness
Clinical Area:	Population Health and Primary Care
Data Inclusions:	Any 'Injury' - Principal diagnosis (ICD 10 Codes: S00-T75 or T79) with 'Falls' as an- 'External cause' (ICD 10 Codes: W00-W19, considered first external cause only)
Data Exclusions:	Residents outside NSW
Numerator:	Persons aged 65 years and older diagnosed with fall-related injury
Denominator:	NSW estimated residential population for all persons aged 65 years and over
Standardisation:	Direct age standardisation to the 2001 Australian mid-year Estimated Resident Population (ERP)
Data Source:	Centre for Epidemiology and Evidence. HealthStats NSW. Sydney: NSW Ministry of Health. Available at: www.healthstats.nsw.gov.au . Accessed (16-May-2018).
Comments:	None

Chart:	FL02
Admin Status:	Current, Jun 2017
Indicator Name:	Fall-related injury hospitalisations, males aged 65 years and older
Description:	Age standardised fall-related injury hospital separations per 100,000 males aged 65 years and over, by local health district of residence, 2012-13 to 2016-17
Dimension:	Appropriateness
Clinical Area:	Population Health and Primary Care
Data Inclusions:	Any 'Injury' - Principal diagnosis (ICD 10 Codes: S00-T75 or T79) with 'Falls' as an- 'External cause' (ICD 10 Codes: W00-W19, considered first external cause only)
Data Exclusions:	Residents outside NSW
Numerator:	Males aged 65 years and older diagnosed with fall-related injury
Denominator:	NSW estimated residential population for males aged 65 years and over
Standardisation:	Direct age standardisation to the 2001 Australian mid-year Estimated Resident Population (ERP)
Data Source:	Centre for Epidemiology and Evidence. HealthStats NSW. Sydney: NSW Ministry of Health. Available at: www.healthstats.nsw.gov.au . Accessed (16-May-2018).
Comments:	None

Chart:	FL03
Admin Status:	Current, Jun 2017
Indicator Name:	Fall-related injury hospitalisations, females aged 65 years and older
Description:	Age standardised fall-related injury hospital separations per 100,000 population for females aged 65 years and over, by local health district of residence, 2012-13 to 2016-17
Dimension:	Appropriateness
Clinical Area:	Population Health and Primary Care
Data Inclusions:	Any 'Injury' - Principal diagnosis (ICD 10 Codes: S00-T75 or T79) with 'Falls' as an- 'External cause' (ICD 10 Codes: W00-W19, considered first external cause only)
Data Exclusions:	Residents outside NSW
Numerator:	Females aged 65 years and older diagnosed with fall-related injury
Denominator:	NSW estimated residential population for females aged 65 years and over
Standardisation:	Direct age standardisation to the 2001 Australian mid-year Estimated Resident Population (ERP)
Data Source:	Centre for Epidemiology and Evidence. HealthStats NSW. Sydney: NSW Ministry of Health. Available at: www.healthstats.nsw.gov.au . Accessed (16-May-2018).
Comments:	None