Hospitalisations due to falls by older people
2006–07 to 2008–09

Falls are common among older people and often result in fractures or other serious injuries. They may have substantial impacts on the older person’s health and wellbeing and may result in loss of independence and admission to residential care.

In Australia, an estimated 1 in 3 older people living at home experience a fall annually. Rates of falls increase markedly with age. Research shows that other risk factors for falls and fall-related injury include gender, medication use and medical conditions. Importantly, having had one fall is a risk factor for future falls. A substantial proportion of injurious falls involving older people result in hospitalisation and the cost to the health system of serious fall-related injuries is considerable.

The three reports summarised here are the most recent editions of the Hospitalisations due to falls by older people series.

Fast facts

- Over 70,000 fall injuries involving people aged 65 and older resulted in hospitalisation in each of the 3 years 2006–07 to 2008–09.

- The majority of hospitalised falls involved older females, and hip fractures were the most common type of injury sustained.

- Fall-related care accounted for about 10% of the total number of patient days for the older population (1.2 million patient days per year).

- The annual cost of fall-related acute care for older people in Australian hospitals was estimated to exceed $600 million.

- Despite a decreasing trend in the rate of hospitalised hip fractures, the number and rate of fall injury cases, and fall-related patient days, increased significantly in the ten years 1999–00 to 2008–09.

More information

Hospitalisations due to falls by older people series are available electronically and can be downloaded free of charge from www.aihw.gov.au

Communications, Media and Marketing Unit, Australian Institute of Health and Welfare
Phone: 02 6244 1032, Email: info@aihw.gov.au
About the reports

The Hospitalisations due to falls by older people reports analyse fall-related hospital separations data from the National Hospital Morbidity Database for the financial years 2006–07, 2007–08 and 2008–09.

Three main types of fall-related hospitalisation are examined: fall injury cases (having a principal diagnosis in the ‘community injury’ range and a principal external cause describing a fall); additional hospitalisations for patients transferred to a second hospital after their initial hospitalisation; and, fall-related follow-up care separations, such as for rehabilitation. These episodes of hospital care are considered to be directly attributable to serious (injurious) fall events.

Age and sex

The estimated number of hospitalised injury cases due to falls in people aged 65 and over has increased over recent years. In 2008–09 there were an estimated 78,600 admitted fall injury cases involving older Australians, which was over 4,000 more cases than in 2007–08 and about 7,000 more cases than in 2006–07. These cases represent 2.6% of all hospitalisations involving people aged 65 and older in each year analysed.

In all years (2006–07 to 2008–09) females accounted for most of the hospitalised falls involving people aged 65 and over (about 70% of the cases) and rates of fall cases were higher for females than for males for all age groups (Figure 1). In 2008–09, for the first time in this report series, the age-standardised rate of hospitalised fall injuries involving older females exceeded 3,000 per 100,000 population (compared to 1,900 per 100,000 for males).

Injury type

In all 3 years (2006–07 to 2008–09), just under a third (29–30%) of hospitalised falls had injuries to the hip and thigh as the principal diagnosis. About three-quarters of these cases were hip fractures (74% in 2008–09 and 76% in both 2007–08 and 2006–07). Injuries to the hip and thigh, and hip fractures specifically, were more common for females aged 65 and older than for males.

Head injuries were the second most common type of injury due to a fall, after injuries to the hip and thigh, and accounted for about 1 in 5 cases in the 3-year period (18–19%). Head injuries were more common for older males than for females, and constituted a quarter of all fall injury cases involving males aged 65 and older.

Circumstances of falls

More than 50,000 hospitalised falls in each of the 3 years (2006–07 to 2008–09) (about 70% of cases) were recorded as having occurred in either the home or an aged care facility. Older people who lived in aged care facilities had a rate of falls more than 5 times as high as people of the same age who lived in the community and fell in the home.

An unintentional fall on the same level due to slipping, tripping and stumbling was the most common cause of a hospitalised injury in all 3 years, accounting for a third of all fall injury cases (32–33%). A further third of fall injury cases were attributed to ‘unspecified falls’ (28–29%). Neither code is a particularly useful descriptor of the cause of the fall, limiting our understanding of these events.

The burden on the hospital system attributable to falls

Fall-related injuries often require more episodes of hospital care than are counted as fall injury cases because some patients are transferred to a second hospital for part of their care (inwards transfers), and/or have additional hospitalisations for post-operative care and rehabilitation services (fall-related follow-up care separations). Between 33,000 and 39,000 such episodes of patient care were identified in each of the 3 years (2006–07 to 2008–09), substantially adding to the burden to the hospital system due to falls.

Costs

The direct cost to the hospital system due to falls was estimated in the 2006–07 and 2007–08 editions of the Hospitalisations due to falls by older people series. Acute episodes of hospital care attributable to fall injuries (fall injury case, inward transfer and follow-up care separations) were estimated to have cost $600.3 million in 2006–07. This estimate was nearly $50 million higher in 2007–08: $648.2 million.

About half of the total cost to the hospital system directly attributable to fall injury was for acute care for injuries to the hip and thigh ($324.8 million in 2007–08).

Trends in hospitalised fall-related injury 1999–00 to 2008–09

Australia’s population is ageing, so a stable rate of hospitalised falls will result in greater numbers of cases needing care. Compounding this increase, the age-standardised rates of hospitalised fall injury cases increased over the decade to June 2009. In the 2008–09 Hospitalisations due to falls by older people report, the estimated increase was in the order of 2% per year, with the magnitude of increase higher for males and people aged 85 and older (see Figure 2). From this, it is estimated that an additional 11,000 fall injury cases for people aged 65 and older were admitted to hospital in 2008–09 than would have if the age-standardised rate had remained stable since 1999–00.

Conversely, the rate of hospitalised hip fractures fell over the 10 years to June 2009, decreasing by 2% per year over the decade. It is estimated that some 3,000 fewer hip fracture cases involving people aged 65 and older were hospitalised in 2008–09 than would have been if the age-standardised rate had remained stable since 1999–00. While the reduction in the number of these serious injuries is an important gain for the health and wellbeing of our older population, it has not lessened the burden to the hospital system of fall-related care; substantial increases in the rate of fall-related inter-hospital transfers (5% per year) and follow-up care separations (10% per year) have contributed to a significant increase in the number, and rate, of patient days utilised for fall-related care.

Other useful references

The previous editions of the Hospitalisations due to falls by older people series are also available electronically:


AIHW: Bradley C 2012. Hospitalisations due to falls by older people, Australia 2007–08. Injury research and statistics series no. 61. Cat. no. INJCAT 137. Canberra: AIHW.


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Age and sex

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In all years (2006–07 to 2008–09) females accounted for most of the hospitalised falls involving people aged 65 and over (about 70% of the cases) and rates of fall cases were higher for females than for males for all age groups (Figure 1). In 2008–09, just under a third (29–30%) of hospitalised falls had injuries to the hip and thigh as the principal diagnosis. About three-quarters of these cases were hip fractures (74% in 2008–09 and 76% in both 2007–08 and 2006–07). Injuries to the hip and thigh, and hip fractures specifically, were more common for females aged 65 and older than for males.

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One in every 10 days spent in hospital by a person aged 65 and older in the 3 years was directly attributable to an injurious fall. The episodes of hospital care generated by fall injury cases, inwards transfers and fall-related follow-up care separations utilised 1.2 million patient days in each of the reporting periods.

The estimated average total length of hospital stay per fall injury case declined slightly over the 3-year period, from 16.3 days in 2006–07 to 15.8 days in 2008–09.

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Figure 1: Age-specific rates of fall injury cases; males and females aged 65+, Australia 2008–09

Figure 2: Age-standardised rates for fall injury cases for three age groups; 65–74, 75–84 and 85 and older, Australia 1999–00 to 2008–09

Note: Lines represent the modelled rates over the ten-year period, while symbols represent the age-standardised rate value for each year.