

Fact Sheet: Cost of hospitalisations due to fall-related injuries among people aged 65 years and over in Queensland, 2006-07 to 2008-09

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Key points:

- The total number of admissions to public and private hospitals in Queensland due to fall-related injuries among people aged 65 years and over increased by almost 7% per annum between 2006-07 (12,398 admissions) and 2008-09 (14,168 admissions).
- Expenditure on hospital admitted patient services due to fall-related injuries among people aged 65 years and over was estimated to be \$118.9 million in 2008-09 – an annual rise of around 11% since 2006-07.
- Hip fractures were the most frequent type of fall-related injury. In 2008-09, over 3,500 people aged 65 years and over were admitted with a hip fracture, almost 10 people each day. At an average cost of \$16,485 per episode in 2008-09, hip fractures accounted for almost 50% of the estimated expenditure for all fall-related admissions.
- Of the estimated expenditure for all fall-related admissions between 2006-07 and 2008-09, almost 70% was spent on treating women and more than 40% on treating those aged 85 years and over.
- The total cost of hospitalisations due fall-related injuries among people aged 65 years and over in Queensland is projected to double to over \$240 million by 2015, based on projected estimates of cost, population growth and rate of falls-related admissions.

Estimated total cost of hospitalisations due to fall-related injuries

The number, rate and estimated cost of admissions to public and private hospitals in Queensland due to all fall-related injuries among people aged 65 years and over during the financial years from 2006-07 to 2008-09 is presented in Table 1. The data include admissions from the community setting and residential aged care facilities. The costing methodology is outlined in detail on page 4.

The number of fall-related hospitalisations in 2008-09 was 14,168 — an annual rise of almost 7% since 2006-07. The age-specific rate of hospitalisations in 2008-09 was 2,691 per 100,000 population – an annual rise of almost 4% since 2006-07. Estimated expenditure on admitted

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patient services due to fall-related hospitalisations in 2008-09 was \$118.9 million – an annual rise of around 11% since 2006-07. Almost 70% of the estimated cost of all fall-related hospitalisations between 2006-07 and 2008-09 was spent on treating women and more than 40% on treating those aged 85 years or older.

Table 1: Estimated total cost of admissions to public and private Queensland hospitals due to fall-related injuries, persons 65+ years, 2006-07 to 2008-09

Year	No. of Admissions	Estimated Population	Rate per 100,000	Average length of stay	Average cost per admission	Total Cost
2006-07	12,398	493,525	2,512.1	8.4	\$7,752	\$96,105,885
2007-08	13,028	511,192	2,548.6	8.2	\$8,139	\$106,038,482
2008-09	14,168	526,434	2,691.3	8.1	\$8,394	\$118,925,798

Top 5 fall-related principal diagnosis injury types

The number, rate and estimated cost of fall-related admissions to public and private Queensland hospitals among people aged 65 years and over from 2006-07 to 2008-09 for the top 5 principal diagnosis types, by average cost, is presented in Table 2. Figure 1 shows the age-specific rate according to injury type and year.

Table 2: Top 5 fall-related principal diagnosis injuries, person 65+ years, 2006-07 to 2008-09

Principal Diagnosis Injury	Year	No. of Admissions	Estimated Population	Rate per 100,000	Average length of stay	Average cost per admission	Total Cost
Fracture of femur (hip)	2006-07	3,518	493,525	712.8	11.6	\$14,037	\$49,381,101
	2007-08	3,572	511,192	698.8	11.5	\$15,046	\$53,744,763
	2008-09	3,519	526,434	668.5	12.8	\$16,485	\$58,010,582
Fracture of lumbar spine and pelvis	2006-07	1,128	493,525	228.6	12.5	\$7,501	\$8,461,325
	2007-08	1,111	511,192	217.3	12.0	\$8,064	\$8,959,558
	2008-09	1,238	526,434	235.2	11.9	\$8,873	\$10,985,392
Fracture of shoulder and upper arm	2006-07	810	493,525	164.1	7.7	\$6,915	\$5,600,966
	2007-08	877	511,192	171.6	8.3	\$7,654	\$6,712,403
	2008-09	860	526,434	163.4	7.6	\$7,723	\$6,641,381
Intracranial injury	2006-07	591	493,525	119.8	7.9	\$9,144	\$5,403,861
	2007-08	626	511,192	122.5	7.5	\$10,045	\$6,287,933
	2008-09	718	526,434	136.4	7.2	\$9,666	\$6,939,883
Fracture of lower leg, including ankle	2006-07	641	493,525	129.9	9.2	\$7,739	\$4,960,571
	2007-08	607	511,192	118.7	8.9	\$7,684	\$4,664,056
	2008-09	741	526,434	140.8	8.0	\$8,310	\$6,158,042

Hip fractures were the most frequent type of fall-related injury. In 2008-09, over 3,500 people aged 65 years and over were admitted with a hip fracture, almost 10 people each day. At an average cost of \$16,485 per episode, hip fractures accounted for almost 50% of the estimated expenditure for all fall-related admissions in 2008-09. Although the annual rate of hip fractures declined by around 3% between 2006-07 and 2008-09, the estimated total expenditure increased by around 8% per annum. All of the top 5 injury types, except fracture of the

shoulder and upper arm, showed an increase in estimated expenditure over the period considered.

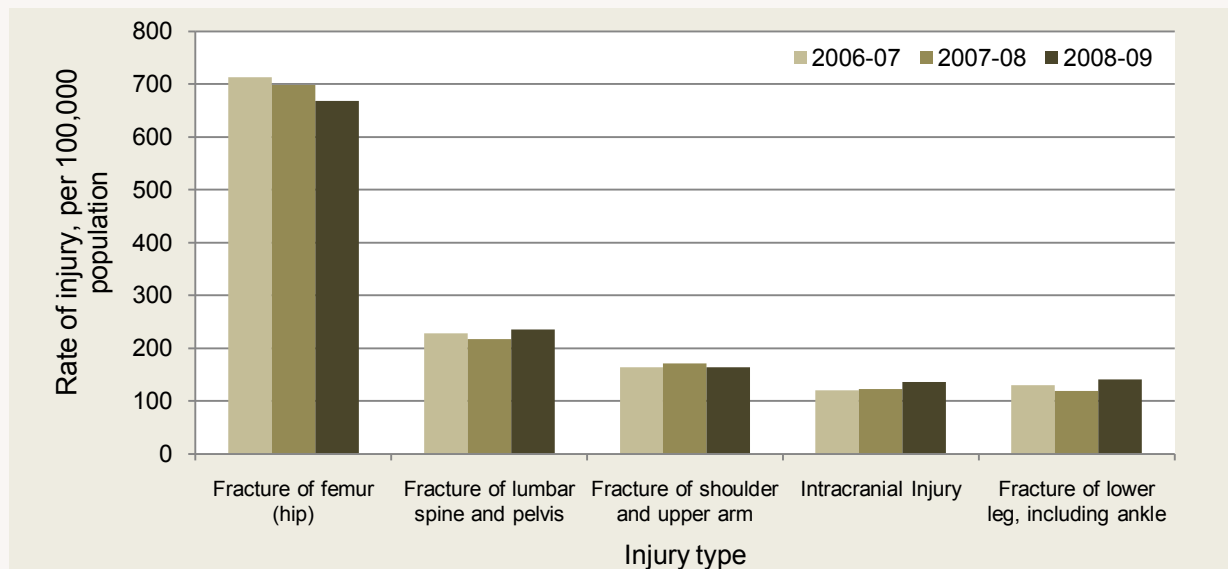


Figure 1: Age-specific rate of admission by top 5 injury types, 2006-07 to 2008-09

Fall-related hip fractures in 2008-09, by age and gender

The number, rate and estimated cost of admissions of fall-related hip fracture admissions to public and private Queensland hospitals among people aged 65 years and over in 2008-09, by age and gender, is presented in Table 3. Figure 2 shows the age-specific rate of hip fracture in 2008-09. The age-specific rate of hip fracture increased substantially with age for both males and females. The age-specific rate of hip fracture in males aged 85 years and over was 1,818 per 100,000 population, while the rate of hip fracture in females aged 85 years and over was 2,953 per 100,000 population.

Table 3: Hip fracture admissions by age and gender, 2008-09

Age Group	Gender	No. of Admissions	Estimated Population	Rate per 100,000	Average length of stay	Average cost per admission	Total Cost
65-69	Males	80	82,663	96.8	9.7	\$15,645	\$1,251,570
	Females	120	81,740	146.8	10.9	\$15,157	\$1,818,833
70-74	Males	96	61,502	156.1	11.5	\$14,828	\$1,423,442
	Females	211	62,573	337.2	11.2	\$17,338	\$3,658,238
75-79	Males	153	46,720	327.5	12.1	\$17,126	\$2,620,311
	Females	361	52,627	686.0	11.2	\$16,015	\$5,781,551
80-84	Males	244	32,007	762.3	13.3	\$16,707	\$4,076,570
	Females	612	42,411	1,443.0	12.7	\$16,664	\$10,198,563
85+	Males	406	22,329	1,818.3	11.4	\$15,842	\$6,431,973
	Females	1,236	41,862	2,952.6	14.5	\$16,788	\$20,749,530
All	All	3,519	526,434	668.5	12.8	\$16,485	\$58,010,582

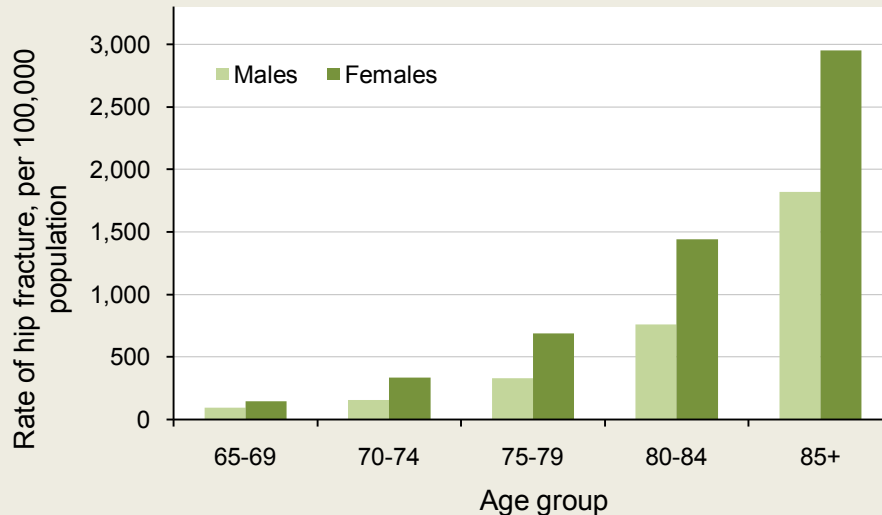


Figure 2: Age-specific rate of hip fracture by age and gender, 2008-09

Costing methodology:

- The number of admissions due to fall-related injuries to public and private acute hospitals in Queensland among people aged 65 years and over between 2006-07 and 2008-09 was based on the ICD-10 principal diagnosis codes (S00-T75, T79), first external cause codes (W00-W19) and excluded admissions from another hospital.
- The estimated expenditure on hospital admitted patient services was calculated using data from the National Hospital Cost Data Collection (2006-07) and Australian Refined Diagnosis Related Groups. Expenditure includes a range of services encountered during an episode of care, such as medical, nursing, allied-health, pharmacy, imaging and hotel services.
- The age-specific rate of hospitalisations, expressed per 100,000 population, was calculated using the estimated age and gender-matched resident population in Queensland for the period considered, derived from the 2006 Census.

For additional information and resources on falls prevention, please visit Queensland Health's -Stay On Your Feet®" website at: www.health.qld.gov.au/stayonyourfeet

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Suggested citation:

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