

Fractures in the elderly are a major health problem, and hip fractures are a common reason for hospital admission. Hip fracture is a collective term for all fractures at the top end of the femur, of which femoral neck fractures make up the biggest group. Such fractures have serious consequences in the form of pain and discomfort, but also loss of function, reduced life expectancy, and an increased need for assistance and residential care. Norway has Europe's highest incidence of hip fractures.

### Background

Treatment of hip fractures takes up a lot of the health service's resources as regards operating theatres, wards and institution beds. The healthiest hip fracture patients fare well, but the average age for patients undergoing primary surgery is high, at 80 years, and many of the patients also have other conditions that increase the risk of complications and readmission.

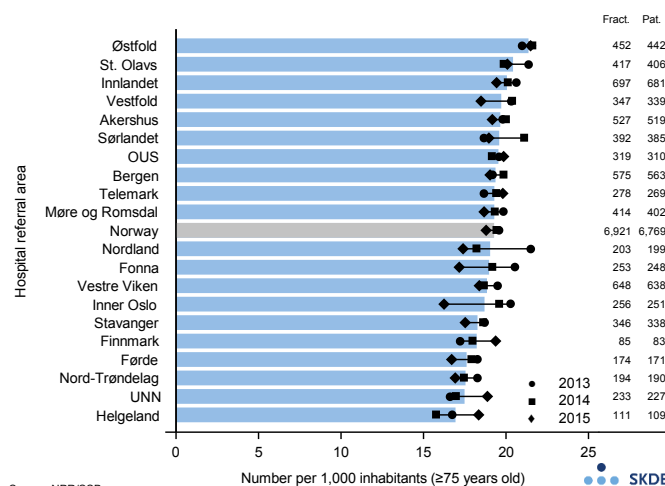
Mortality is high following hip fractures, and it is important to closely follow up patients after a fracture. Pneumonia is a common and dangerous complication in the acute phase, as are blood clots.

### Results

Hip fractures among the elderly result in nearly 7,000 hospital admissions per year, and the proportion of women is 72%. Residents of Østfold hospital referral area are admitted 30% more often than residents in the Helgeland area.

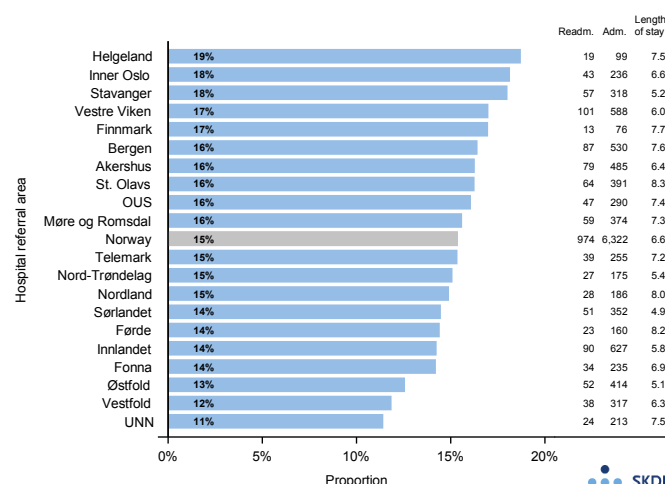
The average 30-day readmission rate after discharge following admission for hip fracture is 15% for Norway as a whole. The readmission rate is approx. 60% higher in Helgeland hospital referral area than in the UNN area. Sørlandet hospital referral area has the shortest length of stay for primary admissions, with an average of 4.9 days, while the St. Olavs area has the longest, with an average of 8.3 days. There is no correlation between the length of stay for primary admissions and the readmission rate.

Of the elderly patients, 11% die within 30 days of being admitted for a hip fracture. One year after the hip fracture, the proportion had increased to 29%. By comparison, 8% of all persons in Norway aged 75 years and older die each year.



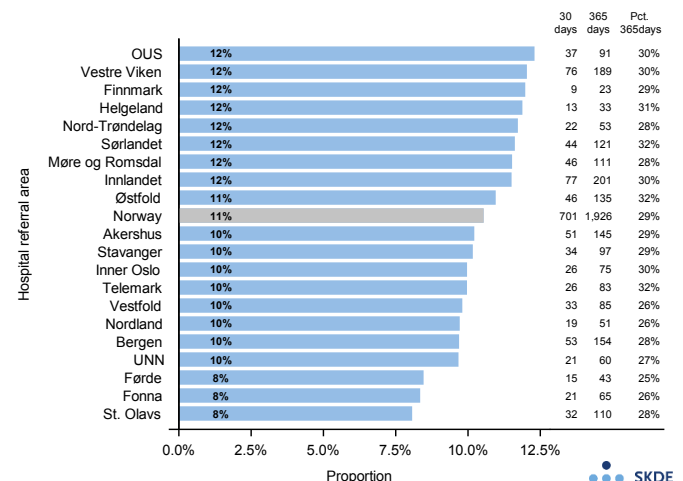
Source: NPR/SSB

Number of admissions per 1,000 population, adjusted for gender and age. Av. number of fractures and patients per year.



Source: NPR/SSB

Readmissions as a proportion of primary admissions, adjusted for gender and age. Av. number of readmissions, primary admissions and length of stay for primary admissions.



Source: NPR/SSB

30-day mortality proportion following admission, adjusted for gender and age. Av. number of deaths within 30 days, number and proportion who die within one year.

### Comments

There is little variation between hospital referral areas in admissions for hip fractures. There appears to be no simple consistent logic to the variation in lengths of stay, the readmission rate and the 30-day mortality proportion. A high readmission rate could be due to patients being discharged too soon, inadequate follow-up and postoperative infection, but it can also be an indication of good patient treatment with a low threshold for returning to hospital. This can make it difficult to interpret readmissions as a measure of quality.

The mortality rate of 11% within 30 days and 29% within a year shows that an event such as a broken hip, which does not appear very serious in itself, can have major consequences over time.