The main risk factors for hip fractures are associated with ageing, including an increased risk of falling and loss of skeletal strength from osteoporosis. With increasing life expectancy across most OECD countries, it is anticipated that hip fracture will become a more significant public health issue in coming years.

In most instances following hip fracture, surgical intervention is required to repair or replace the hip joint. There is general consensus that early surgical intervention maximises patient outcomes and minimises the risk of complications. General agreement is that surgery should occur within two days (48 hours) of hospitalisation. Guidelines in some countries call for even earlier intervention. For example, the National Institute for Health and Care Excellence (NICE) clinical guidelines recommend hip fracture surgery to be performed on the day of hospital admission or the next day (National Institute for Health and Care Excellence, 2014).

The time taken to initiate hip fracture surgery after hospital admission is widely considered to be a clinically meaningful process indicator of the quality of acute care received by patients with hip fracture. In 2015, on average across the OECD over 80% of patients admitted for hip fracture underwent surgery within two days (Figure 6.22). In Norway, Denmark and the Netherlands, the proportion was greater than 95%. Countries with the lowest proportion of patients operated on within two days of admission include Italy (53.2%), Spain (48.4%), Portugal (46.5%), Latvia (46.0%) and Costa Rica (24.9%).

Many patients were treated sooner than two days following admission, with about a quarter of patients treated on the same day and around two thirds of patients treated by the end of the next day across the OECD. Rates were higher than 40% on the same day in the Netherlands, and 80% by the end of the next day in Denmark.

Figure 6.23 shows the proportion of hip-fracture repairs occurring within two days of admission in OECD countries between 2005 and 2015. The OECD average increased from 72% to 81% over that time. The greatest improvement was observed in Switzerland, where the proportion increased from 46% to 91% and in Italy, where it increased from 28% in 2007 to 53% in 2015. A policy of comparative public reporting of hospital indicators, including time to surgery following hip fracture, implemented by Italian authorities may partly explain the improvement observed in that country. In Canada, the percentage of patients operated on within the two day benchmark increased over time, but there is considerable variation in this indicator between provinces and hospitals (CIHI, 2015). Only Portugal reported a decline of hip fracture repair within two days of admission, reducing from 57% in 2008 to 47% in 2015.

Time to surgery for hip fracture patients is influenced by many factors, including hospitals’ surgical theatre capacity, flow and access and targeted policy interventions, including public reporting and monitoring of performance (Siciliani et al, 2013). Improvement in timely surgery for patients with a particular diagnosis or injury (e.g. hip fracture) may be achieved at the expense of timeliness in others (e.g. hip or knee replacements).

**Definition and comparability**

This indicator is defined as the proportion of patients aged 65 years and over admitted to hospital in a specified year with a diagnosis of upper femur fracture, who had surgery initiated within two calendar days of their admission to hospital. Data are also provided for the proportion of patients who had surgery within one day of their admission to hospital, and for patients who had surgery on the same day as their hospital admission. Some countries supplied results for surgery within two calendar days only.

The capacity to capture time of admission and surgery in hospital administrative data varies across countries, resulting in the inability to precisely record surgery within 48 hours. While recent research and development data indicates that the impact of measuring days rather than hours may only result in marginally higher rates, the impact on relative performance across countries can be noticeable, given the similarity of rates in many countries.

While cases where the hip fractures occurred during the admission to hospital should be excluded, not all countries have a ‘present on admission’ flag in their datasets to enable them to identify such cases accurately.

**References**


6. QUALITY AND OUTCOMES OF CARE

6.22. Hip fracture surgery initiation after admission to the hospital, 2015 (or nearest year)

1. Hungary only provided data for within two calendar days.
2. Sweden provided data within 12, 24 and 48 hours.


StatLink: http://dx.doi.org/10.1787/888933603754

6.23. Hip fracture surgery initiation after admission to hospital, 2005 and 2015 (or nearest year)


StatLink: http://dx.doi.org/10.1787/888933603773

http://dx.doi.org/10.1787/888933603773