

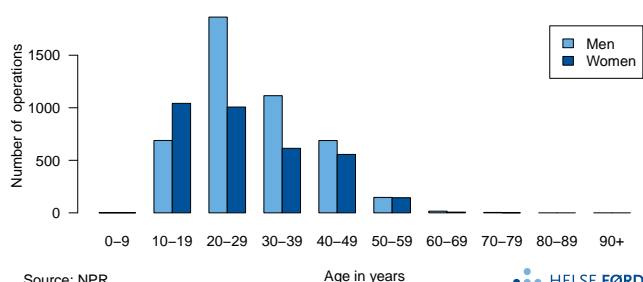
Anterior cruciate ligament injury

Anterior cruciate ligament injury is the most common serious knee injury worldwide. There are about 4,000 cruciate ligament injuries in Norway each year, and about half of these patients undergo surgery. This injury primarily affects younger age groups, and the average age of patients at the time of their operation is 29 years. Slightly more men (56 %) than women are operated on, and approx. 70 % of injuries occur in connection with sports, often football, handball or alpine skiing. Conservative treatment in the form of physiotherapy, exercise, a knee brace and change of activity level may be sufficient, but surgery is often performed in order to improve the stability of the knee and reduce the risk of subsequent osteoarthritis. The most common surgical technique is to replace the torn cruciate ligament with a tendon from the patient's own body, and the operation is often performed as day surgery.

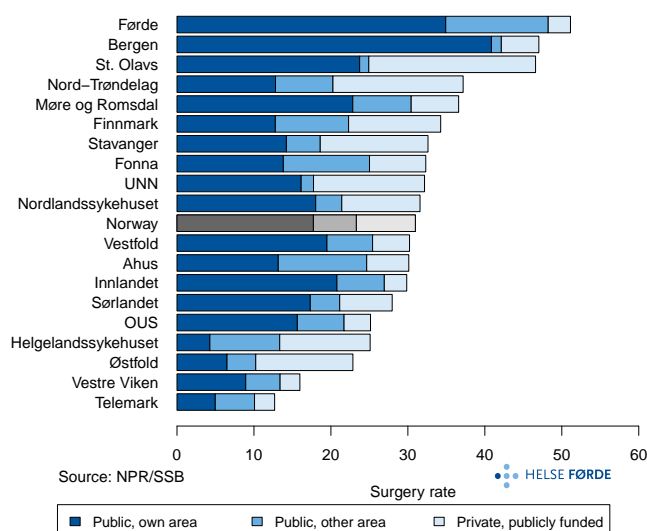
Background

Anterior cruciate ligament injury is defined as a primary or secondary diagnosis of S83.5, S83.7, M23.5 or M23.51 (ICD-10). Surgical treatment is defined by a diagnosed anterior cruciate ligament injury in combination with one or more of the following procedure codes NGE11, NGE15, NGE21, NGE25, NGE31, NGE35, NGE41, NGE45, NGE51, NGE55, NGE91, NGE95 (NCSP). Patients of all ages are included in the sample.

Each year there are an average of 1,500 publicly funded operations for anterior cruciate ligament injuries in Norway.



Source: NPR
Total number of operations for anterior cruciate ligament injuries during the period 2012–2016, for Norway as a whole. The patients have been broken down by gender and age group.

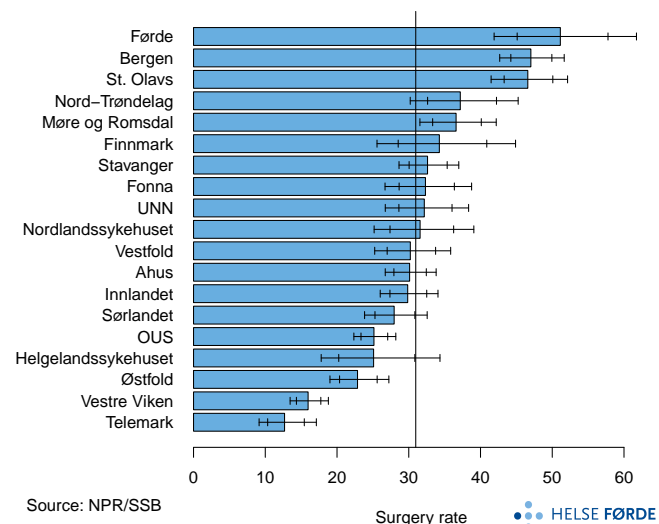


Source: NPR/SSB
Surgery rate: Number of operations for anterior cruciate ligament injuries per 100,000 population (all ages), broken down by hospital referral area. Rates have been adjusted for gender and age. Bars show the average value per year for the period 2012–2016, broken down by where the patients had surgery.

Results

Surgical treatment for anterior cruciate ligament injury is four times as common in Førde hospital referral area as in the Telemark area.

Most patients are operated on at public hospitals (75 %), but in several areas many patients are operated on at private service providers with public funding (up to 55 %). Patients receiving surgical treatment provided by wholly commercial institutions or specialists are not included in the numbers, but account for a significant part of all surgical treatment for anterior cruciate ligament injuries.



Source: NPR/SSB
Surgery rate: Number of operations for anterior cruciate ligament injuries per 100,000 population (all ages), broken down by hospital referral area. Bars show the average value per year for the period 2012–2016, with pertaining 95 % and 99.8 % confidence intervals. Vertical line indicates average for Norway as a whole. Rates have been adjusted for gender and age.

Comments

Variation in surgical treatment of anterior cruciate ligament injuries is particularly high. There is no known corresponding geographical variation in the incidence of anterior cruciate ligament injuries in Norway, and the variation in publicly funded surgical treatment of anterior cruciate ligament injuries is characterised as high and unwarranted.

Surgical treatment of anterior cruciate ligament injuries in children is controversial. In Norway, the accepted practice has been relatively restrictive in order to avoid the risk of damaging bones that are still growing. Most operated patients in the age group 10–19 years are 16 years or older (82 %).