

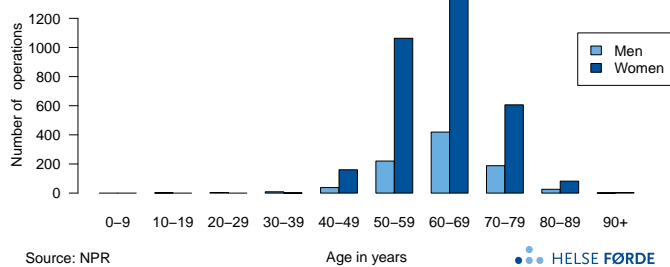
## Osteoarthritis of the thumb

Osteoarthritis of the thumb develops as a result of wear and tear on cartilage surfaces and other age related changes of the joint. Younger patients have often had a previous fracture or injury to the thumb joint. Approx. 10 % of people over 30 years of age have osteoarthritis of the thumb, but not all show symptoms of the condition. Pain and loss of function often increase over time. Most patients achieve good results with simple treatment measures like pain relieving medication and a joint supporting splint. Surgical treatment may be indicated for advanced cases; by reconstruction of the joint function, fusion or prosthetic replacement of the joint. Although there is no professional consensus on which technique is preferable, surgery often provides good pain relief and function.

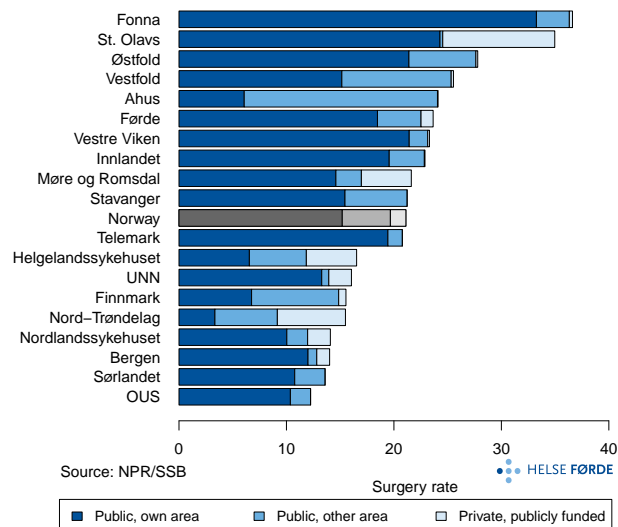
### Background

Osteoarthritis of the thumb is defined by a primary or secondary diagnosis of M18 (ICD-10). Surgical treatment is defined by diagnosed osteoarthrosis of the thumb in combination with one or more of the procedure codes NDB01, NDB02, NDB03, NDB11, NDB12, NDB13, NDB20, NDB30, NDB40, NDB50, NDB80, NDB81, NDB82, NDB99, NDG02, NDG12, NDG22, NDG32, NDG42, NDG52, NDG92, NDK11 or some of the codes from categories NDE, NDF, NDK or NDL (NCSP). Patients aged 18 years or older are included, except in the figure that shows gender and age distribution of operated patients.

Each year an average of 800 patients are operated for osteoarthritis of the thumb. This accounts for a third of all patients with osteoarthritis of the thumb in contact with the specialist health service.



Total number of operations for osteoarthritis of the thumb during 2012–2016, for Norway as a whole. Patients have been broken down by gender and age group.



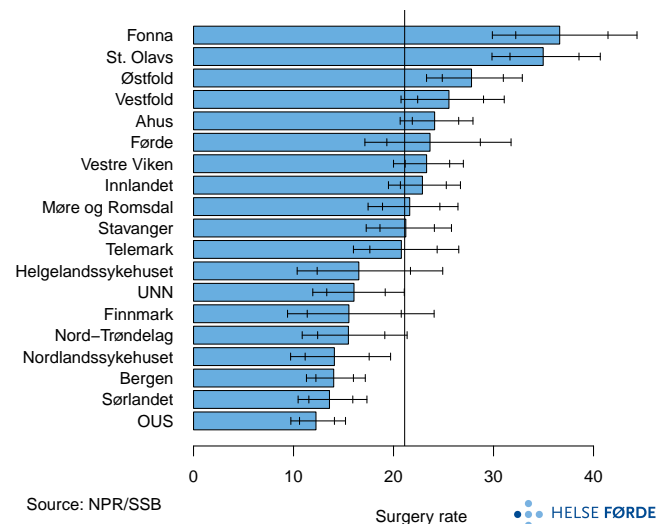
Surgery rate: Number of operations for osteoarthritis of the thumb per 100,000 population, broken down by hospital referral area. Rates have been adjusted for gender. The bars show the average rate per year (2012–2016), with the percentage distribution broken down by where the patients had surgery.

### Results

It is three times as common to be operated for osteoarthritis of the thumb in the Fonna area than it is in the OUS area. With a small number of operations during the period, a relatively high proportion of the observed variation could however be random. The surgery rate seems to increase in some areas. The percentage operated is highest in the Stavanger area (42 %) and lowest in the OUS area (16 %).

Most patients (93 %) are operated at public hospitals. In some areas a significant proportion of patients are operated at public hospitals in other hospital referral areas (up to 75 %), or by private service providers that receive public funding (up to 41 %).

The use of different surgical techniques varies greatly between hospital referral areas. At the national level, we see a shift in technique popularity, from interposition arthroplasty towards excision arthroplasty.



Surgery rate: Number of operations for osteoarthritis of the thumb per 100,000 population (18 years and older), broken down by hospital referral area. The bars show the average value per year for the period 2012–2016, with pertaining 95 % confidence intervals. The vertical line indicates the average for Norway as a whole. The rates have been adjusted for gender and age.

### Comments

It is our assessment that the systematic variation in surgical treatment of osteoarthritis of the thumb is moderate to high. Since there is no known corresponding geographical variation in the prevalence of osteoarthritis of the thumb in Norway, we consider the variation to be unwarranted.