

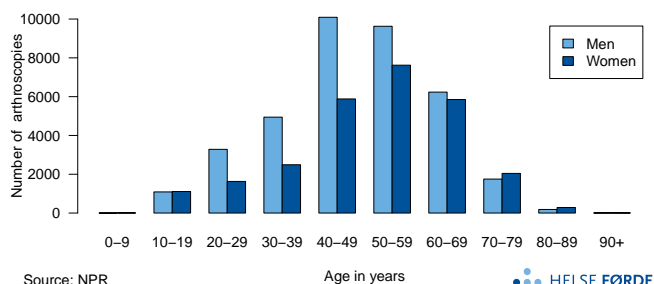
## Arthroscopy for degenerative knee disease

Arthroscopy of the knee joint is the most common orthopaedic operation in Norway. Half of the patients are 50 years or older, and most of them suffer from degenerative knee disease, i.e. age-related changes in the knee joint, such as wear and tear on cartilage surfaces (osteoarthritis) or meniscal tears. Several studies have shown that arthroscopy for degenerative knee disease, which involves joint lavage and removal of meniscus flaps and cartilage debris, has little or no effect. South-Eastern Norway Regional health authority is one of the organisations that has made determined efforts to change its practice, and have seen a significant decrease in knee arthroscopies in recent years.

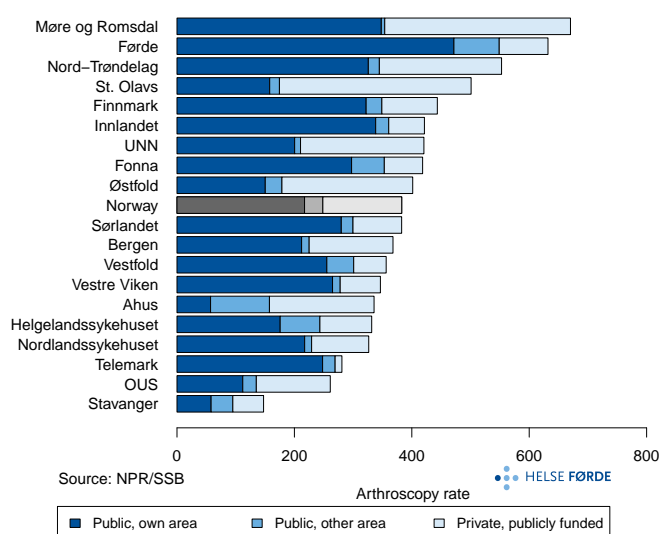
### Background

Degenerative knee disease is defined by a primary or secondary diagnosis of M17, M22.4, M23.2, M23.3, M23.4, M23.8 or M23.9 (ICD-10). Surgical treatment (arthroscopy) is defined by diagnosed degenerative knee disease in combination with one of more of the procedure codes NGA11, NGD01, NGD11, NGD91, NGF01, NGF11, NGF31, NGF91 (NCSP) or tariff code K05b. Patients aged 50 years or older are included in the sample, except in the figure that shows gender and age distribution of operated patients.

The number of arthroscopies per year, for patients aged 50 years or older, decreases during the period from close to 9,000 to around 4,000 on a national level.



Total number of arthroscopies for degenerative knee disease during the period 2012–2016, for Norway as a whole. The patients have been broken down by gender and age group.



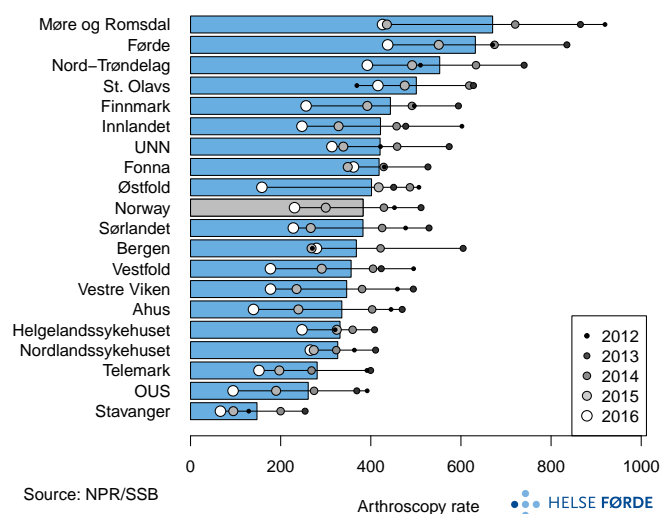
Arthroscopy rate: Number of arthroscopies for degenerative knee disease per 100,000 population (50 years and older), broken down by hospital referral area. The rates have been adjusted for gender and age. The bars show the average value per year for the period 2012–2016, with the percentage distribution broken down by where the patients had surgery.

### Results

Arthroscopy for degenerative knee disease is more than four times as common in Møre og Romsdal as in Stavanger hospital referral area, and there is a marked decrease in the number of arthroscopies in nearly all hospital referral areas.

More than half of the arthroscopies are performed at public hospitals (65 %), most of them in the hospital referral area where the patient resides. In six of the areas about half of the arthroscopies are performed by private service providers that receive public funding, and this percentage was highest (65 %) in the St. Olavs area.

The primary diagnosis is osteoarthritis in 37 % of the arthroscopies, and the percentage varies from 18 % in the OUS area to 63 % in the Bergen area.



Arthroscopy rate: Number of arthroscopies for degenerative knee disease per 100,000 population (50 years and older), broken down by hospital referral area and for Norway as a whole. The bars show the average value per year during the period 2012–2016, and the dots represent the rates for each year. The rates have been adjusted for gender and age.

### Comments

There is particularly high variation in the use of arthroscopy for degenerative knee disease (patients 50 years or older). The variation is considered unwarranted, considering there is no known geographical variation in prevalence. Variation is probably due to differences in preferences and the supply of specialist health services in different parts of Norway.

While there is a clear reduction in the number of arthroscopies for degenerative knee disease in the period, there is a need for continued reduction in light of today's knowledge.