

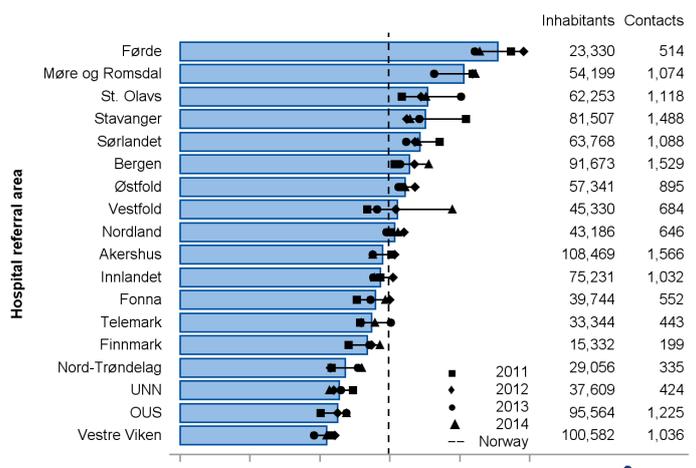
Approx. 1% of all children are born with a heart defect. The heart defect resolves itself without medical treatment in 40-50% of the children. Approximately one third need surgery, and some of them have complex heart defects with a severely abnormal anatomy. Children who develop arrhythmias and rare heart muscle diseases also fall within the scope of this discipline. In addition, some children are referred to have heart murmurs assessed. Heart murmurs are often detected by accident in examinations of children with no other symptoms of heart disease.

Sample

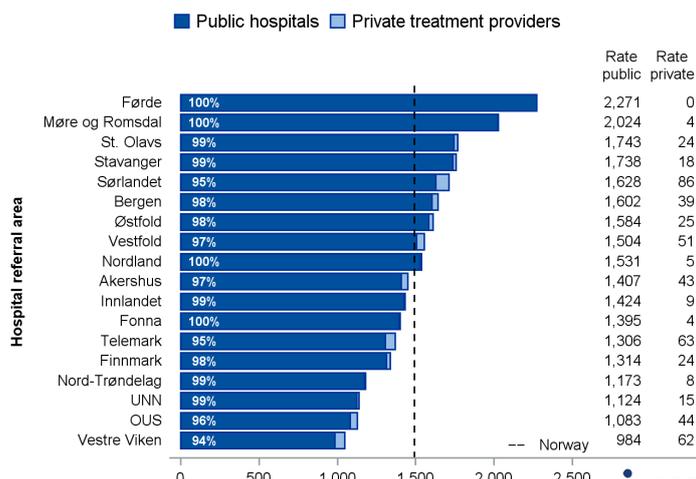
The sample consists of cardiac medicine consultations (outpatient/day patient services) for children in the somatic specialist health service, including specialists in private practice under public funding contracts. Cardiac medicine is defined by a primary or secondary diagnosis (ICD-10) in code blocks I20-52, Q20-28 or R01.

Approximately 3,800 of the consultations concern children with heart murmurs who are not diagnosed with any heart disease. This means that as many as 24% of the cardiac medicine consultations are ultrasound examinations of the heart based solely on a murmur detected by chance. Since most patients with this diagnosis are only examined once, this means that a significant proportion of the Norwegian child population undergoes an unnecessary examination.

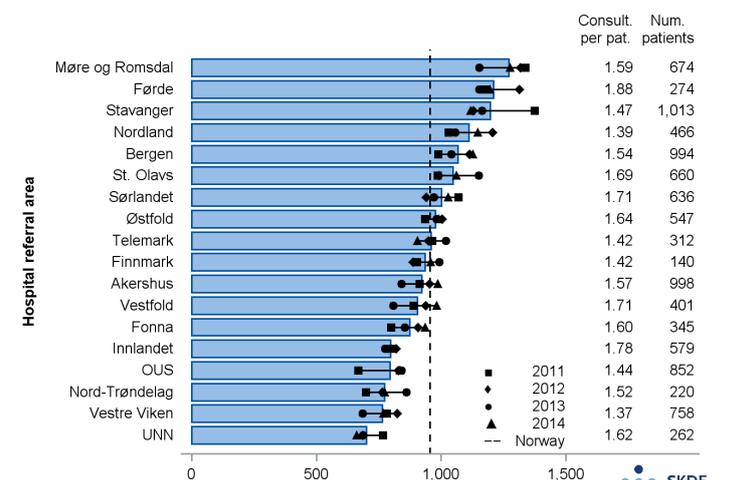
The usage rate in Førde hospital referral area is 2.2 times higher than for Vestre Viken. The patient rate for Møre og Romsdal hospital referral area is 1.8 times higher than for the UNN area. The contact frequency varies from Vestre Viken (1.37) to Førde (1.88). This difference corresponds to 510 more consultations per 1,000 patients treated.



Source: NPR/SSB
Cardiac medicine, outpatient services, age-adjusted usage rates per 100,000 children 0-16 year, per hospital referral area, per year and as an average for the period 2011-2014.



Source: NPR/SSB
Cardiac medicine, outpatient services, broken down by public or private treatment providers, age-adjusted usage rates per 100,000 children 0-16 year, per hospital referral area and as an average for the period 2011-2014.



Source: NPR/SSB
Cardiac medicine, outpatient services, age-adjusted patient rates per 100,000 children 0-16 year, per hospital referral area, per year and as an average for the period 2011-2014. Average number of contacts per patient (contact frequency) and number of patients.

The Section of Paediatric Cardiology at Oslo University Hospital (OUS) is in a unique position in Norway with its big specialist community and its coordination and national functions for children with complex congenital heart defects. It may therefore be relevant to compare usage rates for the other hospital referral areas with the rate for the OUS area. Child cardiologists perform ultrasound examinations of the heart. This is a technical examination that requires experience. Varying levels of experience and patient volumes for cardiologists in other hospital referral areas could explain some of the variation. There are no indications that morbidity varies between hospital referral areas.

The usage rates for outpatient paediatric cardiology consultations vary considerably, however. Both GPs and paediatricians should engage in discussions about whether it is necessary for otherwise healthy children showing no other symptoms to undergo ultrasound examinations for heart murmurs.

Comments

Each year, approx. 10,000 patients have a total of nearly 16,000 cardiac medicine consultations. This makes up 3% of all medical consultations for children, and 4.5% of all children seen in medical outpatient clinics.