

Health care atlas - chronic diseases



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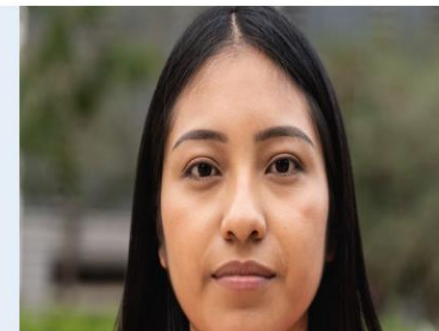
Equitable health services – regardless of where you live?

In Norway, it is a goal for the entire population to have an equal supply of health services across geography and social groups. The health atlas is a tool for comparing the population's use of health services in different geographical areas, regardless of where the patients are treated.

Published April 29 2022

Chronic diseases

The health atlas for chronic diseases looks at health service use for patients who had repeated contact with the general practitioner and specialist health service.

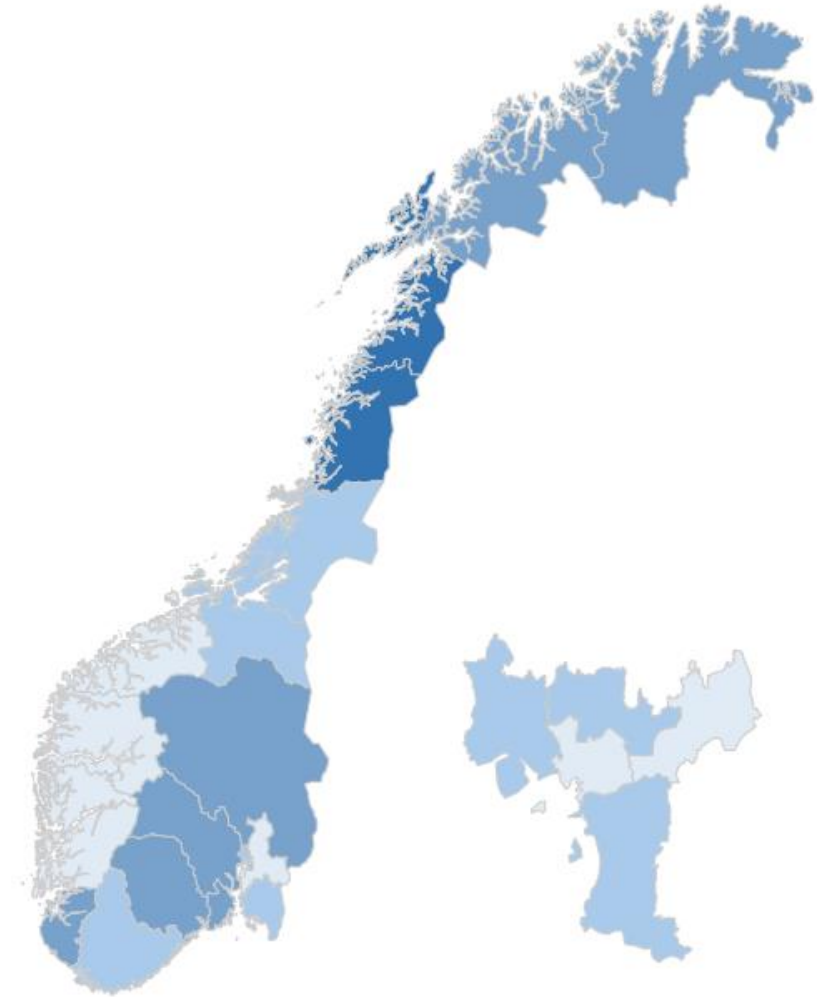


Outline

1. The Norwegian health care atlases
2. «Chronic diseases» - definition
3. Main findings, so far

What characterizes the Norwegian health care atlases?

1. Compares use of health services for the population in different geographical areas, regardless of place of treatment
2. Encompasses the entire population
3. Created with the help of our users (the doctors)
4. Simple, descriptive analyses of observed variation ...
5. ... combined with our interpretations and opinion on whether or not the variation is unwarranted



How to define «chronic diseases»?

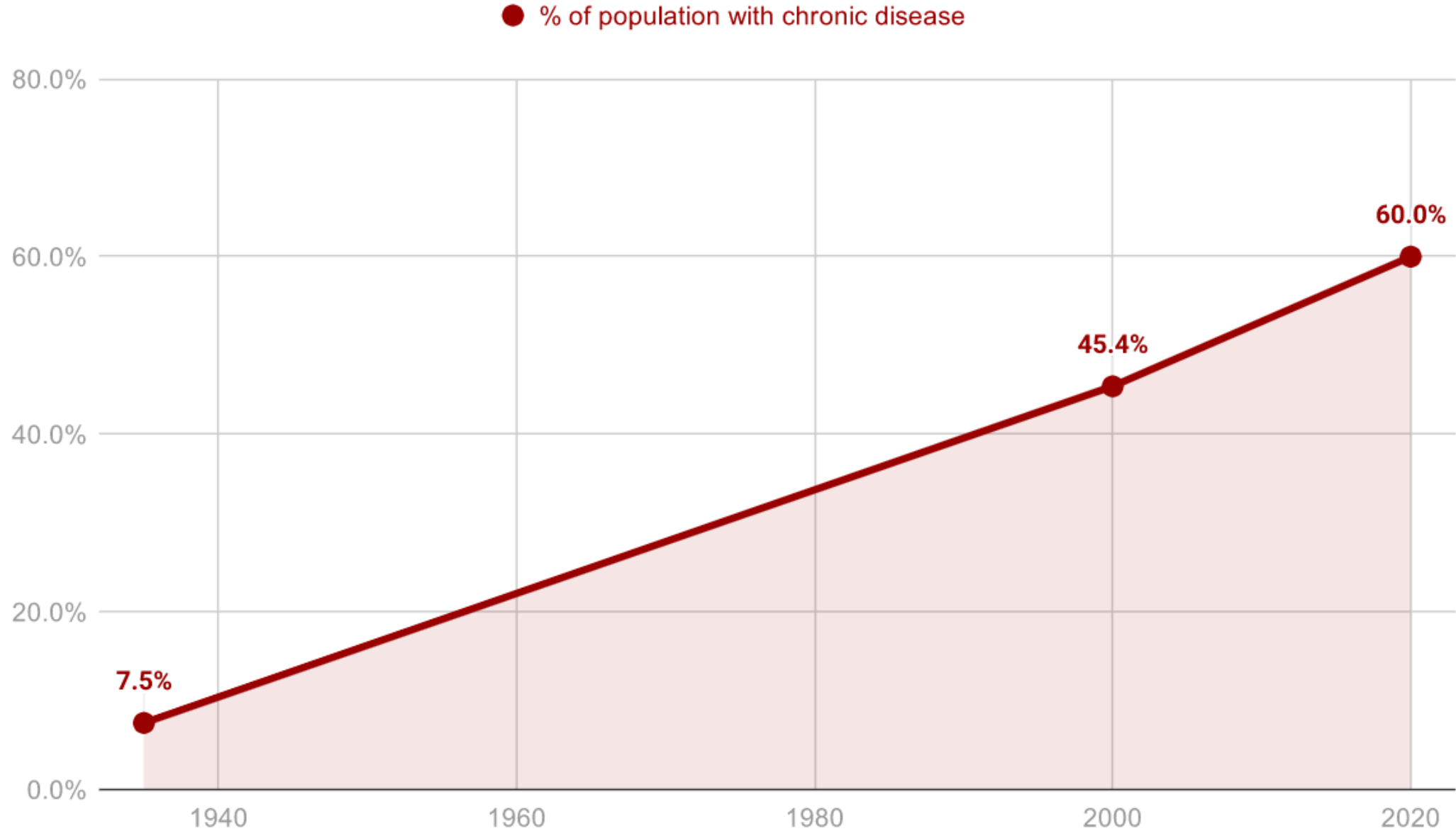
- In internationally published literature, there are many different definitions of chronic conditions

(see for example [Vip i vården](#), [Calderon-Larrañaga et al 2017](#), [Tonelli et al 2015](#))

- A broad definition could include as much as 50–60% of all patients treated annually in the Norwegian specialist healthcare system.



Chronic Disease Prevalence in America



Source: Jeff Nobbs & National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)

How did we define «chronic diseases»?

We have selected a few chronic somatic conditions, using the following criteria:

1. Non-reversible conditions
2. Significant loss of health status or quality of life
3. Follow-up in the specialist health service over time
4. Data has sufficient validity
5. Large the patient groups

Chronic diseases

- 10 conditions were chosen:

Published

- Parkinson's disease
- Multiple sclerosis
- Epilepsy
- Migraine

Coming soon....

- Psoriasis
- Arthritis
- Inflammatory bowel disease
- Heart failure
- COPD
- Endometriosis



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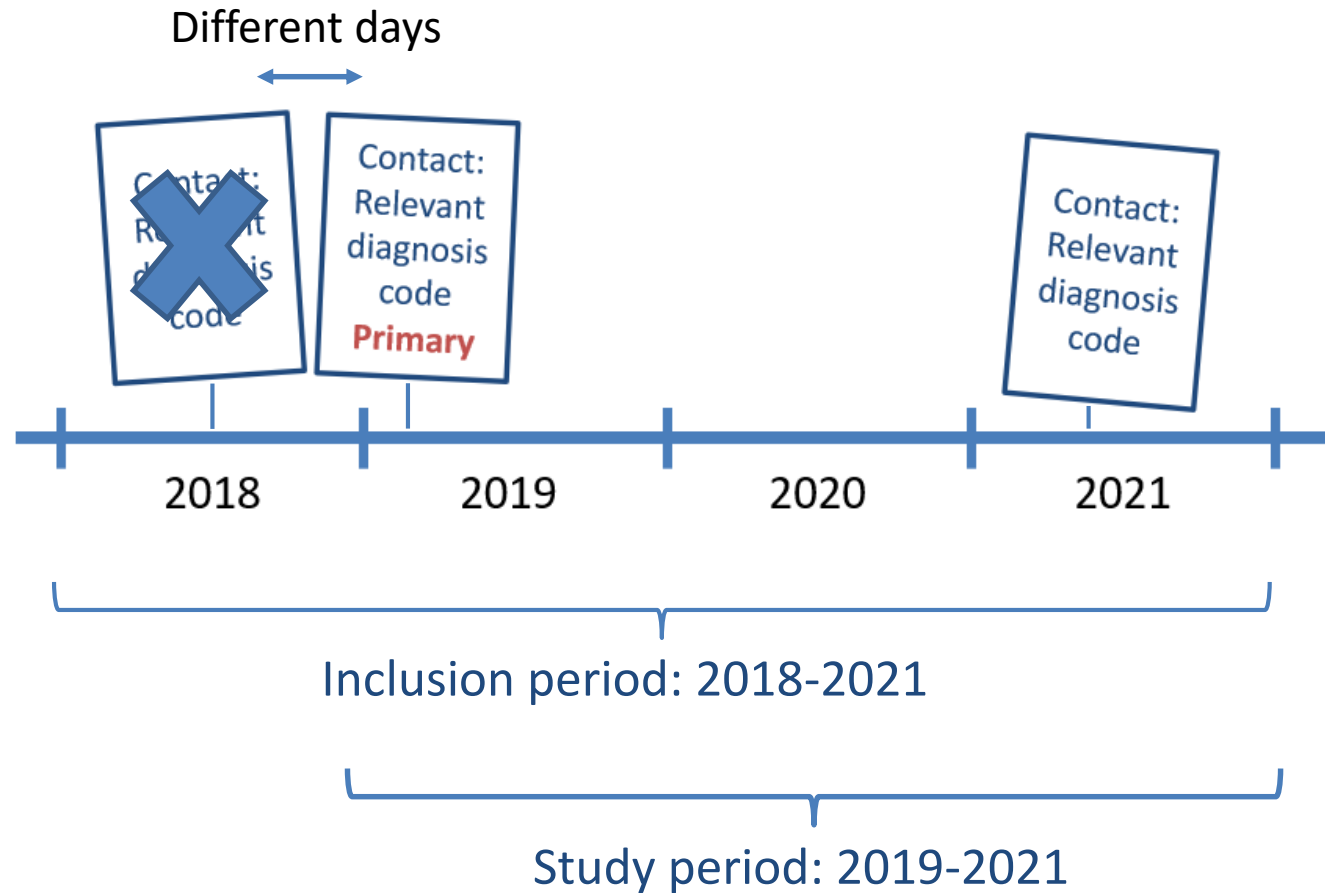
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Patient inclusion criteria



- Minimum 3 contacts
- Relevant diagnosis
- Specialist health service (NPR) or GP/on-call doctor (NRPHC)
- Not the same day
- At least one with primary diagnosis

Main findings, so far



Multiple sclerosis

- Proportion treated with **high-efficacy drugs** varied

Botulinum toxin for patients with migraine

Health atlas for chronic diseases

In this atlas, we have examined whether the use of health services for patients with selected chronic conditions varies based on their place of residence - defined by the health institutions' referral areas. The conditions presented in the atlas have been selected on the basis of five criteria, among those are: data quality, the size of the patient group, and whether the patients require follow-up in the specialist healthcare system over time.

ABOUT THE ATLAS

The atlas is divided into three parts which are published separately at intervals of a few months. The first part was published on 29 April 2022 and contains the four neurological conditions: epilepsy, migraine, multiple sclerosis (MS) and Parkinson's disease.

The other two parts will present analysis on autoimmune diseases (arthritis, inflammatory bowel disease and psoriasis) and update three diseases chosen from previous health atlases published by SKDE (endometriosis, heart failure and COPD).

[About the atlas](#)

[Neurological conditions](#)

[Epilepsy](#)

[Migraine](#)

[Multiple sclerosis \(MS\)](#)

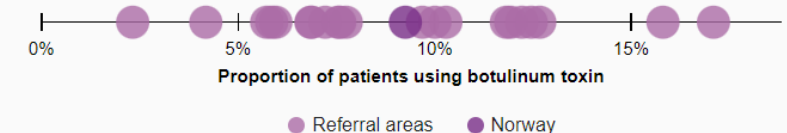
[Parkinson's disease](#)

[Contact us](#)



Preventive treatment with botulinum toxin

There was great geographical variation in the use of botulinum toxin for the treatment of migraine. 17% of patients in the referral area Førde were treated with botulinum toxin, compared to 2% in Stavanger. Health North and Health West both had the lowest proportion of patients treated with botulinum toxin and CGRP inhibitors.



About the atlas

Neurological conditions

Epilepsy

Migraine

Patients with migraine

Specialist consultations

Preventive treatment
with botulinum toxin

Sick leave

Multiple sclerosis (MS)

Parkinson's disease

Contact us

MIGRAINE

Main findings

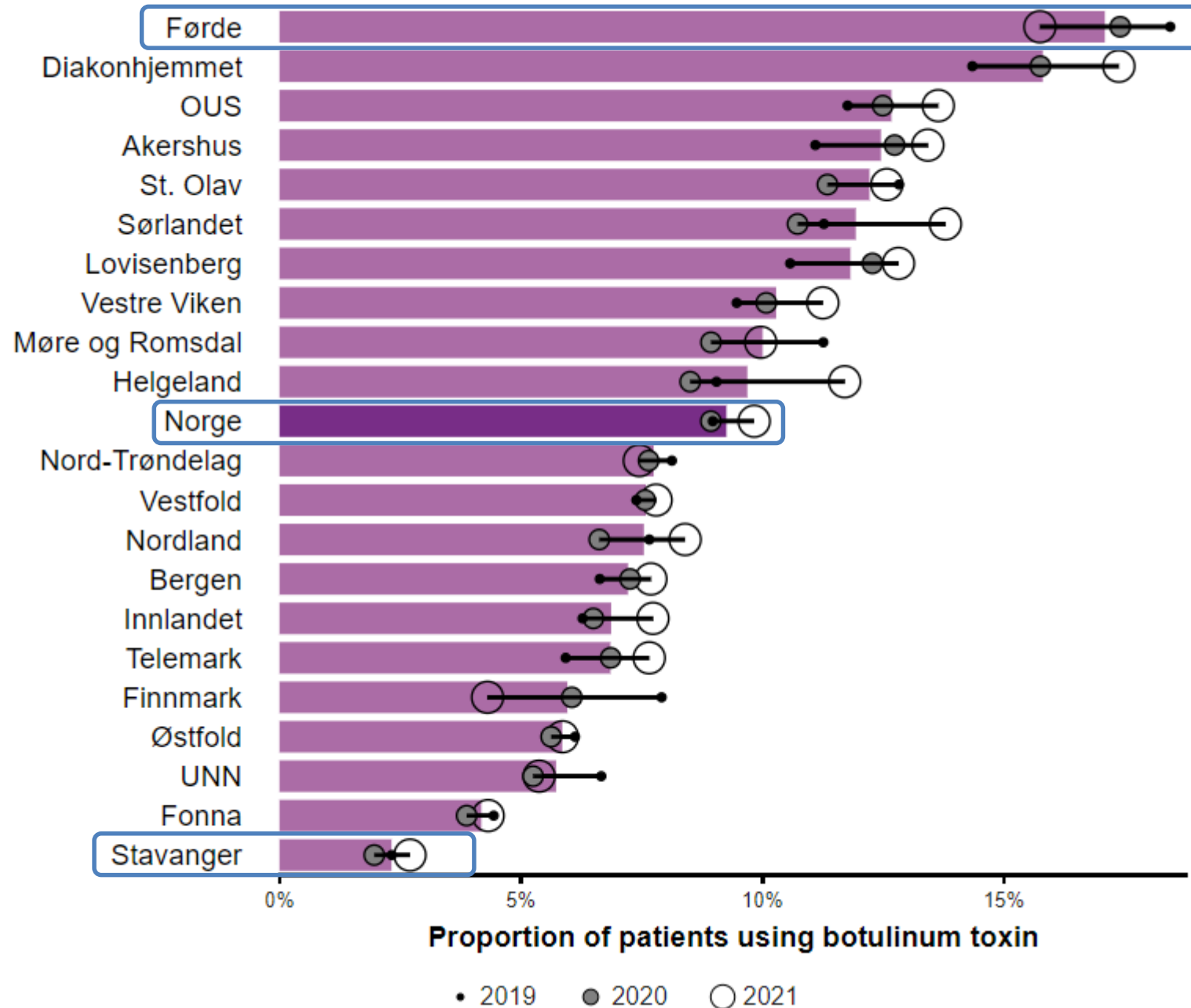
- Annually, approximately 58,000 patients had repeated contact with the health service due to migraine, corresponding to 12% of the estimated number of patients with migraine in Norway.
- There was large geographical variation in the use of specialist consultations, and the variation increased throughout the period of analysis
- There was high geographical variation in preventive treatment of migraine with botulinum toxin and with CGRP inhibitors
- 20% of the patients in the sample were granted at least one sick-leave by a general practitioner, and these had an average of three sick-leaves per year due to migraines

About migraine



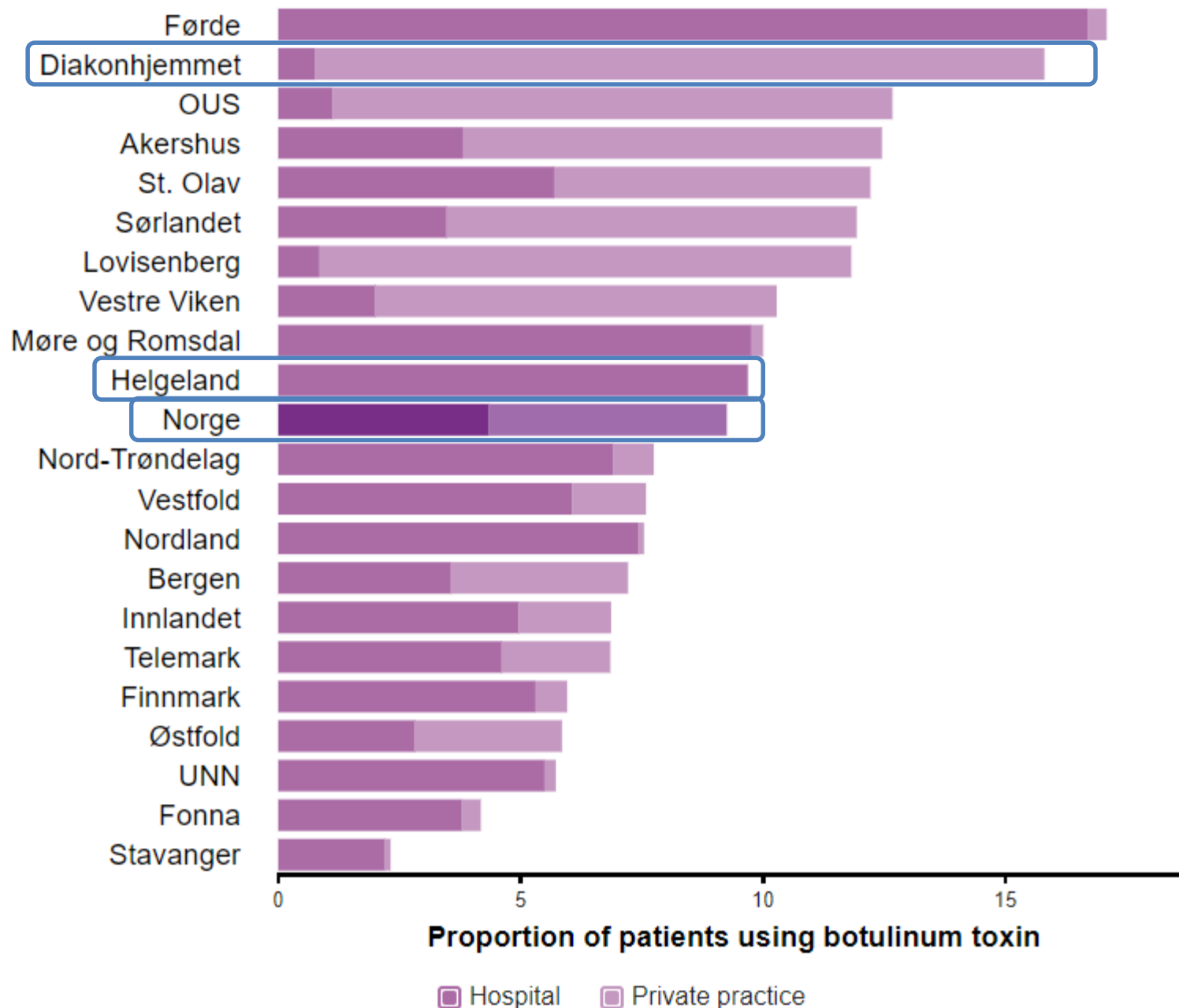
Patients with migraine

Referral areas



- 5 400 patients treated with botulinum toxin
- Mean age 43 years, 90% women
- Nationally: 9% treated with botulinum toxin
- Førde: 17%
- Stavanger: 2%

Referral areas



- Neurology specialists in private practice under public funding contracts - unevenly distributed
- Nationally: 53% of patients were treated by a private practice specialist
- Diakonhjemmet: 96%
- Helgeland: None



Thank you for
your attention!

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