



# **EVALUATION OF NATIONAL IMPLEMENTED TELEHEALTHCARE FOR COPD PATIENTS IN DENMARK**

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# Who am I?



- Sabine Michelsen Raunbak
- Research assistant at DCHI, Aalborg University
- Upcoming PhD student

# What?

## Aim:

To evaluate the nationally implemented telehealthcare for COPD patients in Denmark.

# How?

<p><u>Substudy 1:</u> Uptake of the treatment</p>	<p><u>Substudy 2:</u> Clinical effect, quality of treatment, costs</p>
<p><u>Substudy 3:</u> Quality of life, safety, empowerment</p>	<p><u>Substudy 4:</u> Health economic evaluation</p>

# Why?

- Experience with use of telehealthcare to COPD patients
  - Experiences can be used on other disease-areas
- Improve future treatment options for COPD patients
- Critical assesment of telehealthcare in a real-life practice.



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# Supplementary material

- Substudy 1
- Substudy 2
- Substudy 3
- Substudy 4

# Substudy 1(tentative): Uptake of telehealthcare

- How is the uptake of telehealthcare?
  - How do the patients receive the telehealthcare solution, and how many accept the treatment?
  - Characteristics of patients who accept telehealthcare in relation to age, comorbidity, socioeconomic status and location
- Registry based prospective cohort study among patient who are eligible to telehealthcare
  - Based on data from national registries and municipalities
- Gives insight into the offer and acceptance of the telehealthcare solution among Danish COPD patients, as well as patient- and system-related characteristics for the COPD patients who are offered and accept the use of telehealthcare



# Substudy 2(tentative): Effect of the telehelathcare

- Effect to patients in telehealthcare compared to patients in current Danish practice
  - Clinical effect, quality of treatment, and costs
- Registry based prospective cohort study which compares COPD patients in telehealthcare with COPD patients in current Danish practice
  - Based on relevant registry data and data from the Danish regions and municipalities
- Frequency and costs associated with admissions, outpatient admissions, acute admissions, and municipal services, as well as total costs in the health sector including patient-paid medications, and death rate
- Information about the quality of treatment will be assessed by using quality indicators that reflect compliance with recommended guidelines from the Danish Registry for Chronic Obstructive Pulmonary Disease

# Substudy 3(tentative): Effect of telehealthcare on patient-reported outcomes

- Comparison of COPD patients in telehealthcare and COPD patients in current Danish practice.
- Inclusion of questionnaires
  - European Quality of life – 5 Dimensions(EQ5D)
    - Health-related quality of life
  - ICEpop CAPability measure(ICE-Cap)
    - Quality of life in relation to well-being
  - Questions on feeling of security and safety, and empowerment
- Gives insight into the effect of telehealthcare on patients' quality of life, empowerment, and patients feeling of safety and security

# Substudy 4(tentative): Economic evaluation of telehealthcare in real-life practice.

- Health economic consequences of introducing telehealthcare in a Danish setting to patients with COPD, compared to COPD patients receiving current Danish practice
- Combined health economic analysis which includes the best available evidence of costs, and effects of telehealthcare to COPD patients
  - Includes relevant results from substudy 1-3
- Cost-effectiveness of telehealthcare to patients with COPD in Denmark
  - Average costs and effects of telehealthcare to COPD patients compared to COPD patients in current Danish practice