

Healthcare and care

Healthcare and care through distance spanning solutions (2018-2021) – 24 practical examples from the Nordic region

- Part of the Swedish presidency programme of Nordic Council of Ministers 2018

1st webinar 15th of October, 2020

Niclas Forsling, Centre for Rural Medicine
Bengt Andersson, Nordic Welfare Centre

through
distance-spanning
solutions



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Healthcare and care through distance-spanning solutions (2018-2021)

NEW VOPD WEBINAR SERIES: Technology use for Covid-19 response

In joint cooperation with Interreg NPA and their Covid 19 response group, part of a specific project connected to the track of technology (TechSolns).

The project is implemented under the lead of Professor Joan Condell - Ulster University.



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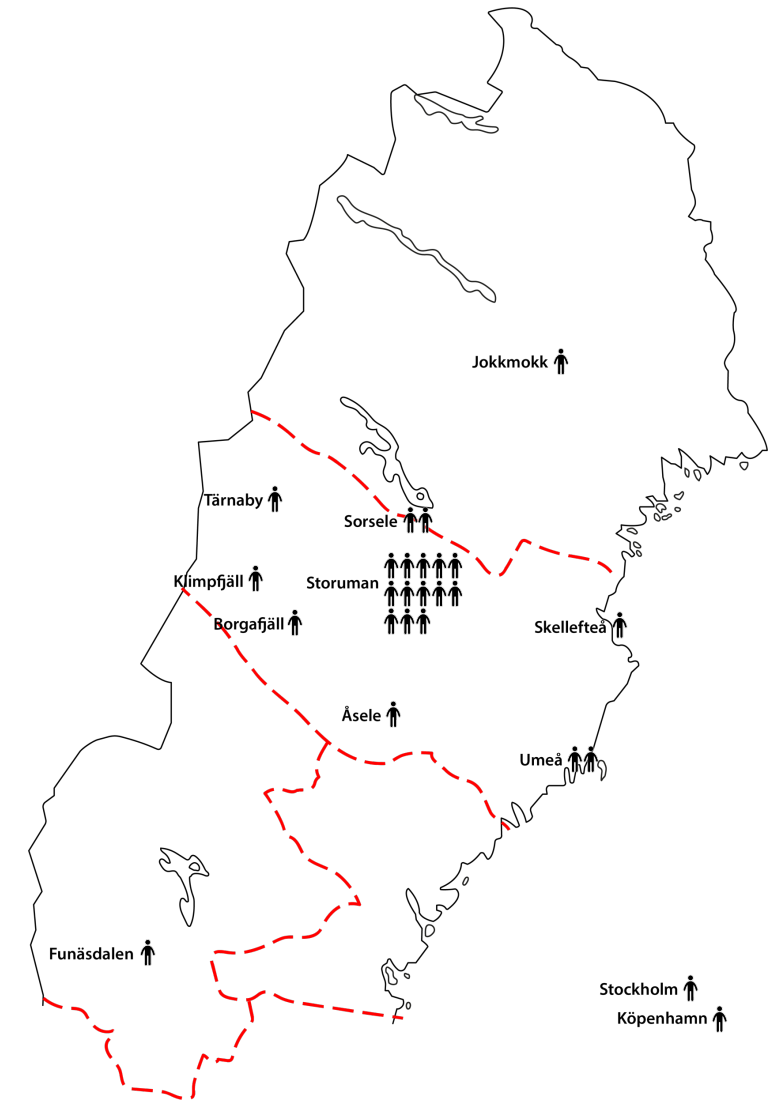


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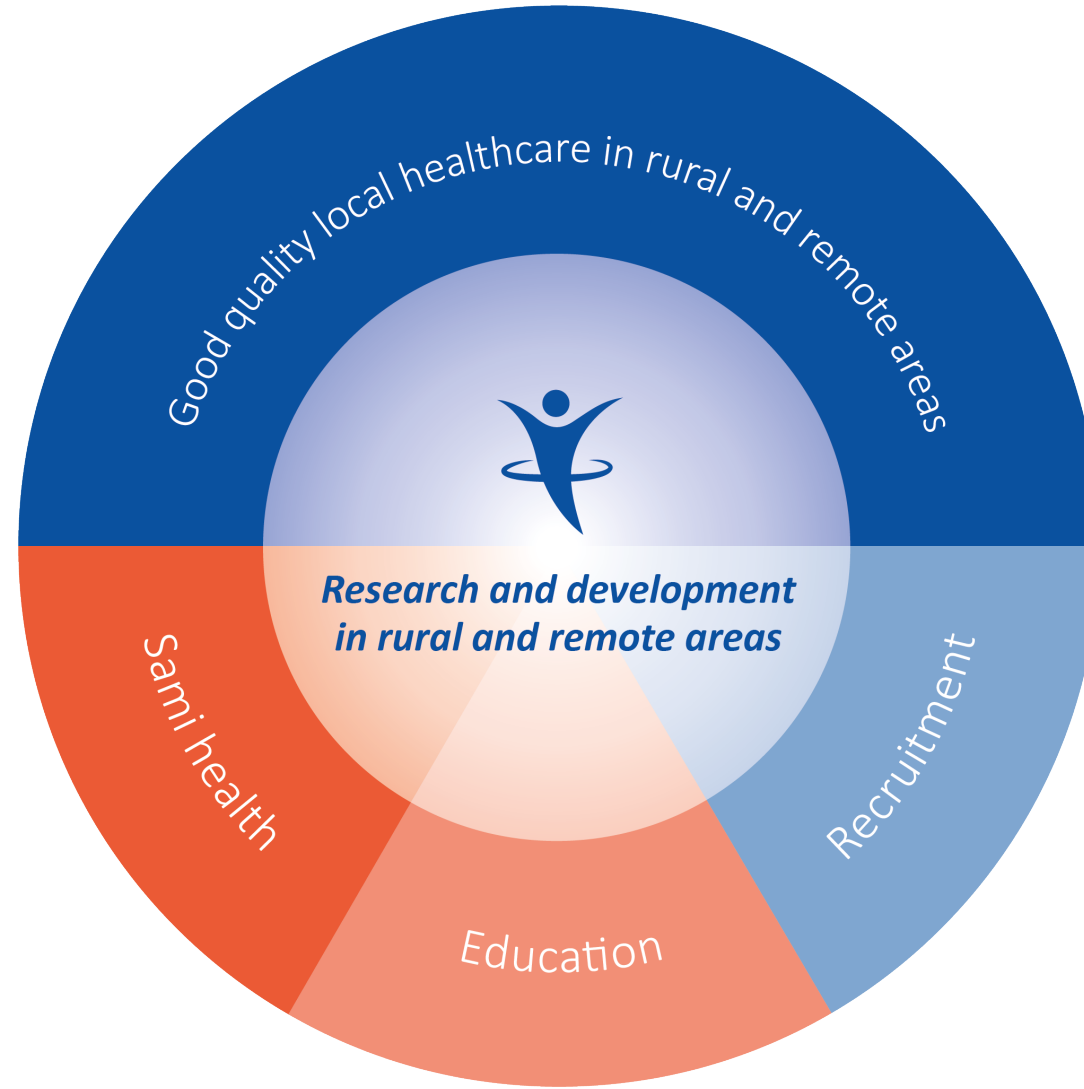
Centre for Rural Medicine

Since 2014 an R&D unit forming part of the Local healthcare service/primary care of South Lapland within Region Västerbotten:

- Around 15 employees
- Main office in Storuman, Sweden
- Our employees are mainly based in the inland of northern part of Sweden
- Funding mainly through projects



- Centre for rural medicine



Nordic Welfare Centre

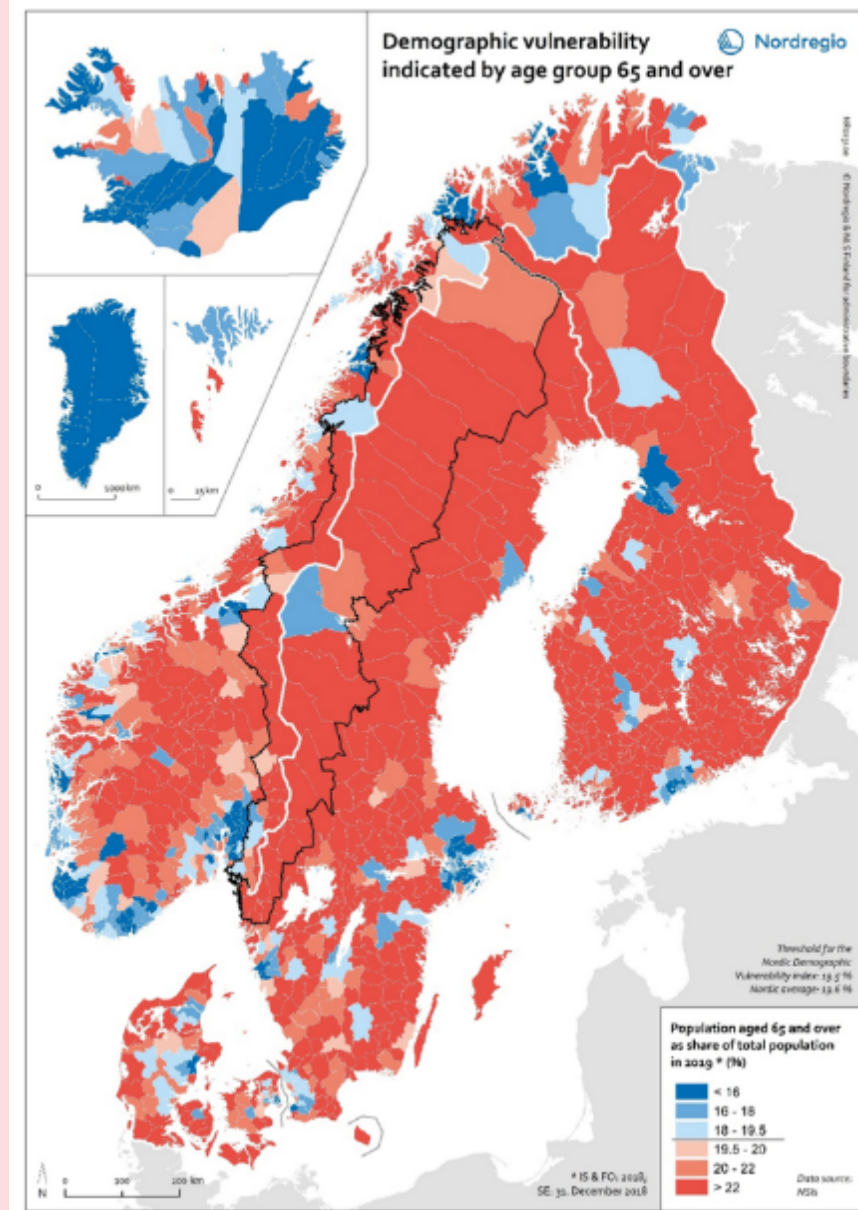
- An institution under Nordic Council of Ministers
- Offices in Stockholm and Helsinki
- 30 employees



An ageing population affects the welfare model

Demographic Vulnerability Index indicated by age group + 65:

- A municipality are viewed to be vulnerable when more then 19,5 % of the population is + 65
- 70 percent of the municipalities in the Nordic countries are above that level



Healthcare and care through distance-spanning solutions (2018-2021)

The project consists of three main blocks:

1. Mapping of distance-spanning solutions applied in Nordic municipalities and regions.
2. Mapping of national methods and tools for implementation support.
3. Through calls identify Nordic municipalities and regions for implementation support of distance-spanning solutions.

Block 2:

Mapping of methods and tools for implementation support



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Block 2:

Mapping of methods and tools for implementation support

2nd webinar: 13:00-14:30 CET, November 3rd, 2020.



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Webinar 2: Specific contribution towards Covid-19 response group

At this webinar, we will highlight the following question, related to Covid-19 response:

- How can technology be brought to those people who need it and/or don't know how to use it?

All five Nordic countries have national visions and strategies for eHealth and welfare technology



Denmark



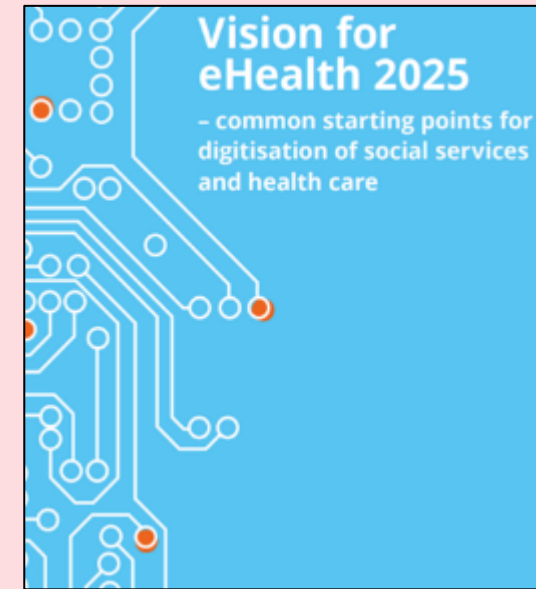
Finland



Iceland



Norway



Sweden

National roadmap/tools: “Roadmap for service innovation”

Roadmap translated into Swedish:

- Download your version [here](#)

Roadmap translated in other languages:

- English, download [here](#)
- Danish, Icelandic and Finnish versions being translated



Block 3:

Through calls identify Nordic municipalities and regions for implementation support of distance-panning solutions



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Block 3:

Through calls identify Nordic municipalities and regions for implementation support of distance-panning solutions

3rd webinar: 10:00-11:30 CET, November 17th, 2020



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Webinar 3: Specific contribution towards Covid-19 response group

At this webinar, we will highlight the following question, related to Covid-19 response:

- How can we fast-track innovation?



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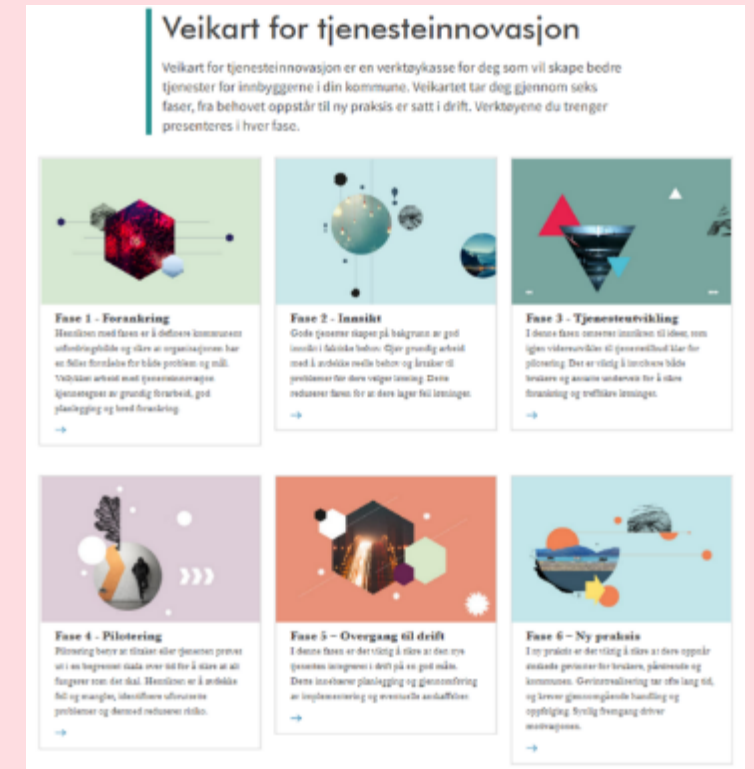
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Reflections from VOPD project managers

- 52 municipalities and 8 healthcare regions supported
 - ✓ All applying Roadmap for Service Innovation
 - ✓ It works!
 - ✓ All projects had to “go back” to Phase 1 and 2 Anchoring/Insight during their implementation work



Wearables + Response services

Is the future of integrated healthcare and care at your wrist?



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Wearables + Response services

Is the future of integrated healthcare and care at your wrist?

4th webinar: 13:00-14:30 CET, December 14th, 2020



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Tele kit solution for patients with hearth failure (only on VOPD.nu)



Tele kit solutions for COPD patients



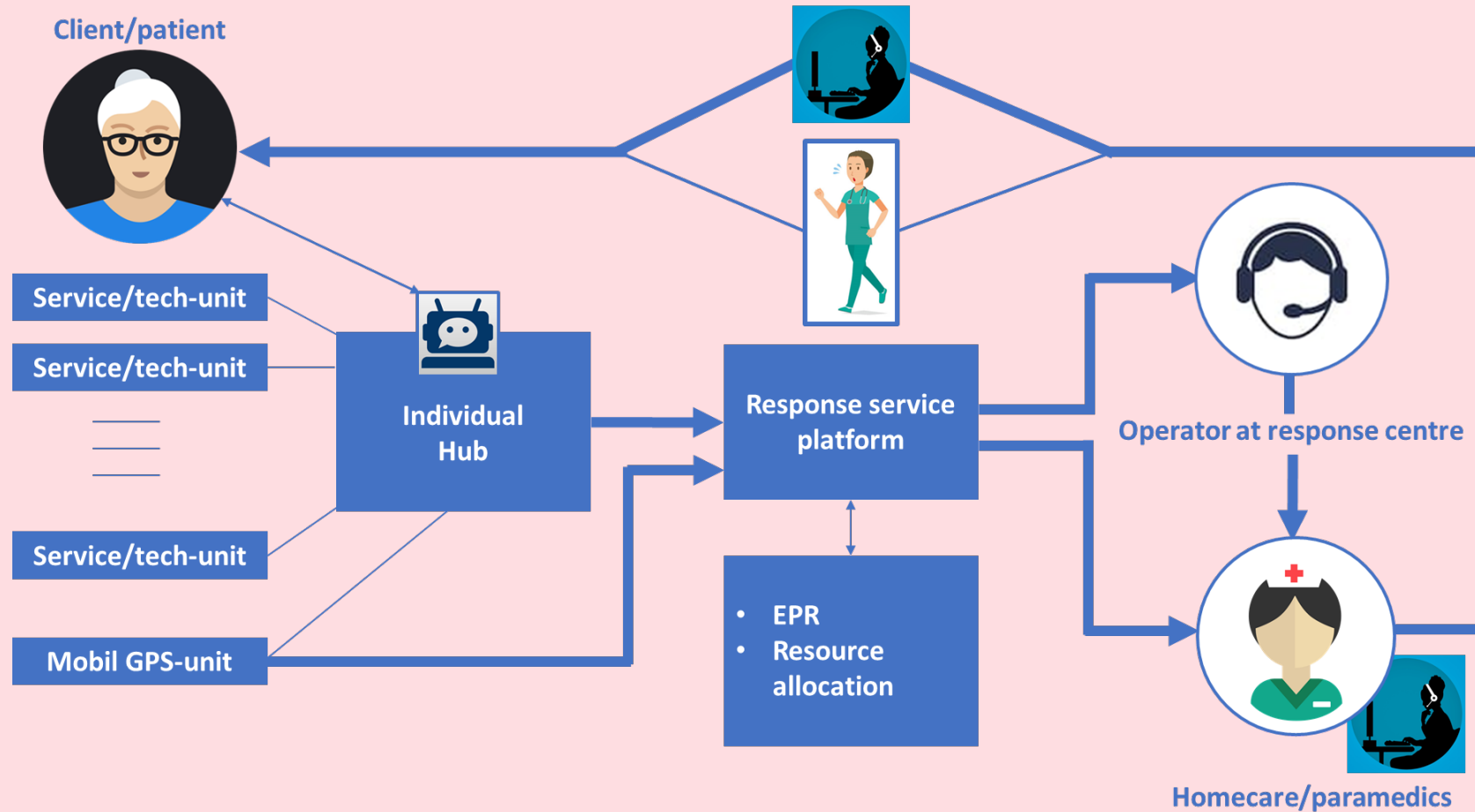
Night surveillance using webcam



Digital safety alarms - GPS



The bottleneck (according to VOPD)



Question and answer session 1 - instructions

- Use the Q&A button to submit your question
- We accept anonymous questions
- Although, we welcome you to state your name and organisation

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Question and answers?



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Block 1:

Mapping of distance spanning solutions in the Nordics



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Webinar 1: Specific contribution towards Covid-19 response group

At this webinar, we will highlight the following questions, all related to Covid-19 response:

- What e-health solutions already exist, and what should be put in place?
- What are the technologies with the lowest threshold?

Publication September 2019 with the 24 most interesting distance spanning solutions

Download an electronic version or order your printed version in English [here](#)

Find your Swedish version [here](#)

If you want to read about the 24 solutions in English and another 19 solutions, please visit our website at: www.vopd.nu



Publication September 2019 with the 24 most interesting distance spanning solutions

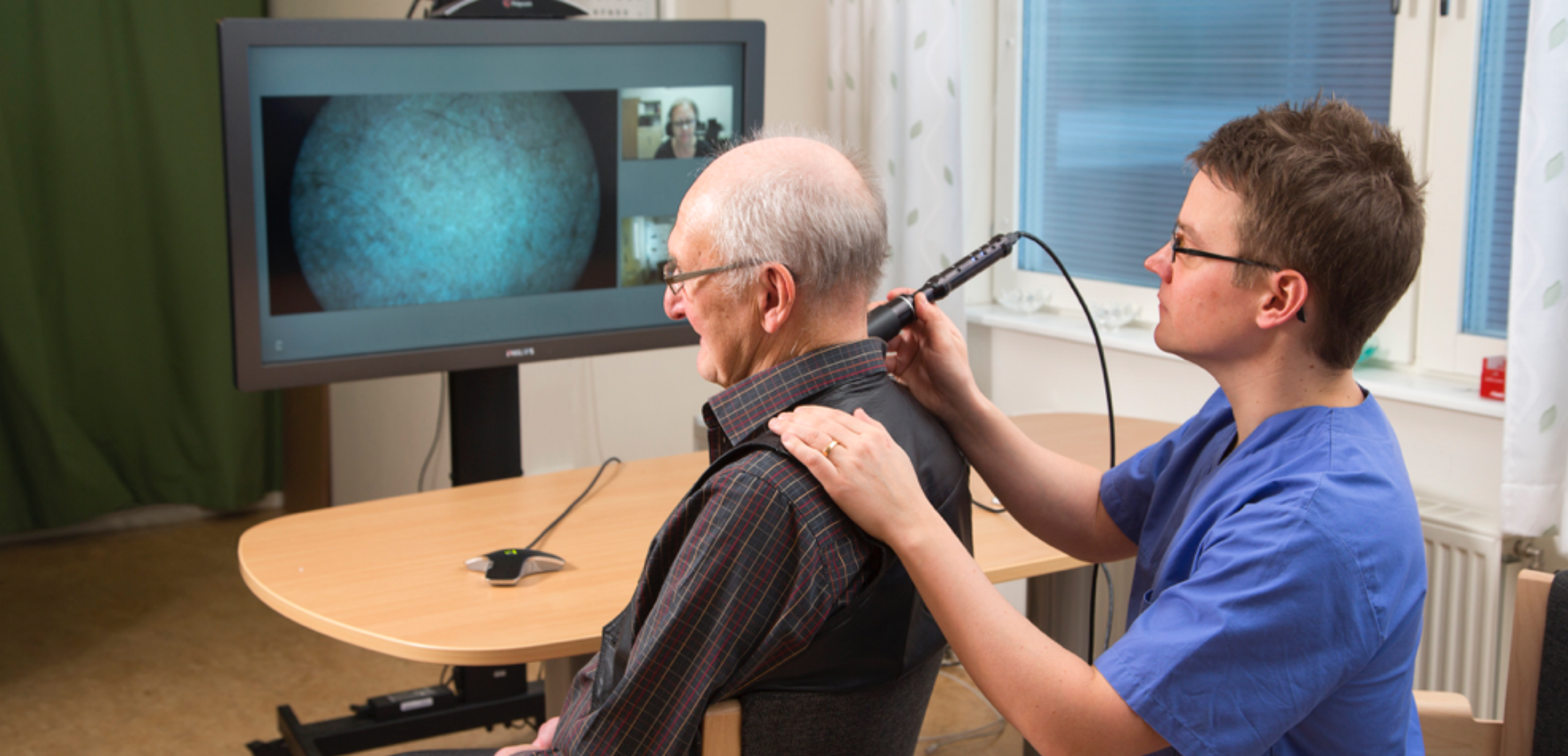
1. Remote treatment
2. Remote monitoring
3. Remote meetings
4. New digital services for healthcare and care – new service models etc; Including new innovative collaboration models



Virtual Health rooms

Distance meeting (+monitoring and treatment)
Swedish case study

through
distance-spanning
solutions



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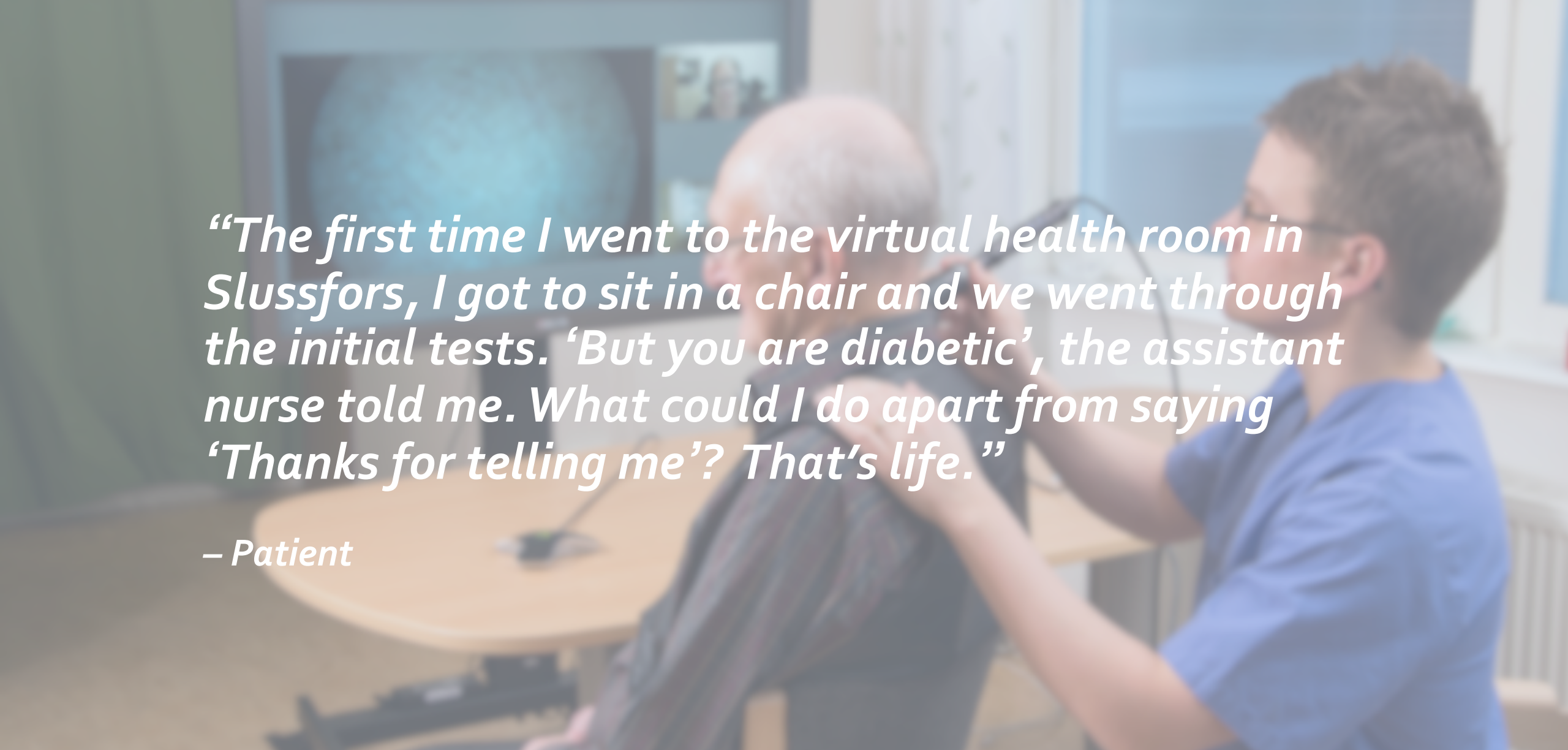


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“The first time I went to the virtual health room in Slussfors, I got to sit in a chair and we went through the initial tests. ‘But you are diabetic’, the assistant nurse told me. What could I do apart from saying ‘Thanks for telling me’? That’s life.”

– Patient

National Danish telemedicine solution for patients with COPD

Distance treatment
Danish case study

through
distance-spanning
solutions



“I am really happy that I have been allowed to keep the Telekit - it gives security and that is important!”

– Connie, COPD patient.

Effects

- Results from TeleCare Nord show that 71% of the citizens experience greater security when using telemedicine
- 26% experience a higher degree of freedom as they can make the measurements themselves

HeilsuVERA (National Citizen Health Portal)

New distance spanning solutions, service models

Icelandic case study

through
distance-spanning
solutions



Þjónustuvefsjá

Þjónusta í boði um allt land - Vaktsími
1700

[Opna þjónustuvefsjá](#)

Mínar síður

Skráðu þig inn með rafrænum
skilríkjum

[Innskráning](#)

[Leiðbeiningar](#)

NÝJAST Á VEFNUM: [Lurtafæði](#) [Hegðun og samskipti](#) [Berklar](#)

[Efnisorð A-Ö](#)

- Sjúkdómar, frávik, einkenni ●
- Meðganga og fæðing ●
- Börn og uppeldi ●
- Ungmenni ●
- Fullorðnir ●
- Eldra fólk ●
- Ferðafólk ●
- Þjónustuvefsjá ●

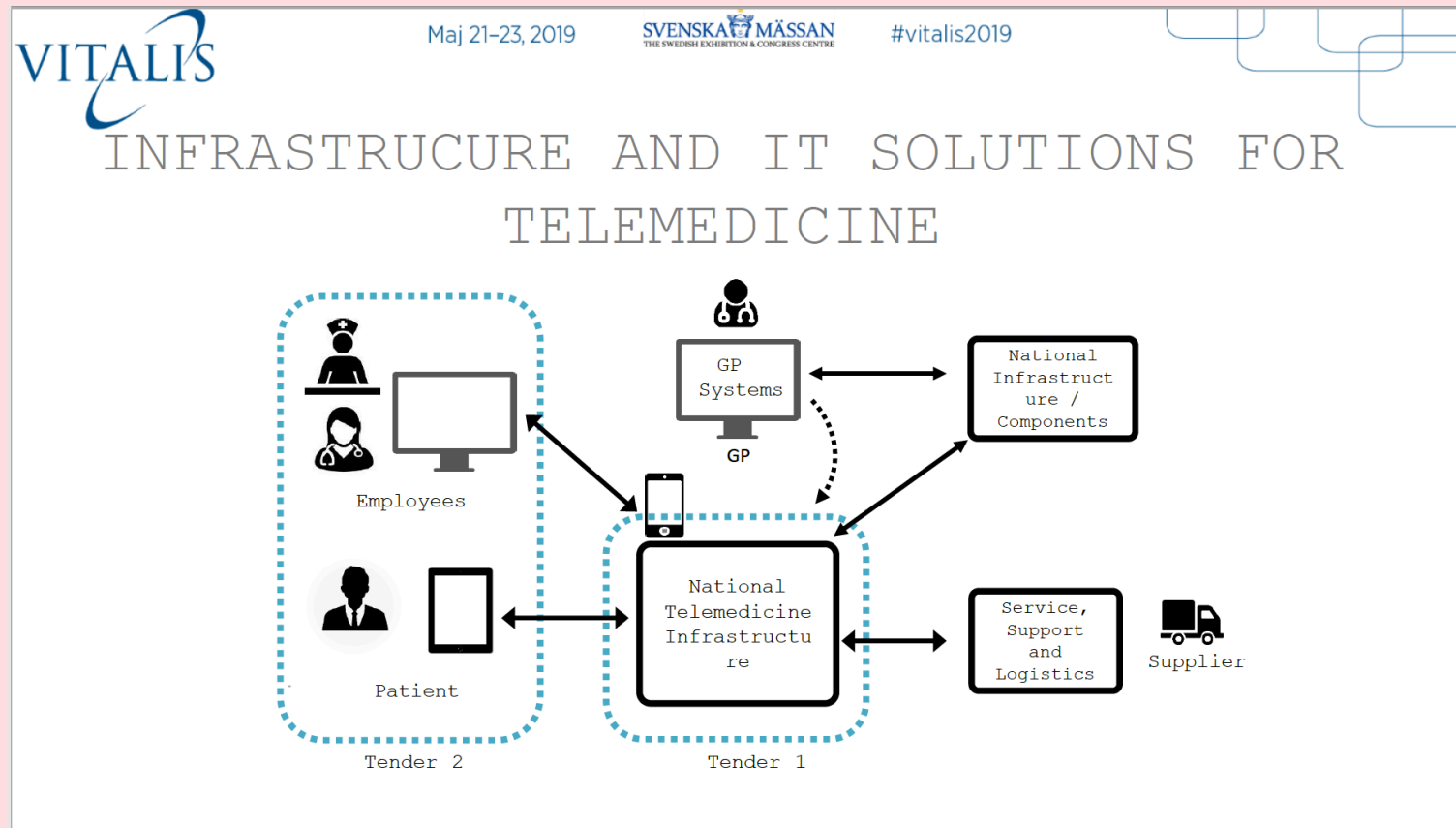
”How convenient to be able to log into HeilsuVera and take care of your own business. Have to give you a compliment for this web-page.”

- User of the health portal

Effects

- Equal access for rural and urban citizens via internet connection and electronic id.
- Citizens/patients can:
 - View and request e-Prescriptions
 - View dispensed medication
 - Have secure messaging with health professionals
 - Enter own measurements (i.e. vital signs, blood sugar levels, weight)

FUT – Fælles Utbud og Udvikling af Telemedicin (Danmark)



Localisation technologies (GPS)

Distance monitoring

Norwegian case study

through
distance-spanning
solutions

Localisation technologies (GPS)



“A day without a walk is a bad day”

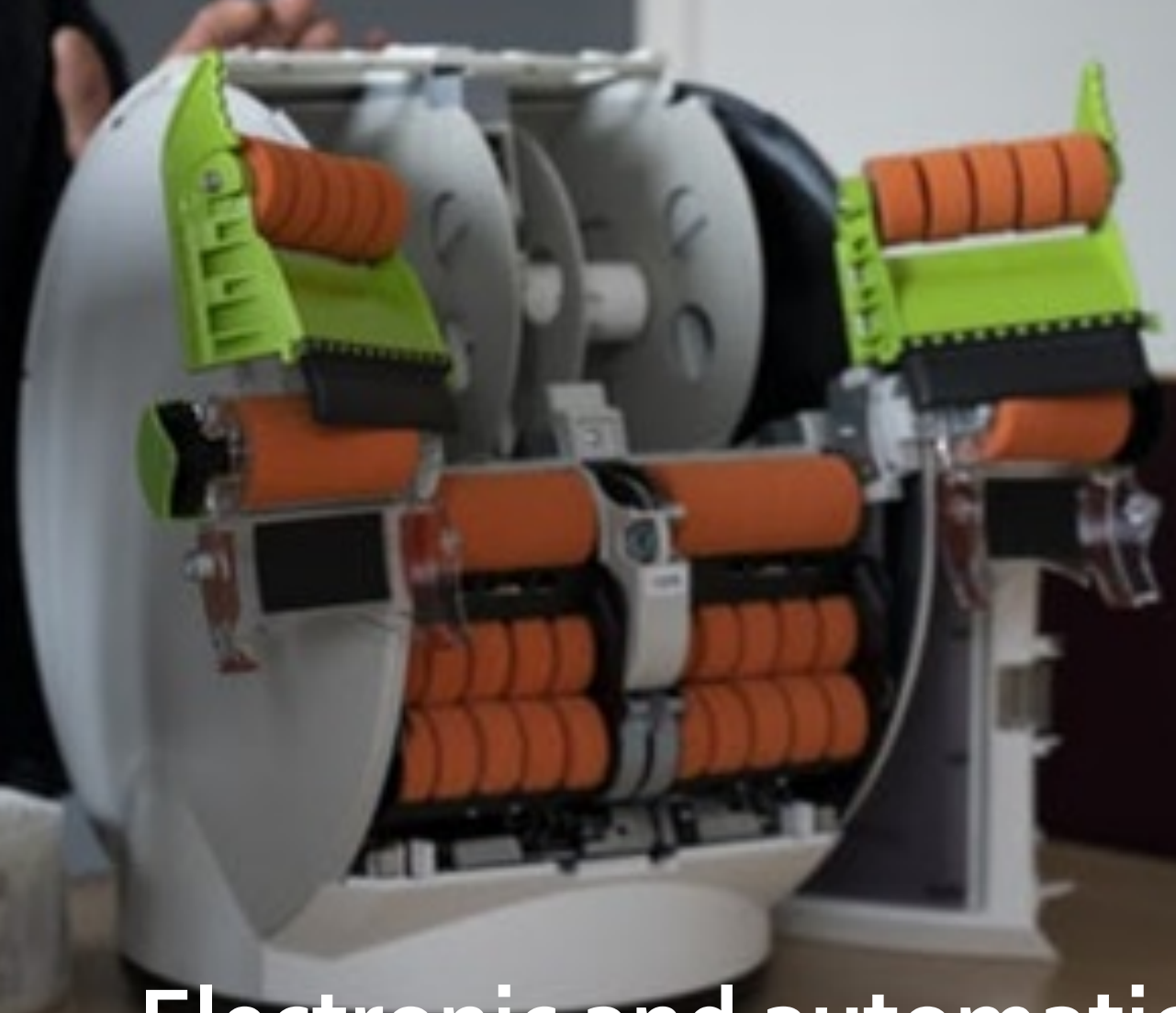
- Service receiver, Larvik municipality (Ausen et al., 2016).

Effects

- **Qualitative benefits** - Increased feeling of security and freedom for both service recipients, family members and staff in the care service.
- **Freedom and absence of coercion**
- **Stay longer at home and postpone further services**
 - 15-20% of users will have a gain in the form of delayed need for escalation of service or institution space (Skien municipality, 2016)
 - In 2014, Drammen municipality expects to have saved NOK 2 109 360, ie NOK 124 000 per user. The expected number of users in 2016 is 28, = total saving of NOK 3 474 240 (Drammen municipality, 2016)
- **Avoidance of search and rescue actions**
 - Time retrieved by quickly locating the user via GPD, thus avoiding major search and rescue activities. 548 hours saved (Drammen municipality, 2016)

Digital night monitoring with cameras - offers undisturbed sleep



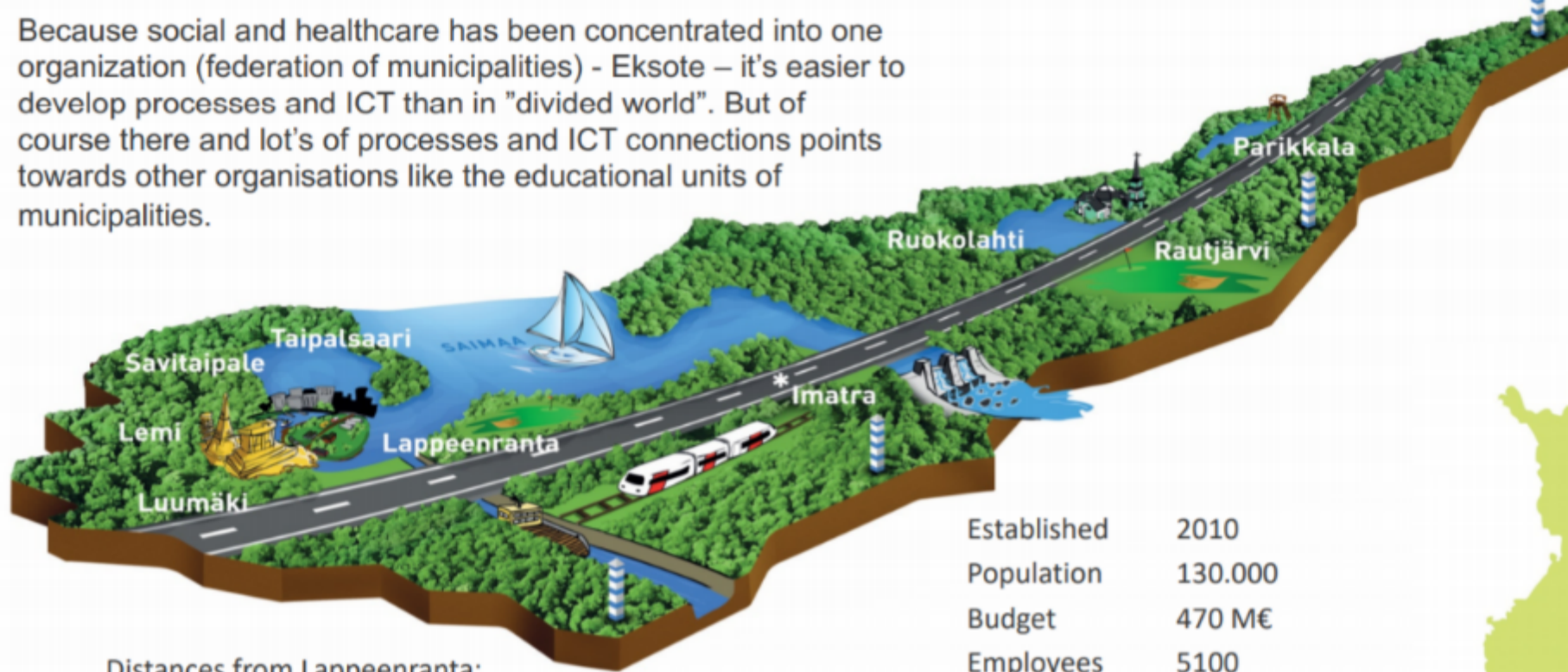


**Electronic and automatic
medicine dispensers**

South Karelia Social and Health Care District



Because social and healthcare has been concentrated into one organization (federation of municipalities) - Eksote – it's easier to develop processes and ICT than in "divided world". But of course there are a lot's of processes and ICT connections points towards other organisations like the educational units of municipalities.

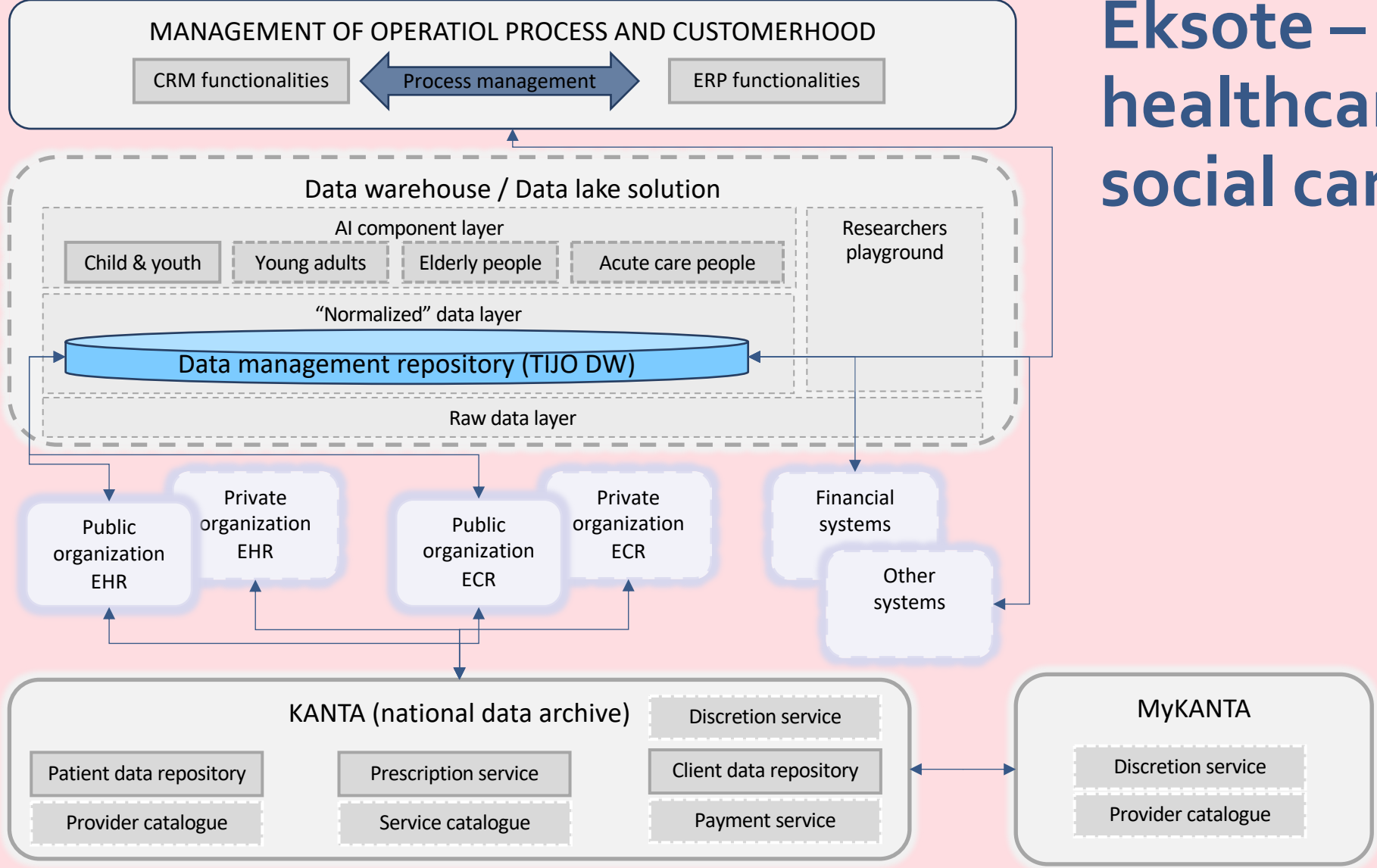


Distances from Lappeenranta:
 to Helsinki 230 km
 to St. Petersburg 230 km
 to Russian borders 35 km

Established	2010
Population	130.000
Budget	470 M€
Employees	5100
Hospital	280 beds
Nine municipalities and 13 wellbeing centers in our regions	



EksoTE – A joint healthcare and social care region



Question and answer session 2 - instructions

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Example of implemented service – Bornholm DK

Digital outpatient clinic at Bornholm Hospital



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Facts about Bornholm

Area	588,36 square kilometres
Perimeter	141,4 kilometres
Citizens	39.499 (lowest in 100 years)
Main city	Rønne (13.772), Nexø (3.602)
Administration	Bornholms Region Municipality – as part of the Capital Region
Transport	Ferry's (DK, SE, DE, PL), Flight (DK),
Main business	Tourism, fishing, geographical raw materials, agriculture
Higher education	Nurse, teacher, glass and ceramics, social worker, business academy degree programs



Source: From Wikipedia

Conclusions from 'Analysis of possible telemedical areas of action at Bornholm' December 2019

- **Increasing pressure on the overall health service at Bornholm**, as a result of more elderly people and citizens with chronic diseases.
- **Significantly longer transport time** in connection with treatment compared with the rest of the capital area (**Approximately 40.000 single travels yearly**).
- **Telemedicine services can give patients easier access** to specialized treatment at the region's other hospitals and give patients greater flexibility, more coherence and fewer unnecessary transitions in local treatment courses.
- Data from outpatient contacts shows that **patients with cancer and chronic diseases have a significantly larger volume than others**
- Different telemedicine initiatives can potentially be extended to a much wider range of target groups, if the efforts are based on types of telemedicine that can be used across several target groups.

Source: Borholms Hospital – Alex Kjøller

DIGITAL ISLAND 2020-2024

Telehealth Bornholm:

- HIT
- KOL
- TelePOCT
- Yellow blink
- Virtual admissions
- Digital beds
- Digital prevention
- Video conferences - MinSP

Telehealth Capital Region:

- TeleAmbulatorier
- Medico logistics
- Distance development
- Medicine dispensing
- Tele Medical Knowledge Center
- Center For Health
- Health Research and Innovation

Health IT:

- SP
- MinSP
- PRO data
- APPs
- (SP Link)
- (SP Talegenkendelse)
- (Kunstig intelligens)
- (Robot teknologi)

Digital competencies: Research:

- Citizen readiness
- Clinic readiness
- Organization readiness
- E-learning
- Patient safety
- Distance issues
- Citizens' readiness


Culture


Organization


Implementation

Patient statements

1

I contacted Bornholm Hospital myself and they helped to set up a video consultation. So instead of having to spend 18 hours, it just took 8 minutes

2

The advantage was that I did not have to spend a whole day in Copenhagen (04-22) and I do not have to have my child looked after for several days due to this. (early departure - late return)

3

It takes a lot of energy and are hard for me, sometimes we have to fly at 06:00 in the morning, therefor we weak up at 02:00 at night to be ready for pickup at. 04:30

4

Several patients have requested the possibility of telephone and video consultation, but were refused

5

I have to pull out a whole working day to get to Copenhagen and sit for a 5 minute consultation, to find out that it's going well, or we adjust your medicine

Source: Borholms Hospital – Alex Kjøller

Digital out patient clinic ready end October 2020

- Great potential to support patients and citizens needs – equality in health focus
- Opportunity for Bornholm Hospital to be front runner as Digital Island
- First step for is to focus on video consultations – ongoing development
- Designed a separate room at the hospital (Integrated Cisco platform to EPJ/Sundheds platform for patient journal, blood pressure monitor, scale, EKG, thermometer, etc)
- First selected disease area – Danish Headache Centre – corporation between Rigshospitalet and Bornholms Hospital
- As-is To-Be analysis – new patients and workflows, booking, etc
- 10 video consultations has been conducted as pilots, more planned
- Roadmap for next disease areas – expand Neurology, Sclerosis, Sleep Apnea, Cardiology – potential others
- Focus on value creation for all - patient, clinicians and Bornholm – equality in health
- SDG and climate foot print to be evaluated – based on collected data

Question and answer session 3 - instructions

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Save the date for more webinars to come:

October 21st , 10:00-12.00 CET

Well-being in the Nordic Region and the potentials of digital solutions in health care and social care - Launch of two Nordregio reports

November 3rd, 13:00-14:30 CET

Roadmap for service innovation - How can technology be brought to those people who need it and/or don't know how to use it?

November 18th, 13:00-14:30 CET

Practical examples from implementation work 2020 - How can we fast-track innovation?

December 14th , 13:00-14:30 CET

Wearables and Response Service – Innovation track



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Well-being in the Nordic Region and the potentials of digital solutions in health care and social care



Date: 21st of October, 2020

Time: 10:00-12:00 am, CET

More info including registration [here](#)

Webinar 2 - Roadmap for service innovation



Date: 3rd of November, 2020

Time: 13:00-14:30 am, CET

Registration for next webinar,
monitor our webiste for info:

www.healthcareatdistance.com

Healthcare and care

Thank you!

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