



<https://youtu.be/w4aasiZLY9Q>

## **Eksote's story: From 2009 to 2019**

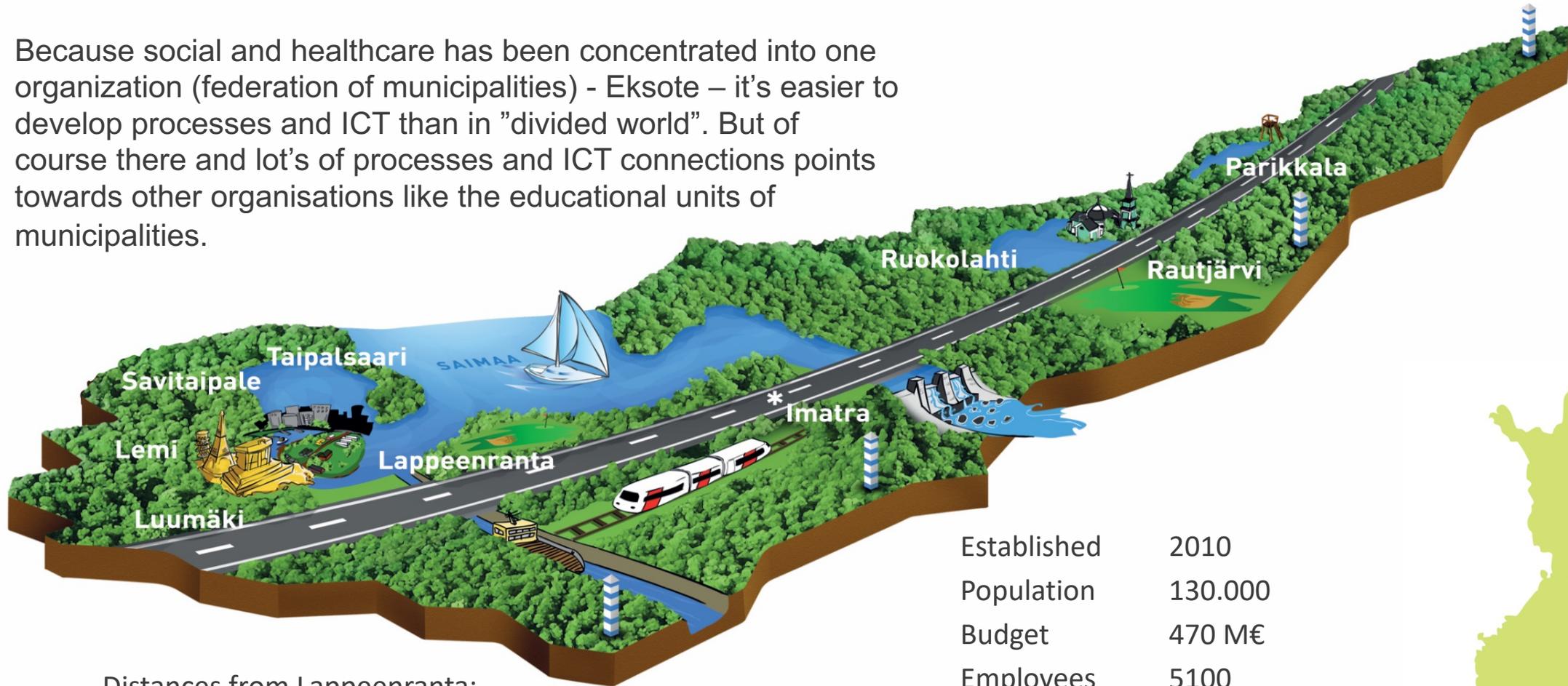
*Merja Tepponen Director of Development, Eksote*

<https://www.youtube.com/watch?v=WQ7oOHNbsSg>

# 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 lots 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	

# Why the new regional model Eksote was made



- Traditional arguments :
  - Integration between the acute hospital, primary care and social well-being services;
  - A new and better balance between primary care and hospital;
  - Better coordination in strategy, financing and investments
  - Common use and recruit of staff.
  - Share the resources
  - Strengthen the steering power of the owner municipalities
- Future arguments:
  - Added value comes from data
  - Use of data and data analyzing
  - Artificial Intelligence, robotics, machine learning
  - Create out-of-hospital services and autonomous work



# A little history of Eksote



...First steps

## Digitality supports the development of the entire service system



### A single patient and customer information system

Significant customer benefits: freedom to choose within the region and all services available also in small municipalities



### A shared knowledge base

A significant cost and quality factor: complete chains such as rehabilitation and stroke treatment can be managed within the region

Target group-specific reporting and cost monitoring in each service throughout the region.



### Online services

Online nurse, scheduling appointments, online health checks, risk tests, and many other services are available to customers 24/7

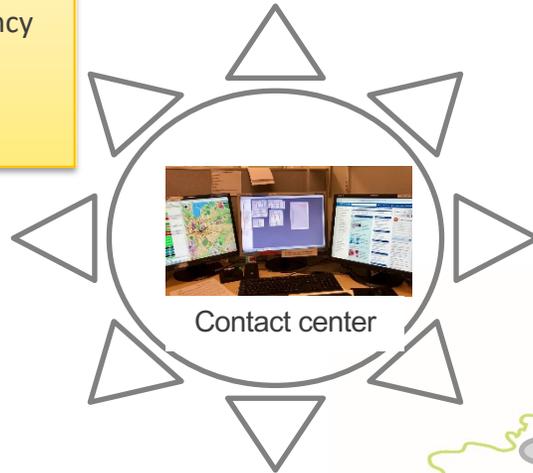


### Light operations control solutions

Process and operations control with own light, browser-based SAS tools: reveals any bottlenecks and helps eliminate them.

# ...First steps

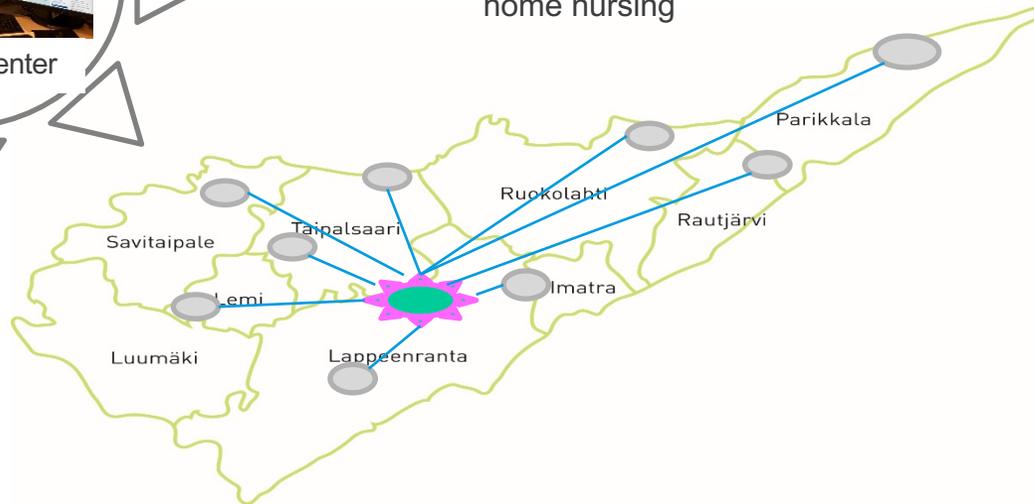
## REGIONAL SERVICE NETWORK



New Kind of Health Care Center with Social Elements

Rehabilitation  
Home rehabilitation  
Preventive home care  
Home help, home care,  
home nursing

Information flow  
transportation  
Moving Services  
Care management, case  
management  
Services information



# New kind of Health-Care Center with social elements



## Old model

- Several nurses
- Several doctors
- Concentrating mainly on illness and diagnosis
- Social work and health-care working mainly separate
- Wards



## New model ("Welfare center", fi. Hyvinvointiasema)

- Multidisciplinary teamwork
- Remote doctors by appointment
- Some specialized nurses (recipe nurses etc.)
- Social workers
- eServices
- Co-operation with different health and social care associations and companies
- Theme-events, preventive groups
- Rehabilitation at home, living longer at home
- Supported housing/service housing
- Mobil Clinic
- Sport instructor / physical education

Second steps...

## MOBILE SOCIAL AND HEALTH CARE SERVICES – A MOBILE CLINIC



I First 2010  
Mallu Mobile Health Care Clinic



III third 2016  
EMS Home Mobile Clinic



II Second 2014  
Laboratory Malla



# Homerehabilitation

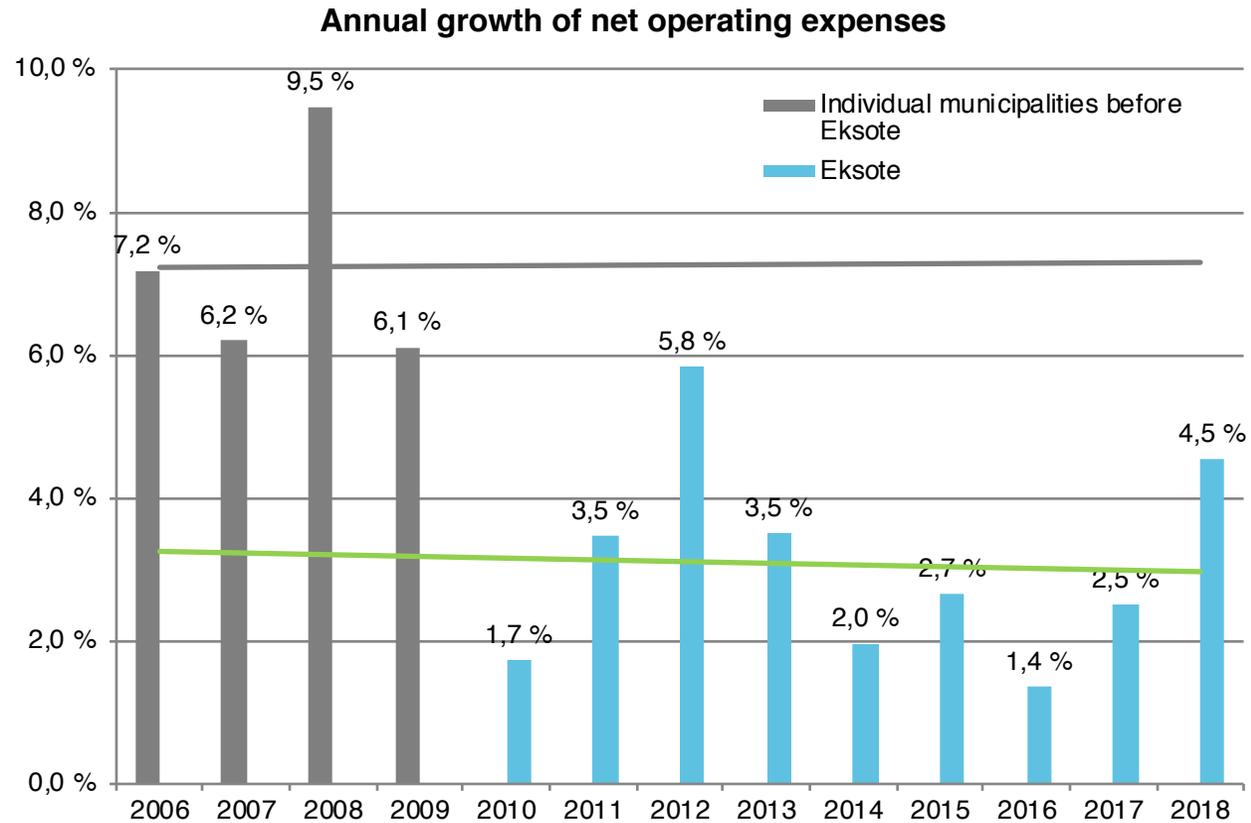
We have developed homerehabilitation in Eksote since 2010. At the beginning we didn't have much staff to work on the field and that's why we started to support home care workers to sustain customers functional ability. This is very important also today though we have much more resources and our interventions provided by rehabilitation professionals are very intensive.

Strategically the main point has been brave change from institution based models to home based models. We have moved our nurses duties to physio- and occupational therapists duties. We have integrated our processes and put the effort to early stage. We have decided to work multidisciplinary in all our processes.

Now we want to discharge very rapidly and straight to home if possible. We want to develop wide customer management solutions in the future to improve our processes.



# Annual growth of net operating expenses of social and health care in South Karelia (%)\*



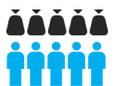
\* comparable growth

# Information based management model 2015

The model supports health benefits thinking, facilitates integrations, interventions and impact monitoring, and generation of comparison data.  
Social and health care information package

## Gross expenses and customer volumes per service package



Social and health care age over +75		€131,591,360 15,584
Demanding special health care services age 18- 74		€80,629,374 33,389
Services for children, youth and families		€48,372,598 26,455
Services for the disabled		€31,944,079 1,739
Primary health care		€23,997,467 54,031
Social services for adults		€25,974,251 9,635
Mental health and substance abuse services		€22,235,429 5,766
Stand-by urgent care services		€13,641,455 24,634
Dental healthcare		€12,657,784 35,652
Medical rehabilitation		€7,927,435 11,565
Paramedical care		€7,818,235 1,296

<https://youtu.be/w4aasiZLY9Q>



**Eksothe in practice, current situation**

# Integrated regional Service Network

24/7  
Phone  
116117



HOSPITALS SUPPORTING THE HOMEBASED SERVICES

Acute Care Hospital with Extensive selection of emergency medical care



Teleconsultations and online-services

24/7 nursing home and service House

24h/h  
Care

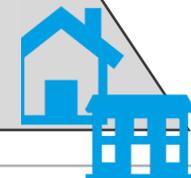
Low threshold service clusters for children, youth and families, adults, elderly and disabled; multidisciplinary services, "one-door"



Mobile work  
Mobile clinic

**Promotion of well-being and health, service instructing**

Near-by-services such as social and health care centres (wellbeing centres), maternity clinics, school health care, home care 24/7, multidisciplinary home rehabilitation, stand-by urgent care, housing services (short- and long- term), assistance services



**Yksityiset palvelut**

Eksoten hyväksymät yksityiset hyvinvointipalvelut ja hinnat yhdestä osoitteesta!

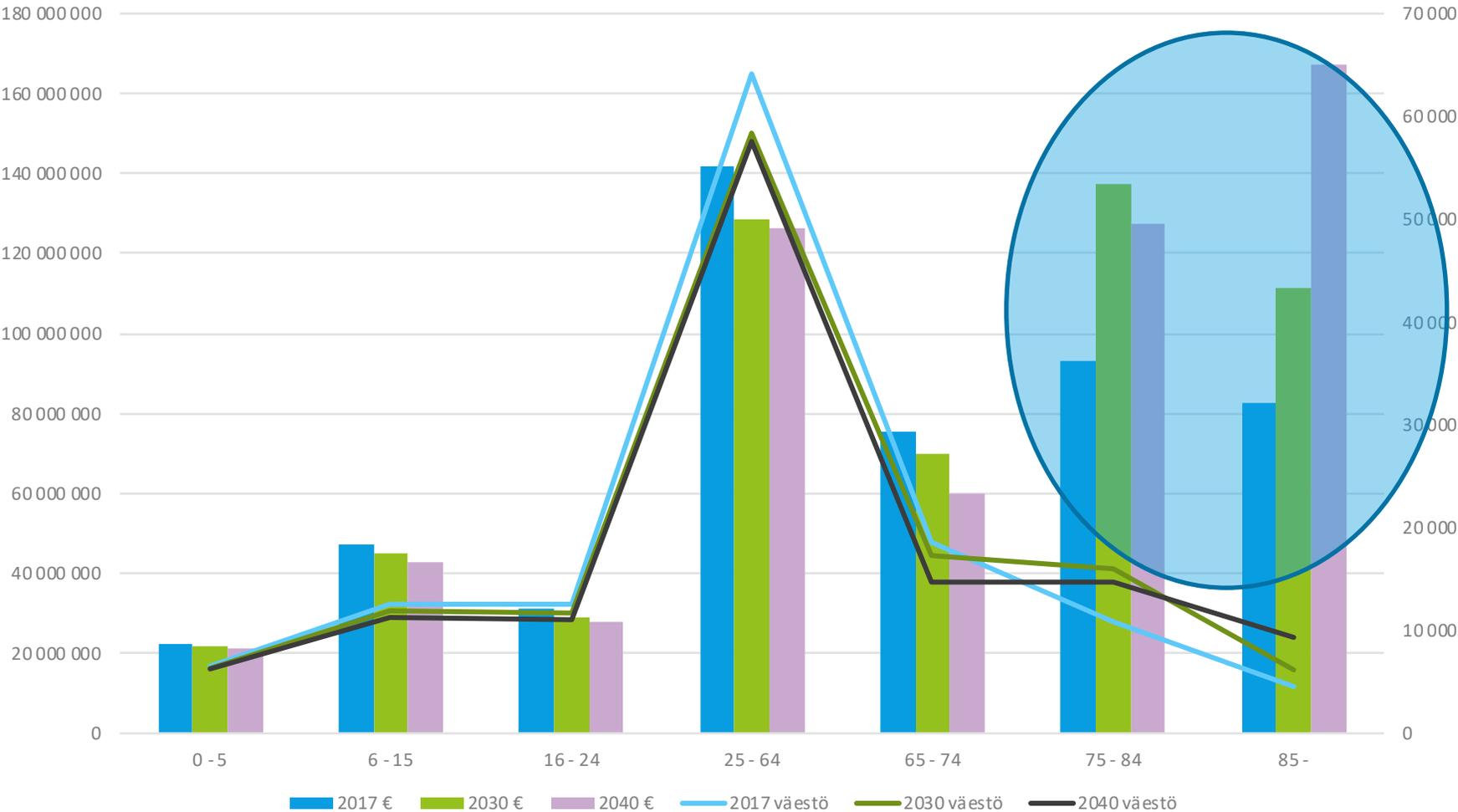
[www.yksityisetpalvelut.fi](http://www.yksityisetpalvelut.fi)



Private services

Age-friendly cities and region

# The development of costs and population change in South Karelia during 2017-2040



# Over 75-year old living at home in Finland and in South-Karelia 2010 ja 2015

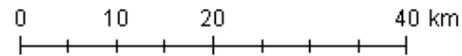
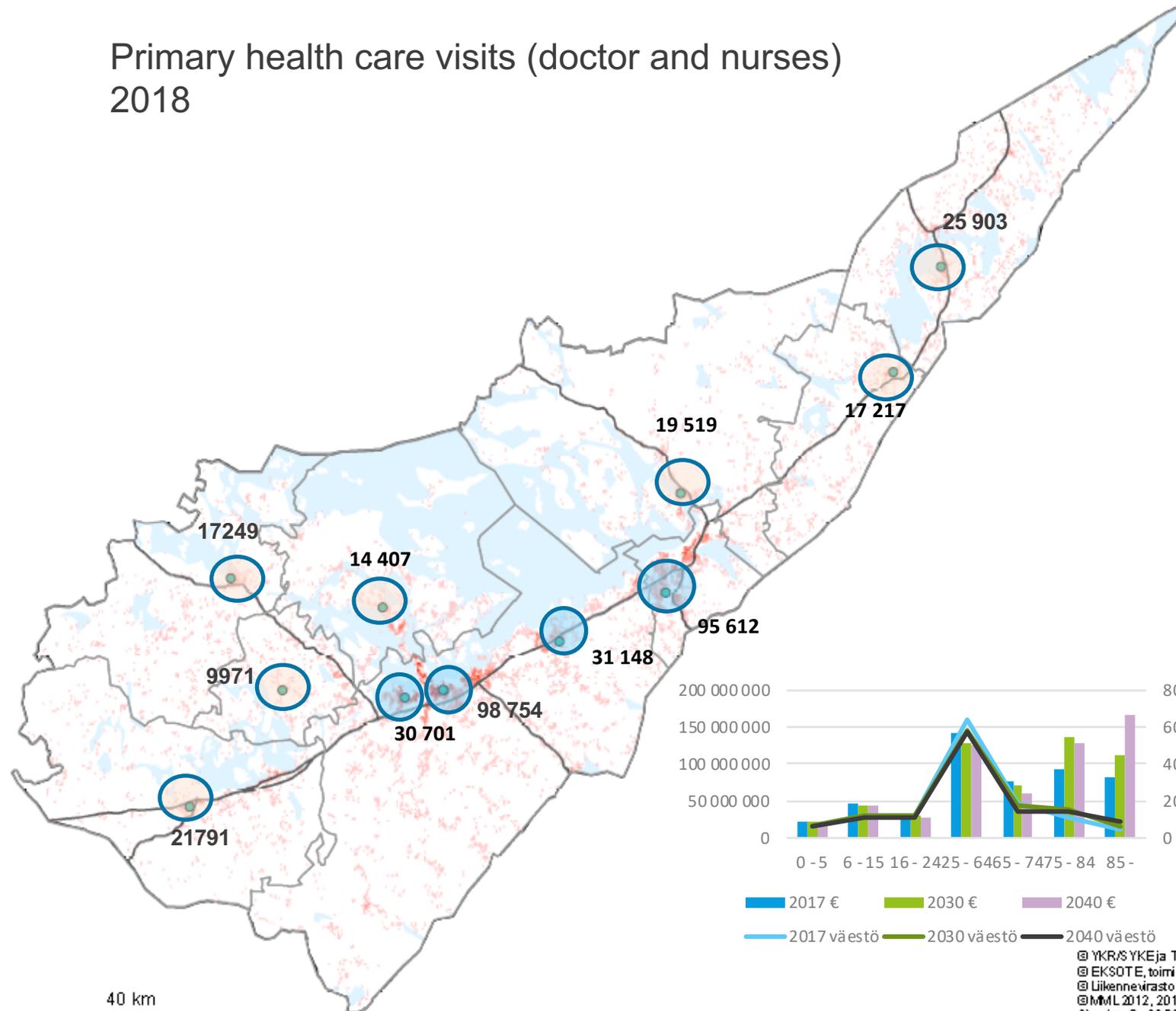
Väestö +75-vuotiaat, vertailua	Etelä-Karjala			Koko maa		
	2010	2015	2017	2010	2015	2017
People, over 75 year old, %	10,2	11,8	12	8,1	9,1	
Living at home, %	90,1	93	93.5	89,5	90,6	91.1
Regular homecare customers,%	10,5	13,1	12.1	11,8	11,8	11.3
At nursing homes, %	4,1	5,2	5.7	5,6	7,1	7.3
Long term care in wards, %	4,9	1,7	0.1	4,7	2,1	0.2
Cared by family care keepers, %	4,1	5,5	5.9	4,2	4,7	4.9

Ekso  
2018  
95,2%

# 75 years+ age group in Eksote in 2018

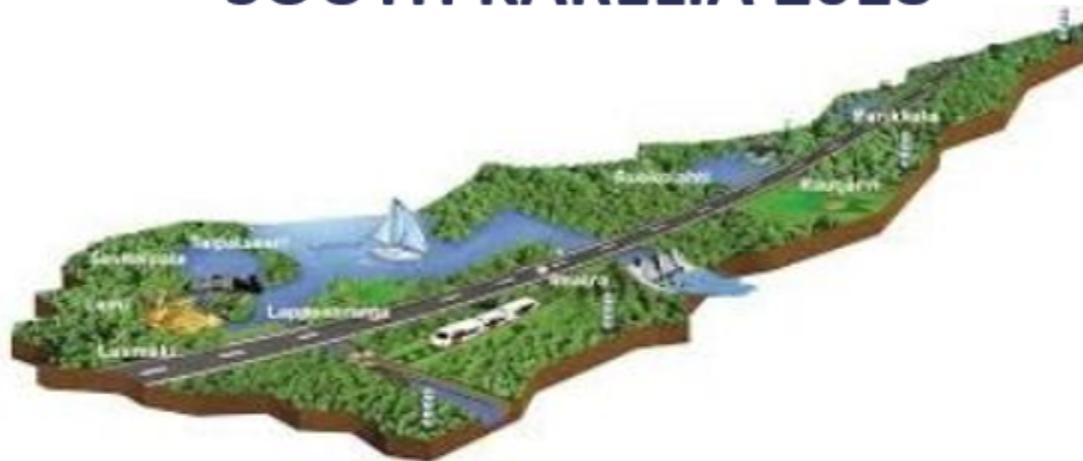
- Institutional care long term customers (24h/7) whole social and health care costs were about 9,4 m€ (59 200 €/customer) (75 years+ age group)
- Intensified housing service (nursing home) long term customers' whole social and health care costs were about 49 m€ (49 000€/customer) (75 years+ age group)
- Lighter housing service customers' whole social and health care costs were about 10 m€ (38 300€/customer) (75 years+ age group)
- Home care long term customers' whole social and health care costs were about 66,9 m€ (34 800 €/customer) (75 years+ age group)
- Family care customer whole social and health care costs were about 24m€ (22 000€/customer)

# Primary health care visits (doctor and nurses) 2018



# THE WELLBEING OF THE ELDERLY IN SOUTH KARELIA 2018

Population  
128756  
South Karelia region  
(whole country  
5 523 415)



27%  
Share of persons  
aged 65 or over  
(whole country  
22%)



**Demographic dependency**  
68% (whole country 61 %)



95 % over 75-year old living  
at home, whole country  
91 % (2017)

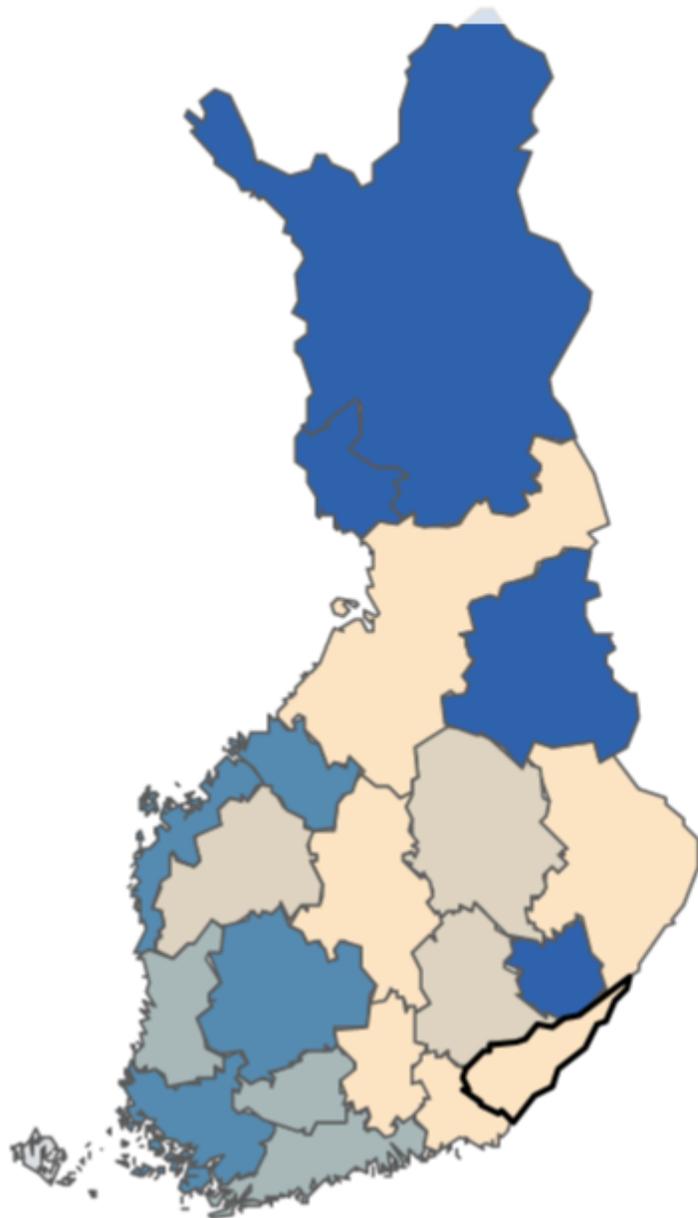
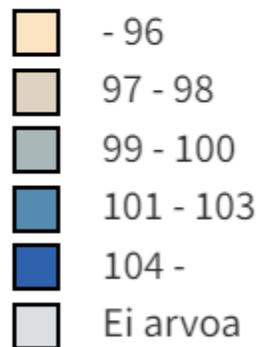


The total social and health care  
costs of the 75 year + customers  
are 190,6 m € (about 38% of  
the whole Eksote budget 2018)

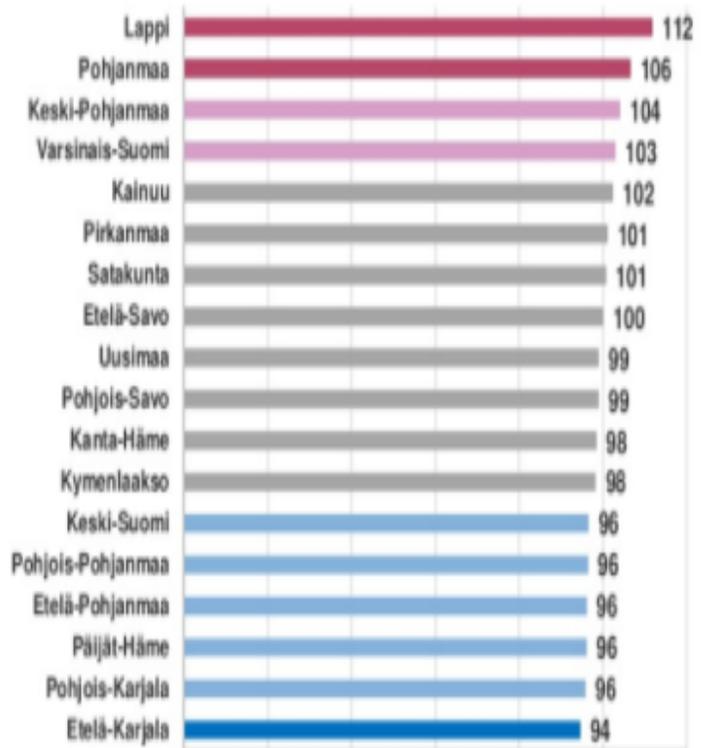
# Needs-adjusted expenditure on social services and health care, index 2017

South  
Karelia: 96

Entire  
country: 100

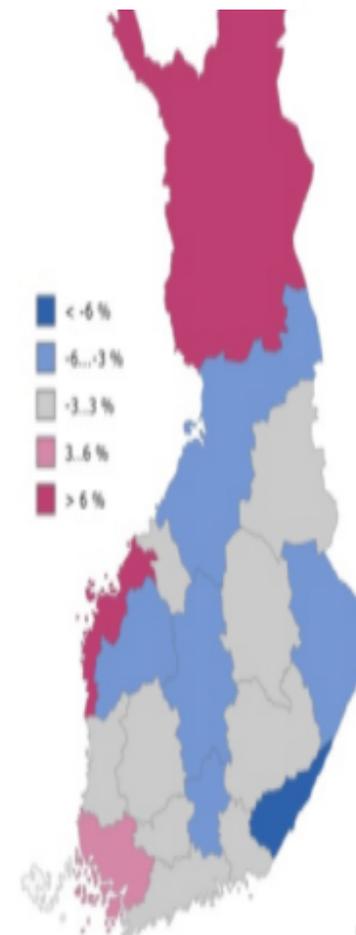


Index 2016



22.2.2018

Tarvevakioidut menot 2016



# Psychiatric inpatient care, care days for those aged 65 and over per 1000 persons of same age (year 2018 preliminary data)

South

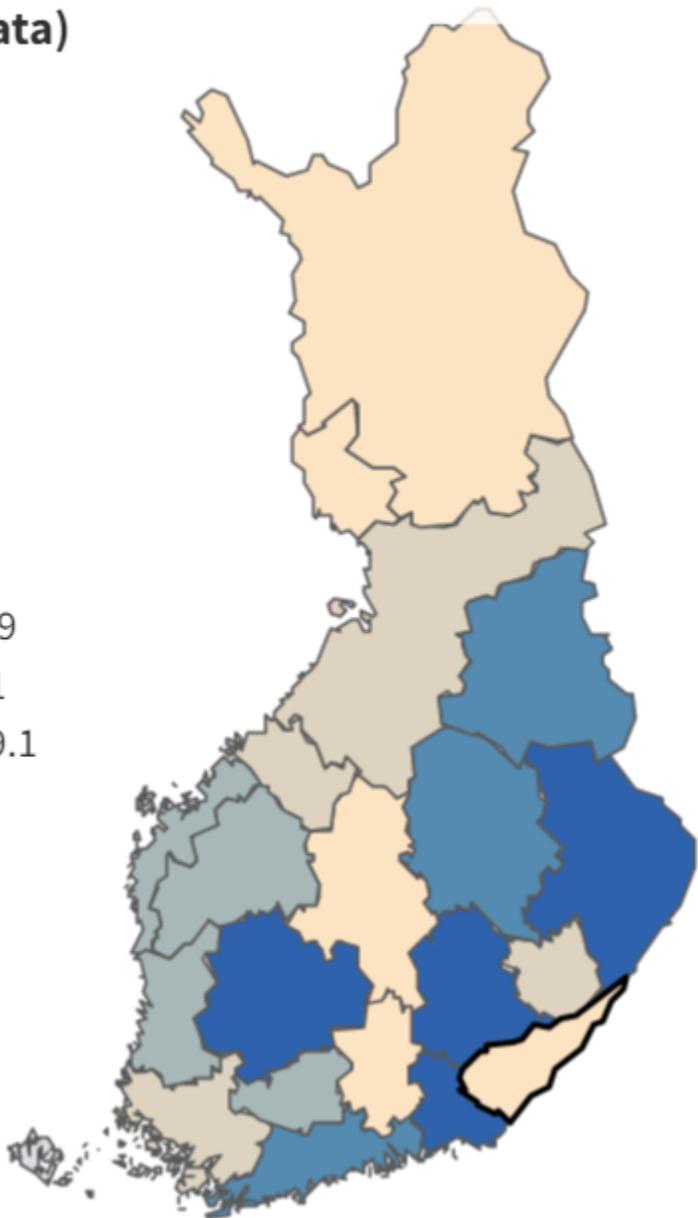
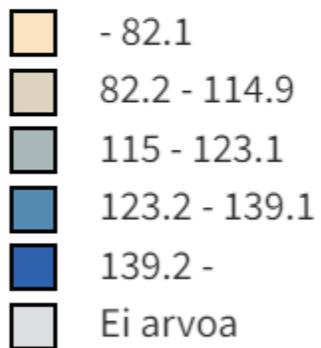
Karelia:

62.3

Entire

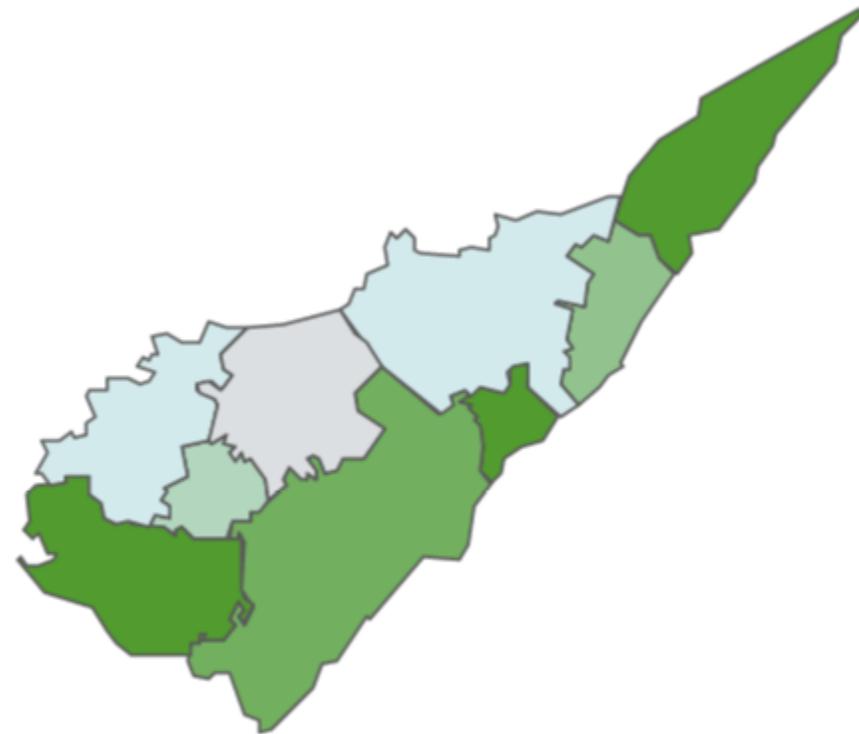
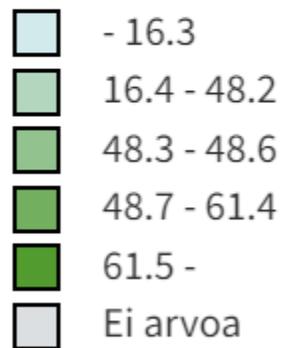
country:

132.8



Select a municipality from the map to see the value

South Karelia: 62.3

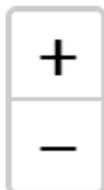
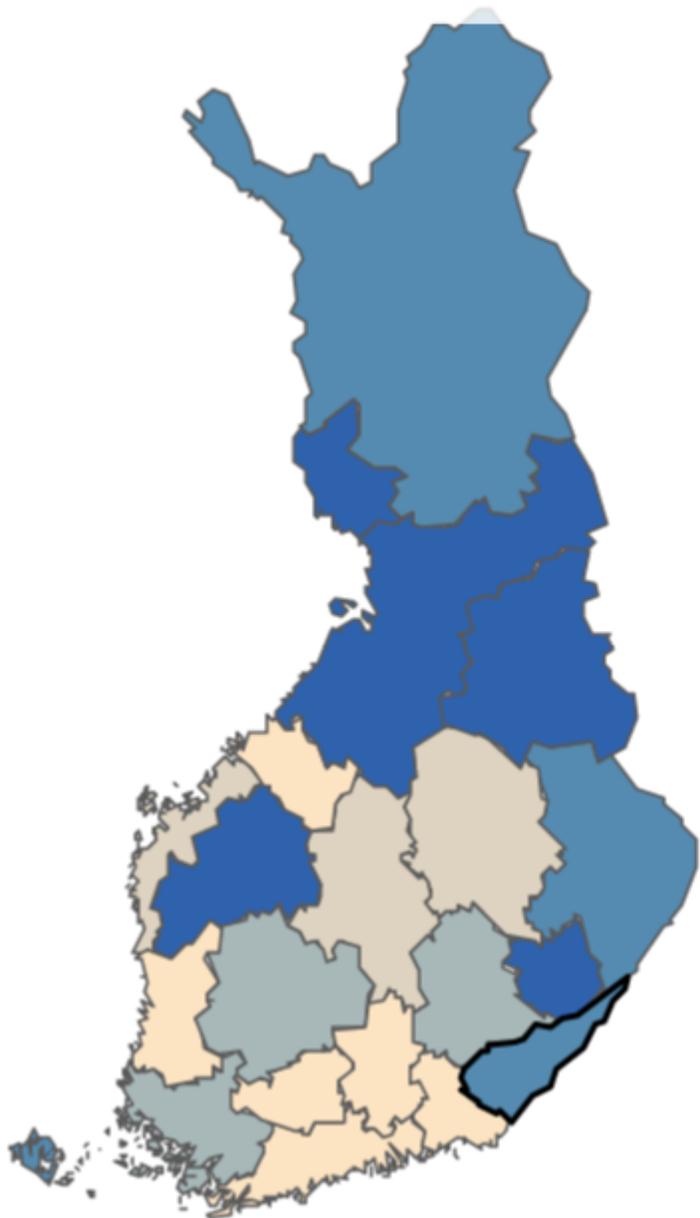
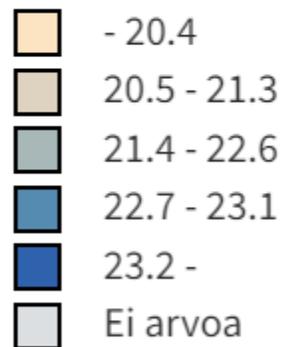


# Regular home care, clients aged 85 and over on 30 Nov, as % of population of same age

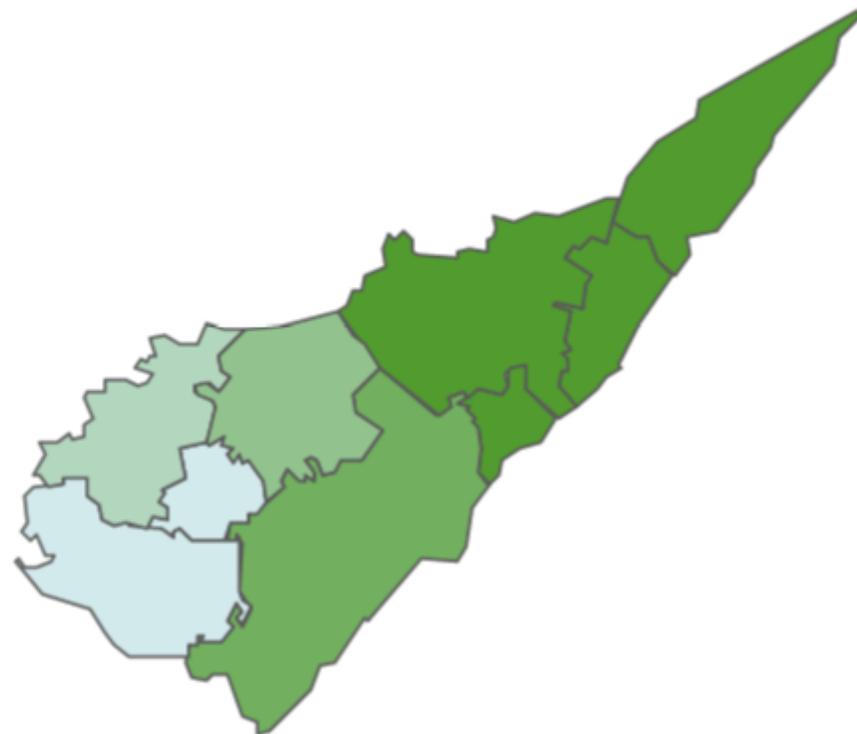
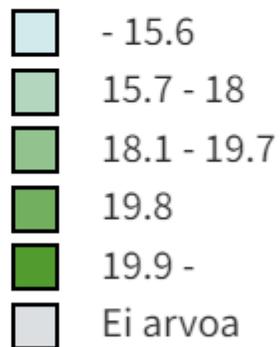
South

Karelia: 23

Entire  
country:  
21.6



South Karelia: 23

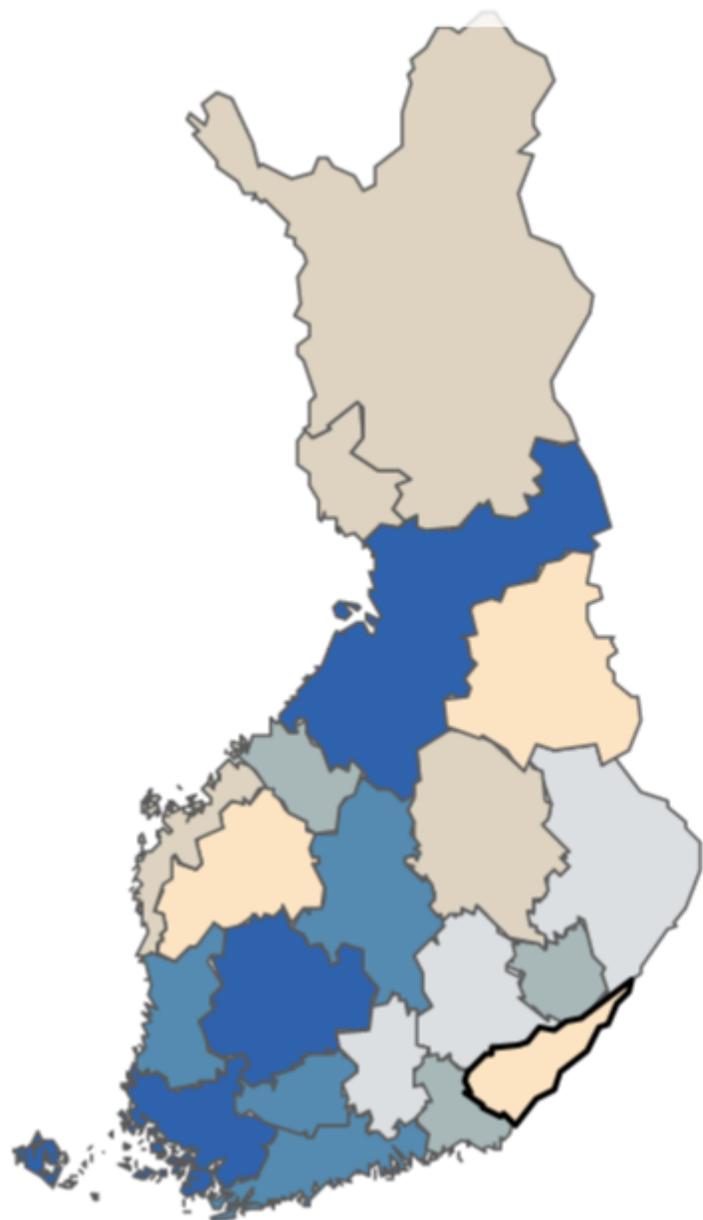
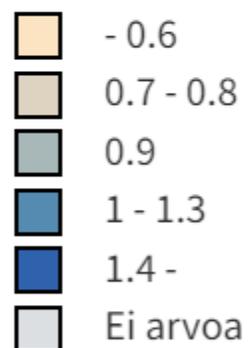


# Residential homes for older people, clients aged 75 and over, as % of total population of same age, on 31 Dec

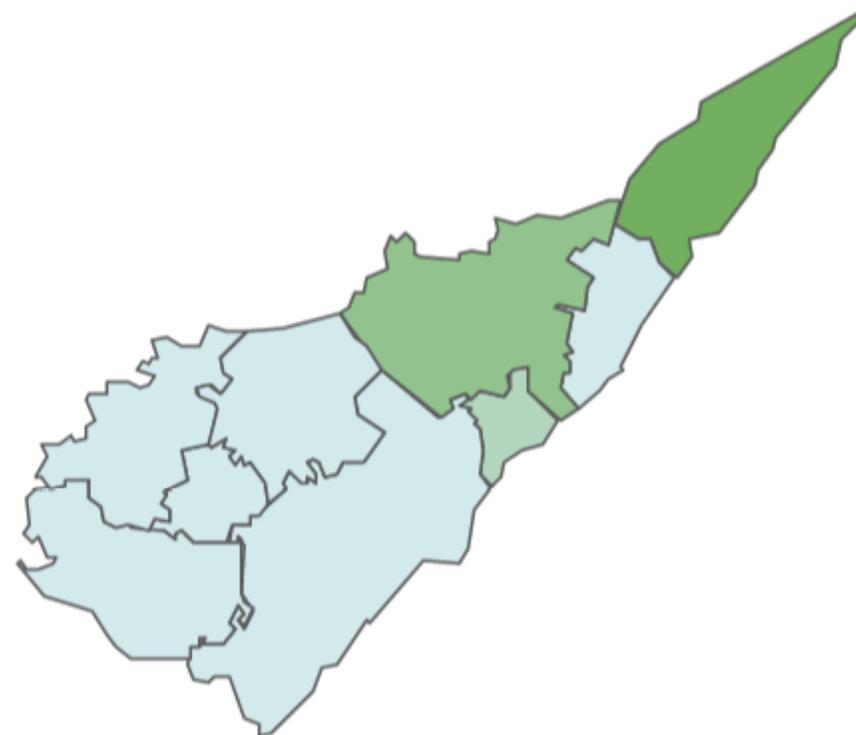
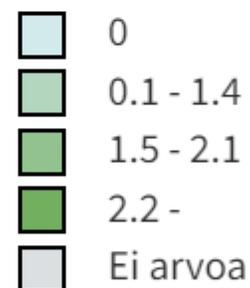
South

Karelia: 0.6

Entire  
country: 1



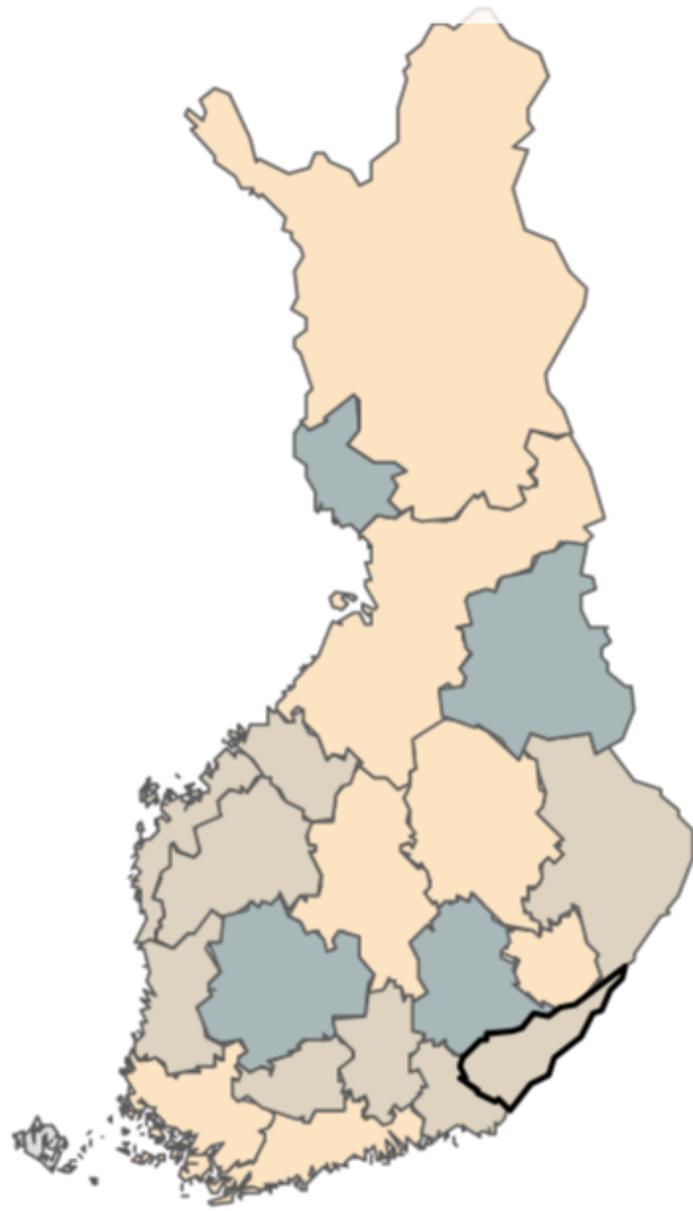
South Karelia: 0.6



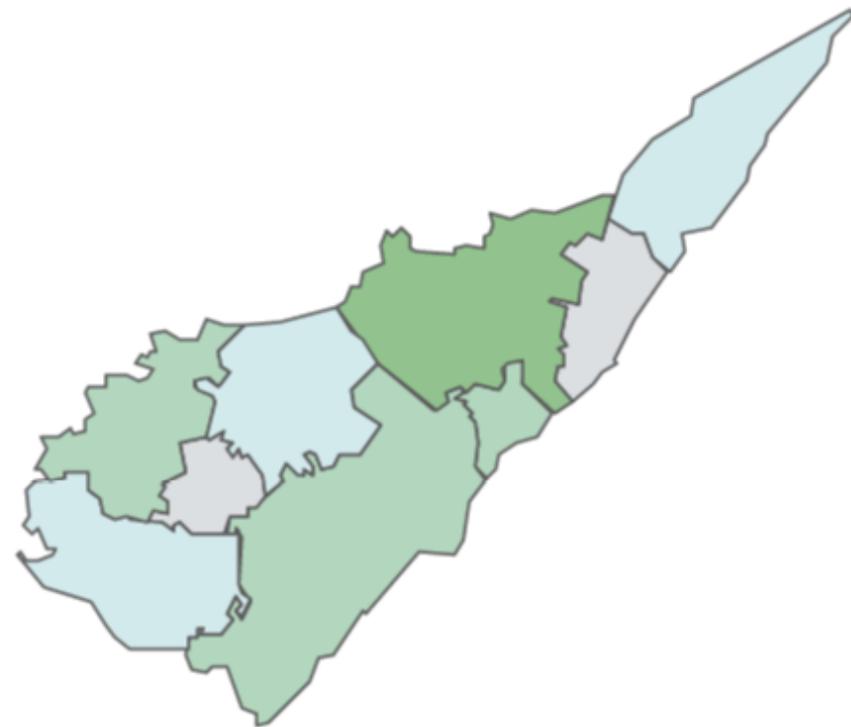
# Hip fractures in those aged 65 and over, as % of total population of same age (year 2018 preliminary data)

**South  
Karelia: 0.7**

Entire  
country: 0.7



South Karelia: 0.7

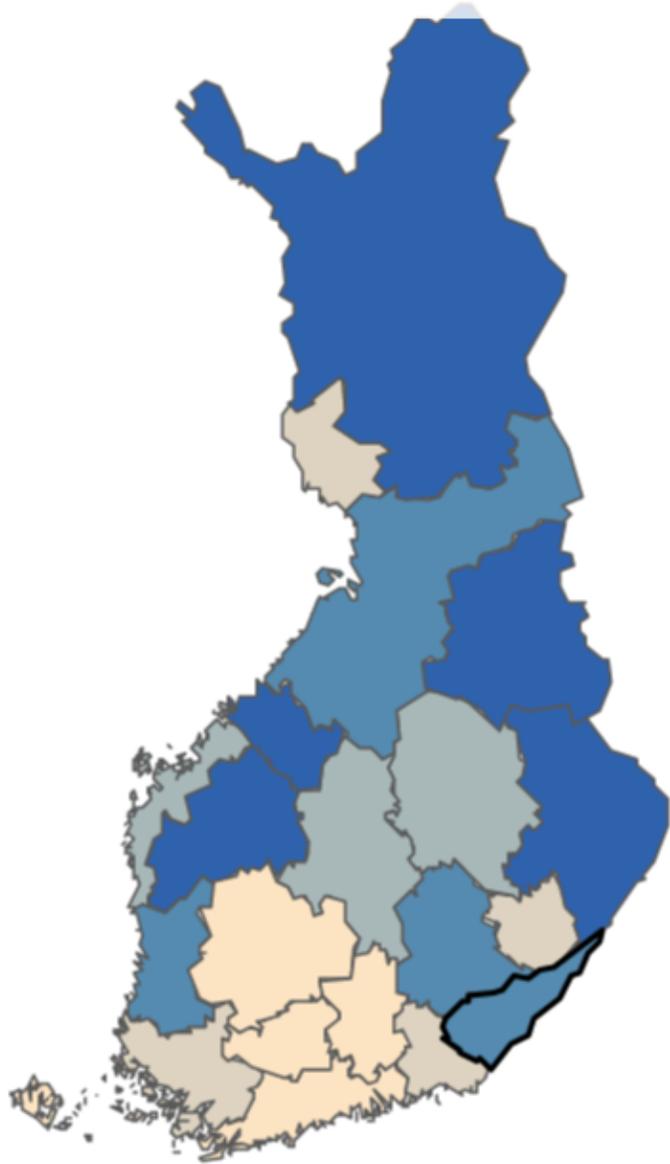
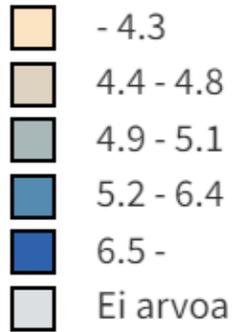


# Support for informal care, persons cared for, aged 75 and over, during year, as % of total population of same age

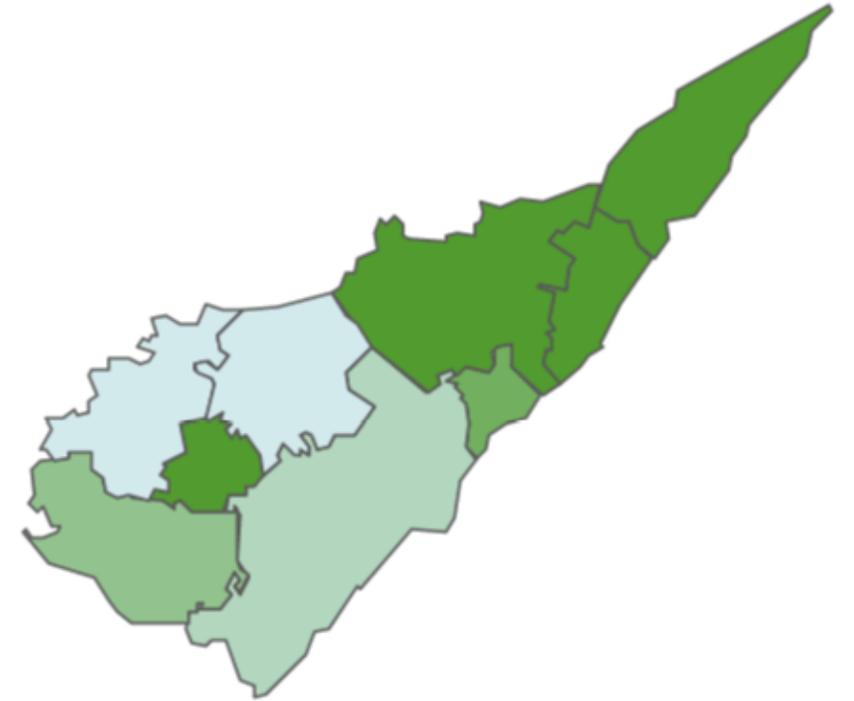
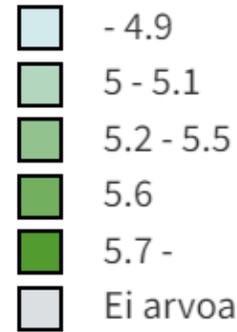
South

Karelia: 5.7

Entire country: 4.9



South Karelia: 5.7



+

-

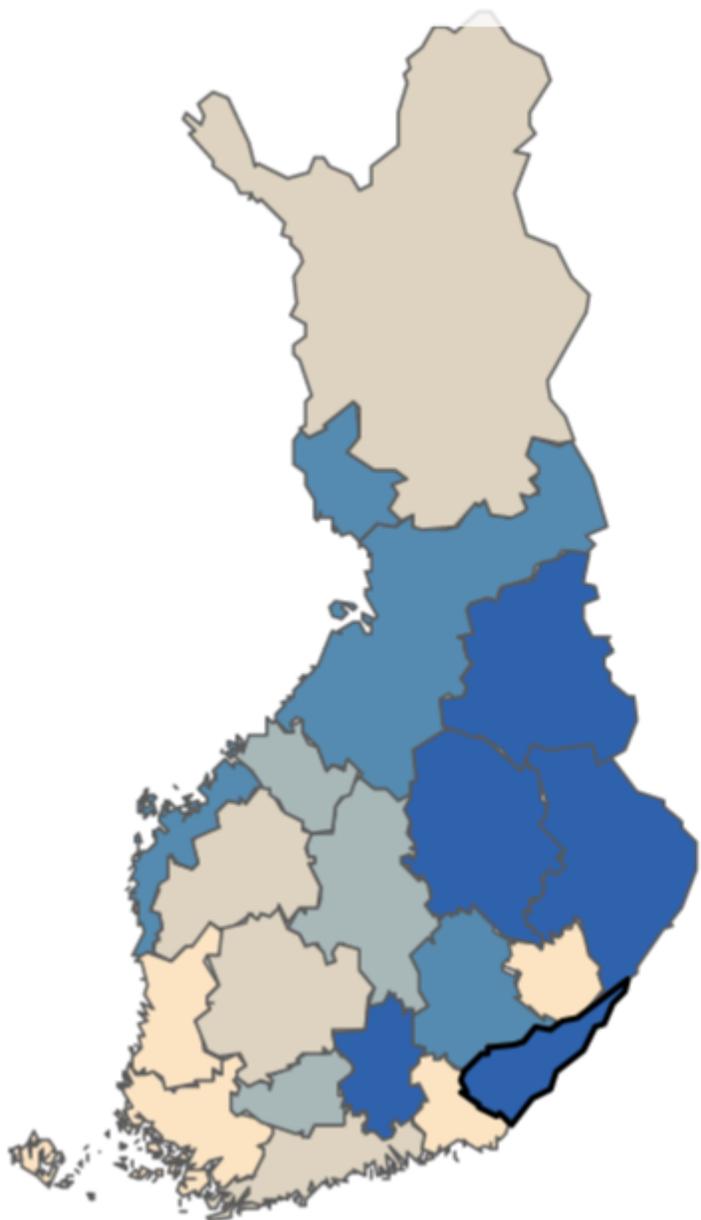
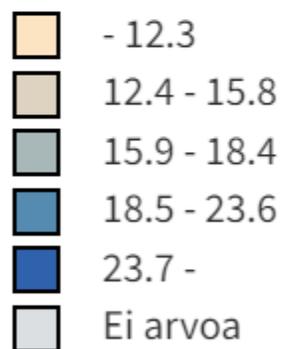
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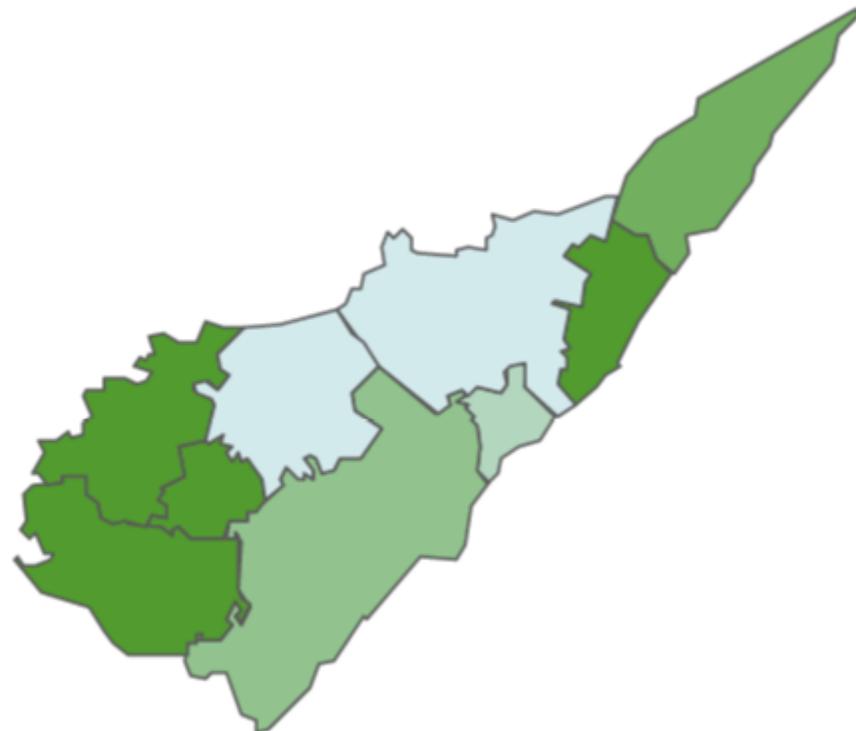
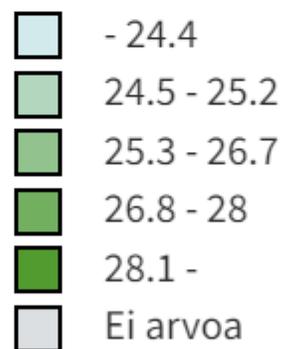
# Regular home care clients aged 75 and over, on 30 Nov, 90 or more home care visits a month (%)

**South  
Karelia:  
27.3**

Entire  
country:  
17.1

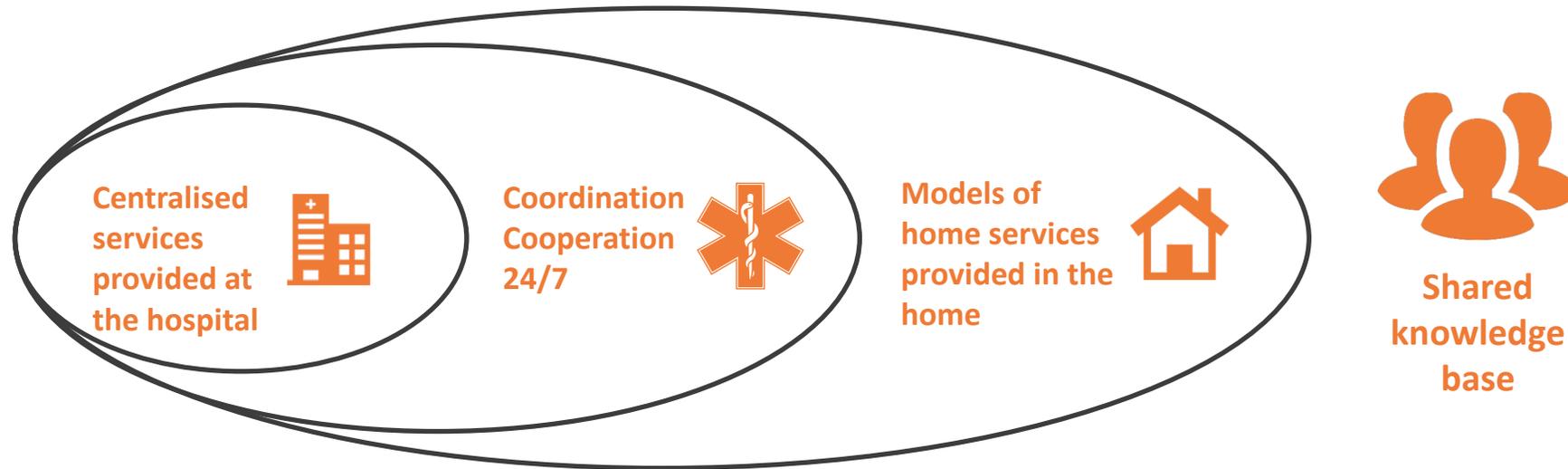


South Karelia: 27.3



# From centralised services to decentralised models

All service needs, guidance to further care, and monitoring of the patients are ensured.  
The impacts of medication, nutrition, and functional ability are considered.

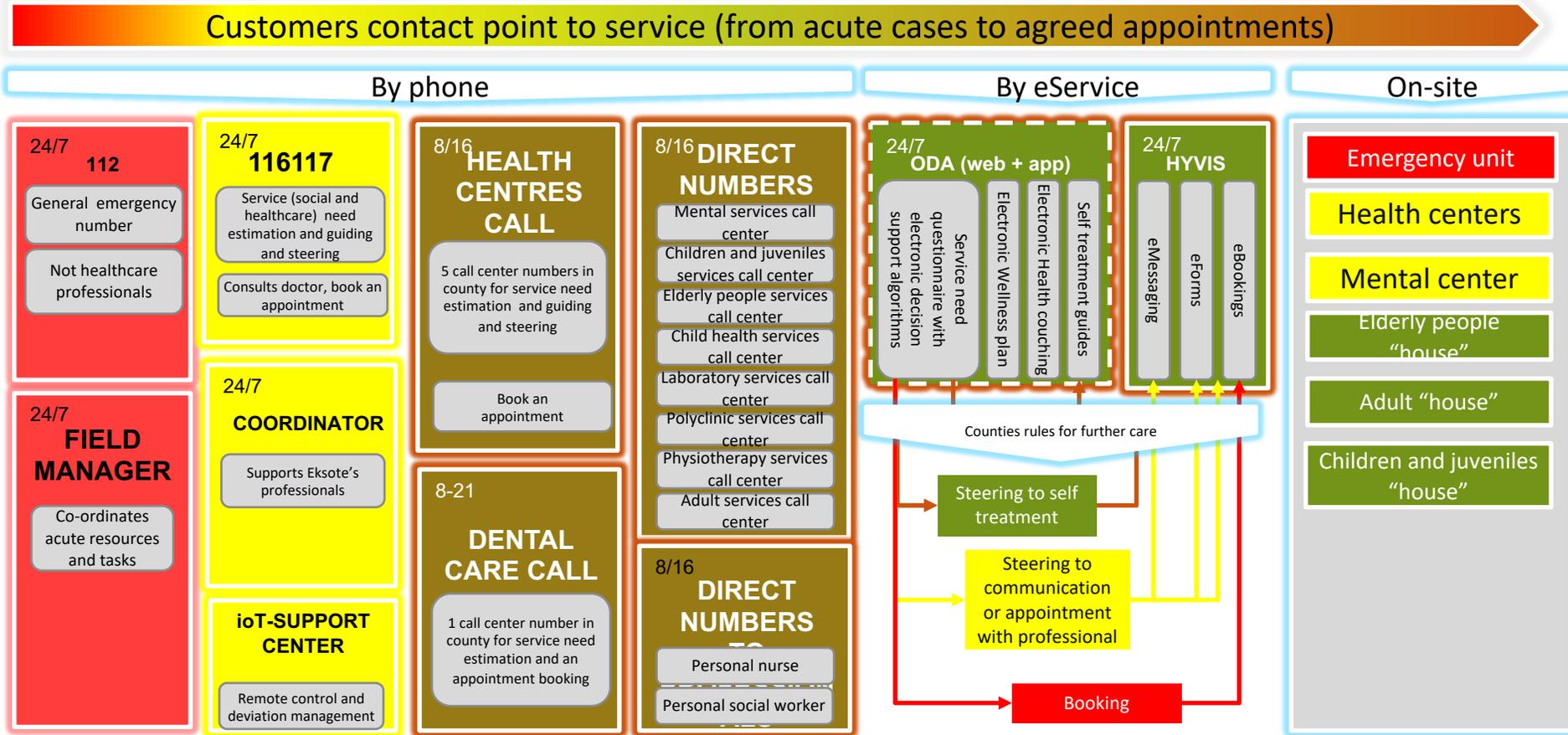


- Consultations outside the hospital are an important part of caring for the patients
- Knowledge of the opportunities provided by the service system
- Enhanced, supported discharge from the hospital 24/7

- No unnecessary visits to the stand-by urgent care clinic, transportation or waiting at the emergency clinic
- Optimised use coordination of resources
- Care paths across sector boundaries – multidisciplinary

- Prevention, early intervention
- Using technology – remote services
- Number of services provided in the home is increased
- Ward beds are used flexibly throughout the region

# EKSOTE'S CONTACT CENTER



# ER IN YOUR LIVINGROOM

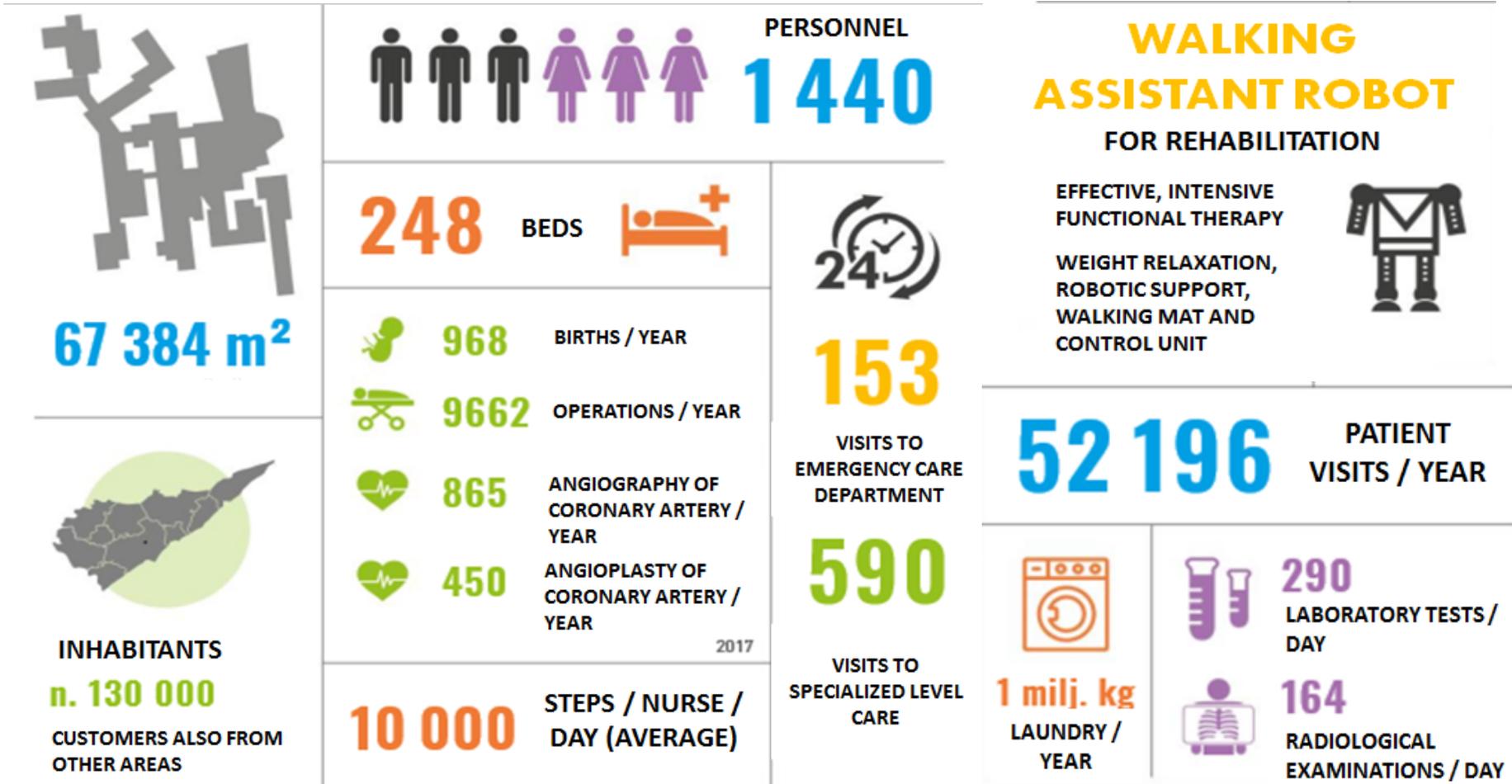


Eksote provides ambulance services throughout the region. 43% of all the interventions in paramedical care are evaluated/assessed and treated at the scene, so that there is no need for transport to hospital.

- ER concept takes the emergency care know-how and tools to where they are needed
- Paramedical evaluation and care unit to reinforce the prehospital services.
- Estimation, examination, medication and care.
- Paramedics use point of care testing, for example: CRP, hemoglobin, cardiac enzymes, blood gas analyze, electrolytes, carbon monoxide and ultrasound.
- Possibility to reserve appointments.
- Additionally trained personnel.
- Own physician for consultation and developing service model.
- ER, ambulance service and intensive home nursing are one functional unit.



# Acute Hospital



# The new K wing of the central hospital



- **A stand-by urgent care clinic**
- **Wards**
- **Analysis laboratory**
- **Logistics, warehouses**
- **Will be taken into use in May-June 2018**
- **The size of the new building is ca. 19,900 gross m<sup>2</sup>**
- **Cost is about €55 M (incl. planning, foundation, construction, and equipping)**
- **Latest technology (e.g. RFID network) and building technology (reservation for using heat extracted from a lake)**
- **Art as a promoter of health partially integrated with the building (art on the ceiling, art wallpaper, art poles, tile patterns)**

# The new K wing of the central hospital



- The wards are mainly one-bedroom, with an en suite bathroom for added privacy.
- Nurses will have smart phones, allowing patient information to be entered into the patient data system in the privacy of their room.
- Each patient has a responsible nurse.
- Patients discharged from the hospital are given instruction on self-care before they leave the hospital, and efficiency of post-treatment is improved by calling certain patient groups once at home.

# The new K wing: healing power of art



- **Customers can come to the stand-by urgent care clinic for any health reason** and they are either treated immediately or an appointment is scheduled at a service point.
- **Art has been integrated with the structures and interior design of the hospital.**
- **Different patient groups are taken into account**, including children, hospice care patients, and those suffering from acute pain.
- **Studies show that hospital art reduces stress and need for painkillers, lowers blood pressure, gives the patient hope, and increases trust**

## QUALITATIVE EFFECTIVENESS



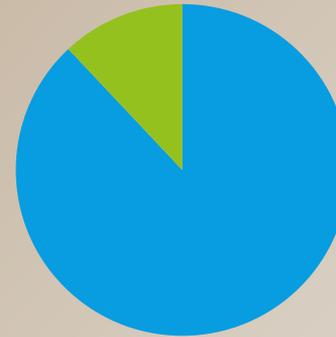
No negative feedback concerning the Mobile on-call unit activity launched in March 2016.

Plenty of positive feedback from customers/patients and their relatives/close-ones.

Operation has been developed listening to the personnel. Personnel is committed and work satisfaction is on a good level.

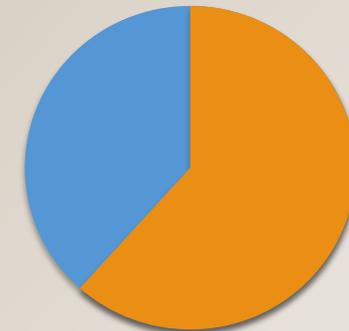
Stakeholder satisfaction has been on a good level since the beginning. The operation has been developed according to stakeholder feedback. Feedback has been positive.

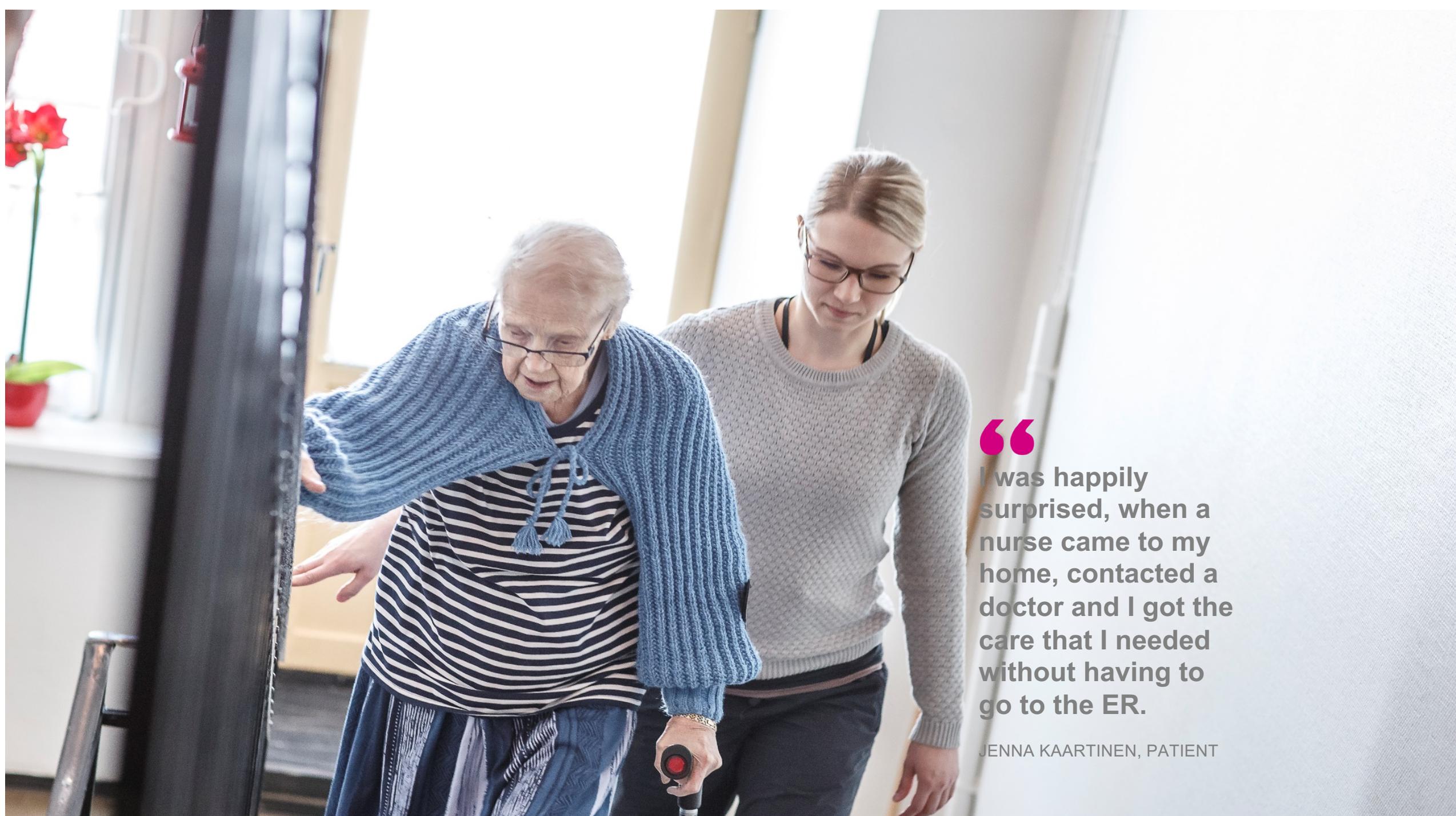
## FINANCIAL EFFECTIVENESS



- Attended to at scene/home
- Transportation to E&A

33%  
Reduced costs





“

I was happily surprised, when a nurse came to my home, contacted a doctor and I got the care that I needed without having to go to the ER.

JENNA KAARTINEN, PATIENT



## Next steps RENEWING THE STRATEGY

Four Action Programs

- Functional capacity of the elderly people
- Digitalization
- Wellbeing of the personnel
- Organization structure, strategic objectives and outcome and performance measuring and reporting



# Thank you! Tack så mycket, Frågor



## Four seasons in South Karelia

