# Integrated home care services

## Session 2: Local innovations at home and abroad

Katri Länsivuori • Account Manager • 2M-IT

# Nuffield Trust Health Policy Summit

## Integrated home care services

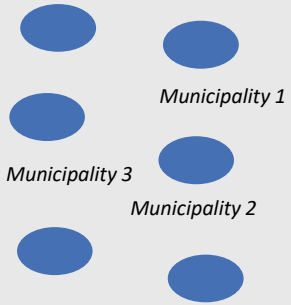
*Katri Länsivuori*

2M IT

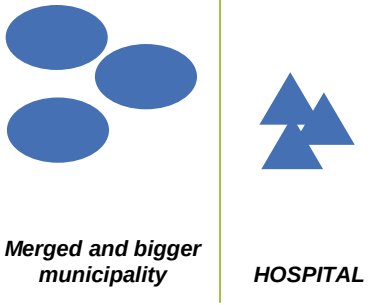
# PHASES IN SERVICE DEVELOPMENT

| Different units in hierarchy | Administrative integration | Functional integration | Service integration | Ecosystem of the customer |
|---|---|---|---|---|

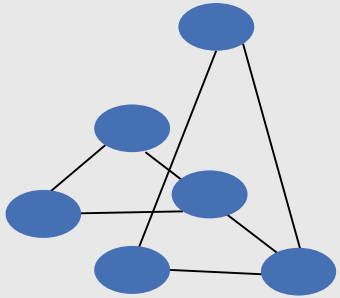
Strategical transfer




- Municipal-based structure
- Added value comes from hierarchy
- Main focus is on professionals and organization

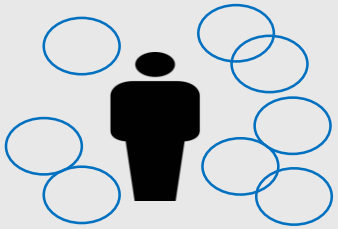



- Administratively integrated structure
- Added value from economies of scale
- Main focus is on professionals and organization



- Functionally integrated structure
- Utilization of digitalization is started
- Added value from data

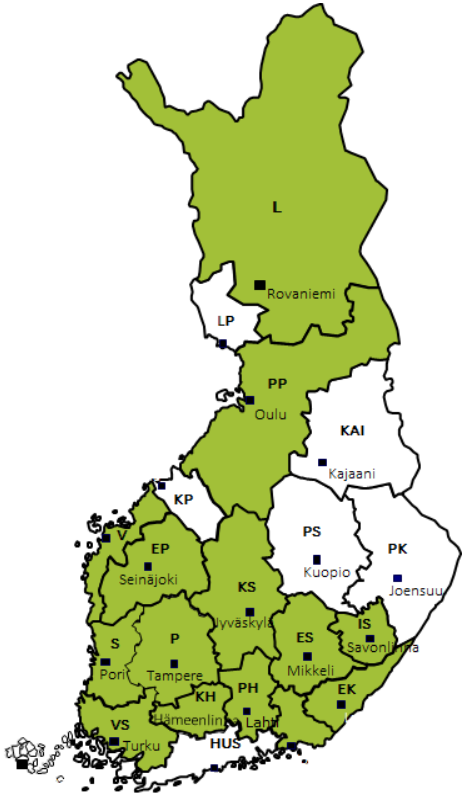
- Integrated ecosystem of actors
- Main focus on the citizen
- Added value comes from Big Data and common data analyzing.



- Emphasizes customer's own responsibility, activity and customer experience
- Network of networks where organizations' interfaces have to be open according to customer's needs
- Customer owns data

# THE BIGGEST PUBLICLY OWNED ICT-COMPANY IN FINLAND

- 18 counties in Finland.
- 5 collaboration catchment areas and 5 university hospitals.
- Counties are responsible for:
  - ✓ Organising services
  - ✓ Financial resources
  - ✓ Determining service level
- 2M-IT provides services for 14 counties that are also owners.




ICT support, mobilizing services, new functional models.

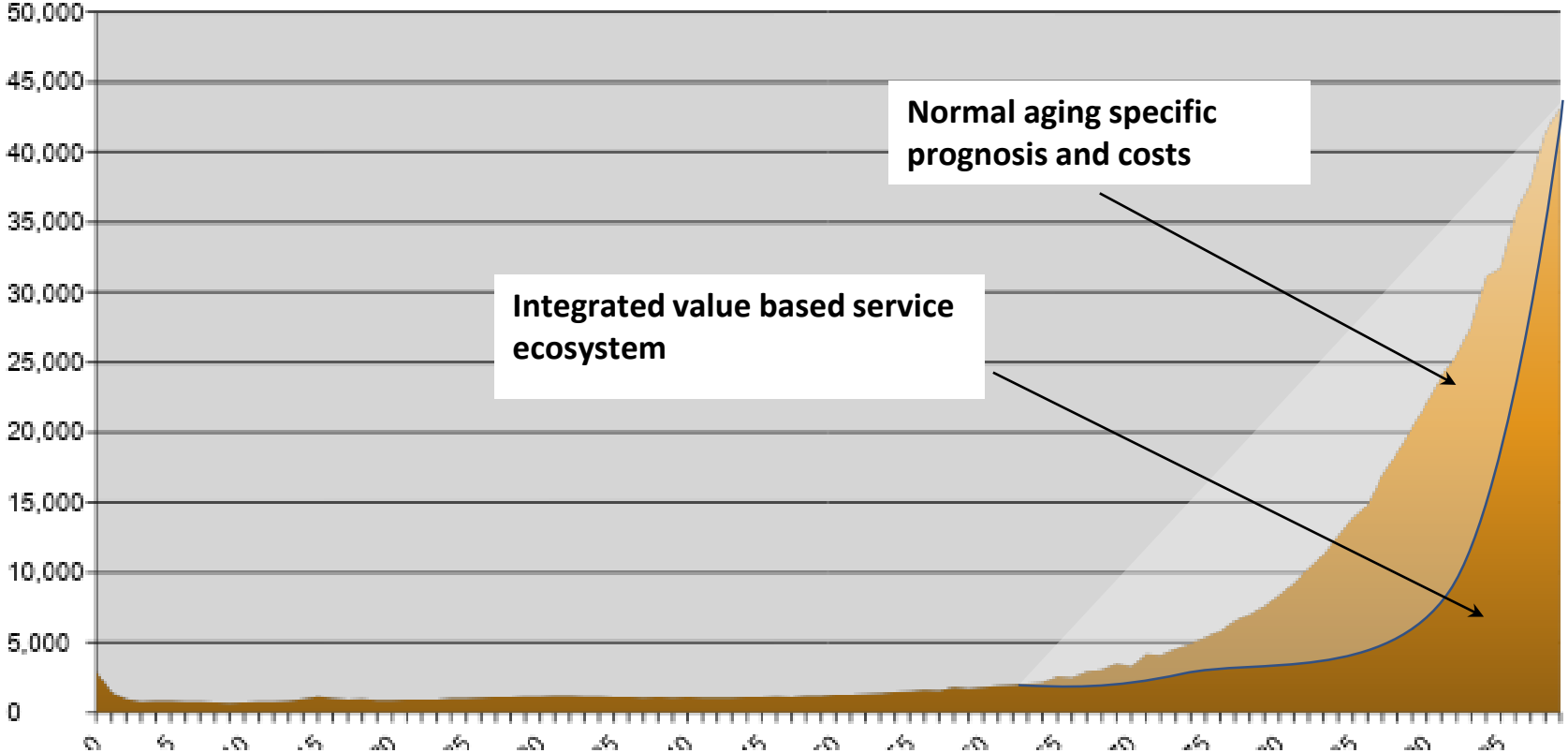
Reformation of service structures, integrations, co-ordinating customerships and services.

Digitalizing services, robotics.

Utilizing composed information, AI, preventive nursing.

Ecosystem-thinking, agile developing and fast utilizing of innovations and solutions.

# COSTS BY AGE


50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Normal aging specific prognosis and costs
Integrated value based service ecosystem

# ENTITY OF SERVICES PROVIDED AT HOME

**ACUTE HOSPITAL MODELS**

- Centralized and digitalized consultation models
- Co-ordination - out of hospital services
- Enhanced and centralized homing

**MOBILE EMERGENCY MODELS**

- Mobile urgent assessment and treatment unit
- Home hospital services
- Multiprofessional co-operation

**SUPPORTING LIVING AT HOME**

- Home rehabilitation
- Early interventions
- Clinic van, mobile lab van
- Palliative and end of life care

Temporary services provided at home

Enhanced home care and palliative care

Continuous home care services

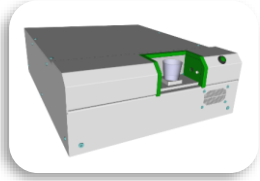
Foreseeing and preventive home care

**JOINT COORDINATION**

# SMART HOME CARE

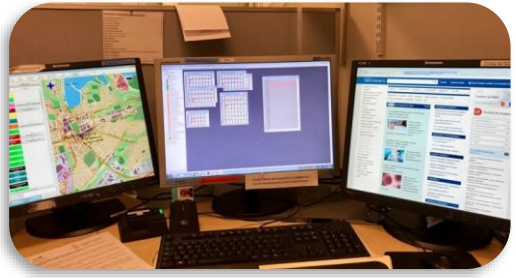
68 400 remote visits accomplished in 2018 meaning 5.7 % contacts made by home care.

Savings 500€ /month/ customer



Medication robot: Potential users aprox. 36% of home care customers.

Up to 1000 € /month savings per customer.



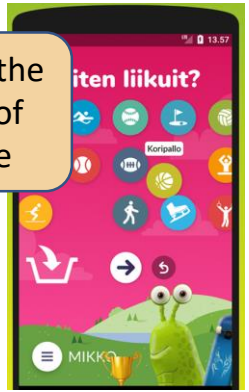
Co-ordinator has up to date information and situational awareness of service resources and service needs.

Previously the customers encountered paramedical services, emergency duty and finally were admitted to hospitals. Now approx. 70% of these interventions are treated more customer oriented and more cost efficient.

**Mobsi**

Life style outpatient clinic for group of children and juveniles.
Back-end system for teachers
(physical training and health infomation)

Observe the effects of lifestyle



Log activities *for the* day

Get feedback

Figure reflects the choices made

You get prizes

# KAT – SAFETY AT HOME -CONCEPT

- The concept is originally based on the cooperation of the South Karelia Social and Health Care District (Eksote) and Rescue Department of South Karelia
- The Safety at Home is a concept for improved situational awareness, risk profiling, the risk management and precautionary improvement of housing safety
- The current form of the concept includes a variety of professionals, citizens and societies forming a network
- www.kotonaasumisenturvallisuus.fi

eksote

RURAL 2020

PSR
FIRE PROTECTION FUND

Centre for Economic Development, Transport and the Environment

# NEW KIND OF HEALTH-CARE CENTER WITH SOCIAL ELEMENTS

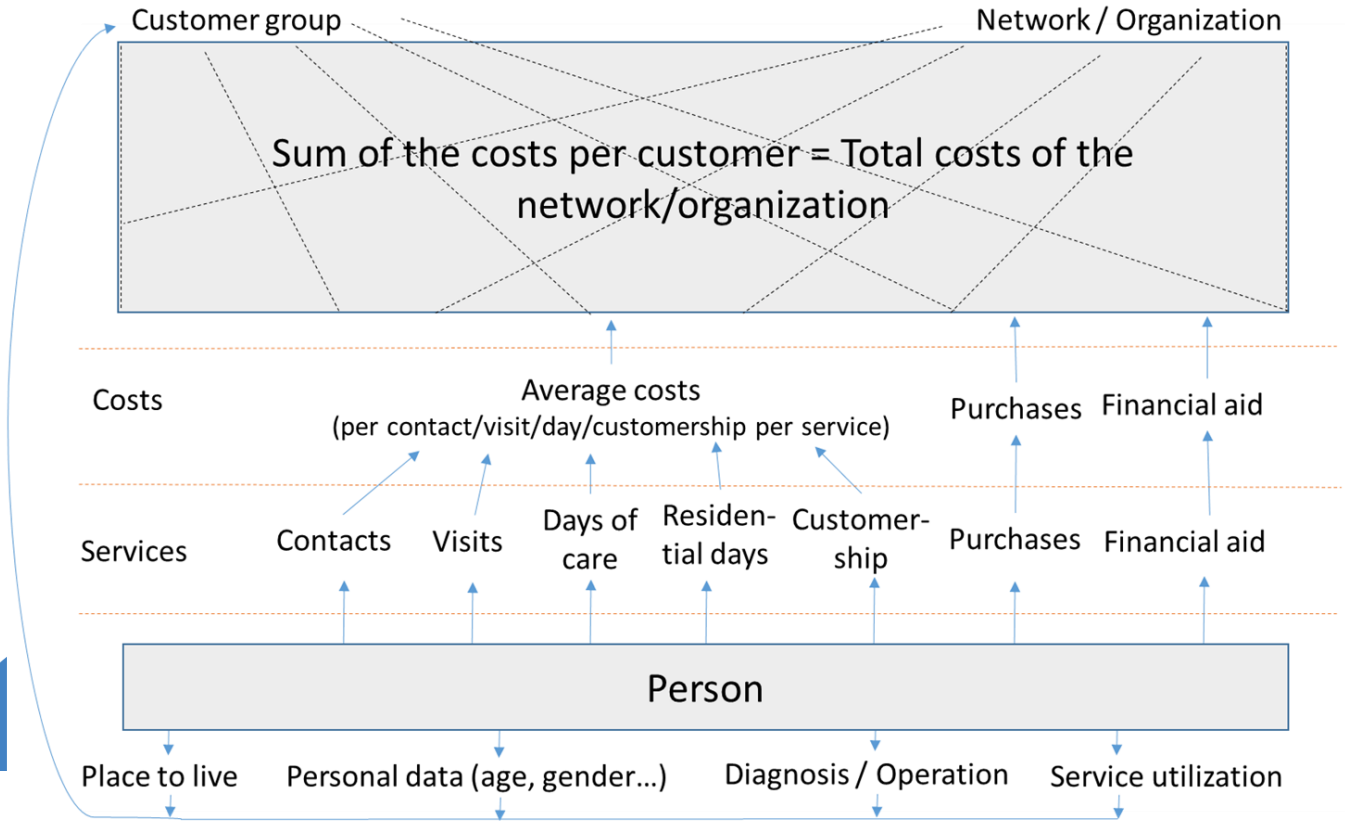
## Old model

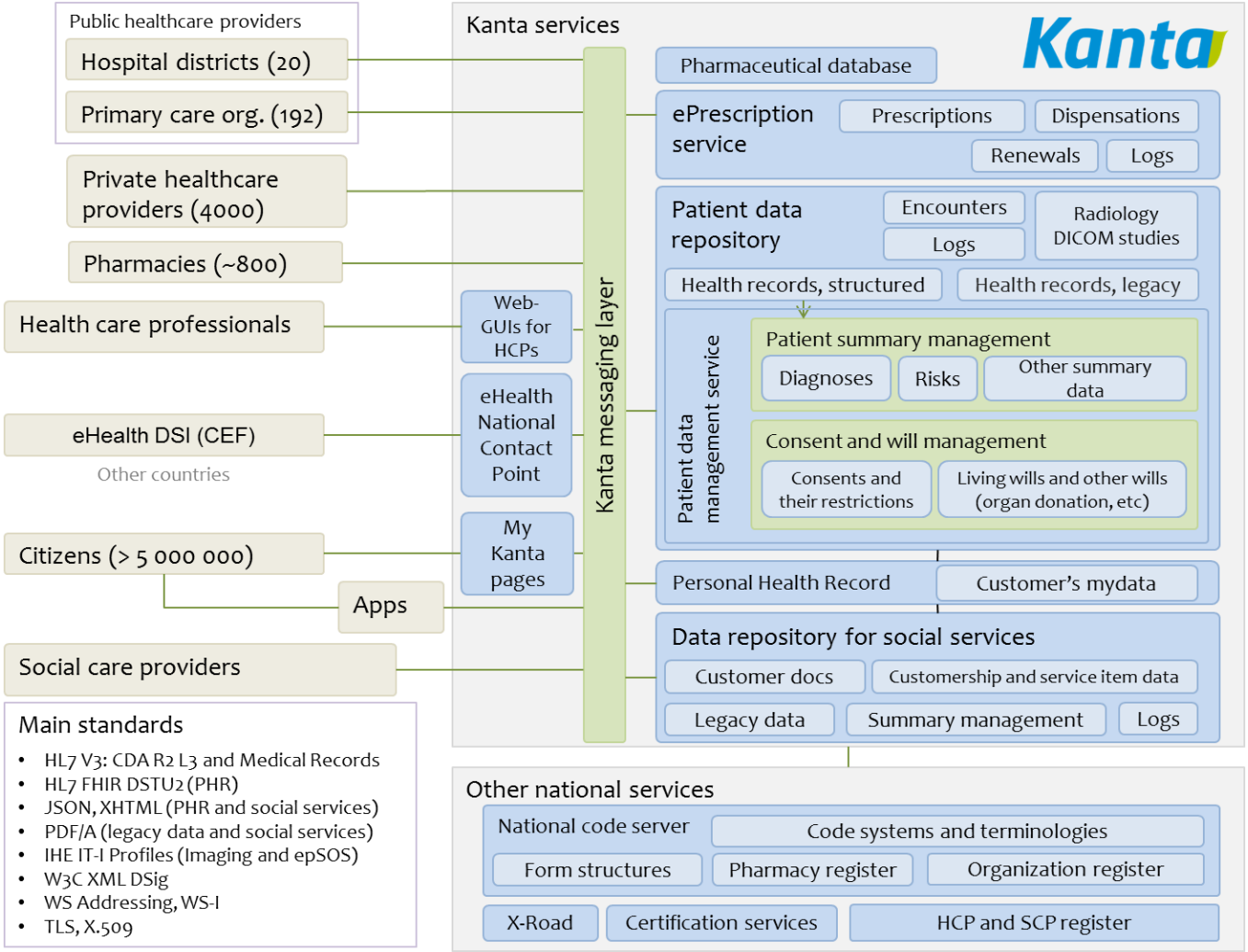
- Several nurses
- Several doctors
- Concentrating mainly on illness and diagnosis
- Social work and health-care working mainly separate
- Wards

## New model (“Welfare center”)

- Multidisciplinary teamwork
- Remote doctors by appointment
- Specialized nurses (recipe nurses etc.)
- Social workers
- eServices and Mobile Clinic
- 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
- Sport instructor / physical education

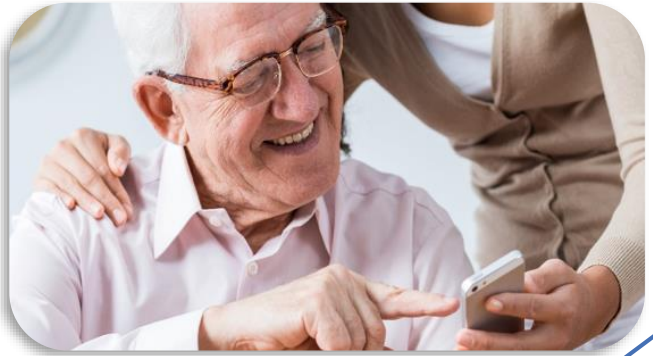
# INTEGRATED MODEL OF EKSOTE



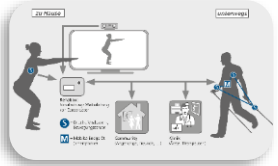



## Main standards

- HL7 V3: CDA R2 L3 and Medical Records
- HL7 FHIR DSTU2 (PHR)
- JSON, XHTML (PHR and social services)
- PDF/A (legacy data and social services)
- IHE IT-I Profiles (Imaging and epSOS)
- W3C XML DSig
- WS Addressing, WS-I
- TLS, X.509



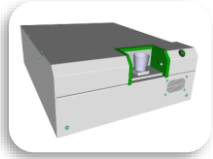
CUSTOMER



Home rehabilitation

Meal dispenser

Localization and safety.



Medication robot

Monitoring vitals

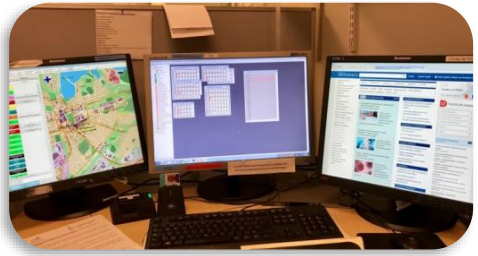
Insulin pump

SERVICE PLATFORM

AI

Nurses can plan their day autonomously.

The awareness and participation of relatives are improved.



Co-ordinator monitores the situation and makes the needed alerts.

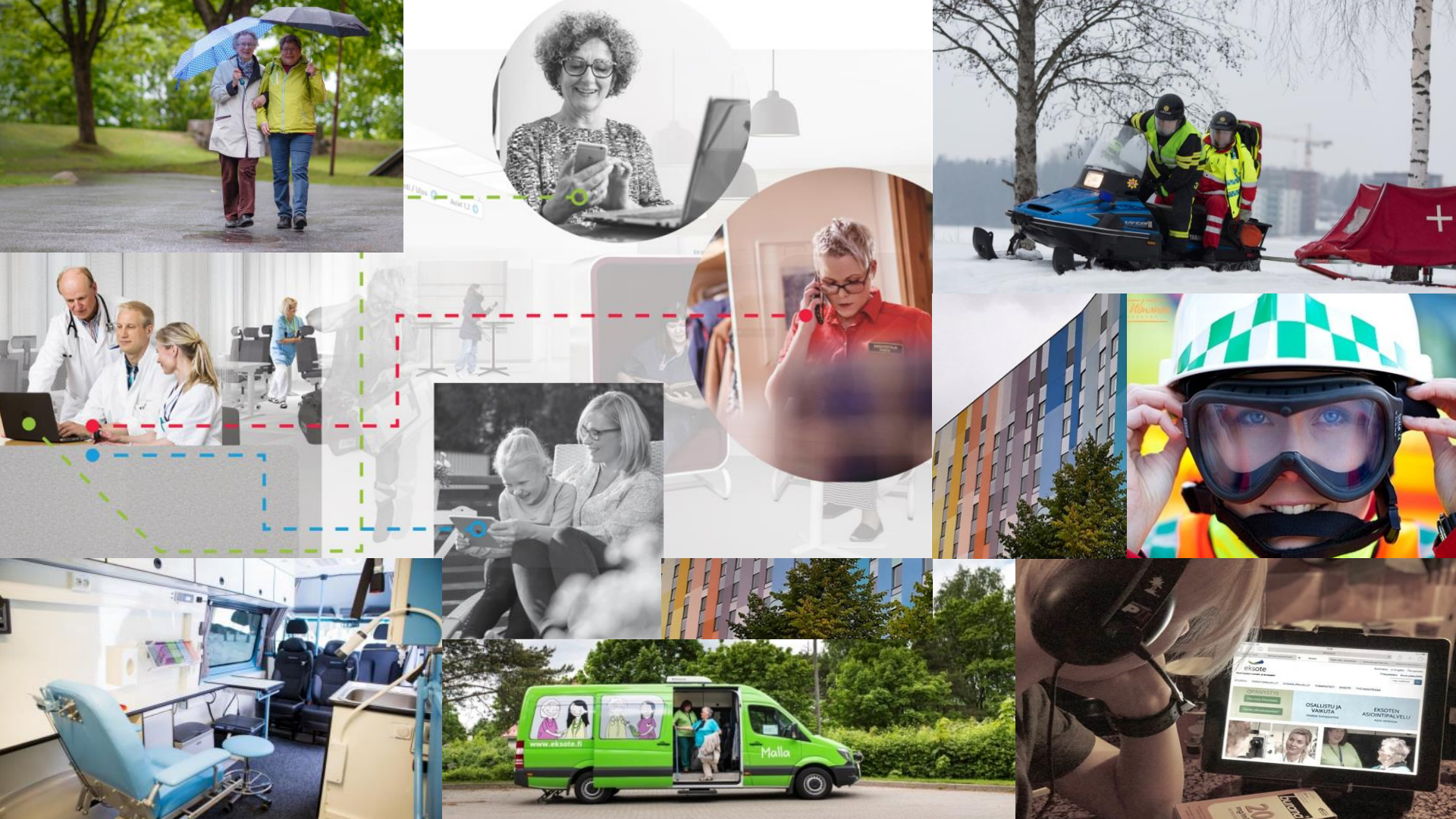
Other parties. Third sector, fire and rescue, home help etc.

# PARTICIPATE AND INFLUENCE

HOW CAN I GET INFORMATION?
Website, public seminars, magazines, social media

HOW CAN I PARTICIPATE?
Giving feedback and ideas for development, questionnares and research, social media

HOW CAN I INFLUENCE?
Kids parliament, youth parliament, parliament for the disabled and elderly parliament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“Coming together is a beginning;
keeping together is progress;
working together is success.”
(Henry Ford)
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