



**Northern Periphery and  
Arctic Programme**  
2014-2020



**EUROPEAN UNION**

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# Electronic medicine dispensing



**RemoAge**

REMOTE SUPPORT OF AGED PEOPLE

# Electronic medicine dispensing

## T1.5 Navigational and safety support

### Summary

This service for automated medicine dispensing is available for people in home health care who need some assistance with taking their regular medication. The goal is to help patients become more independent with their drug intake while patient safety is maintained.

People who participated in the pilot had previously had support by home service staff. Home care staff visited them 3 to 4 times a day and handed out medicine. Instead of these visits the participants got a device that reminded the person to take their medicine at the predetermined times. The device sends a message to the head nurse if the person did not take their medicine. The goal of this service is to support independent living, reduce the number of visits to the person and releasing staff resources to support and assist other care needs of the individual.

### Typology of Impacts

#### *Tangible impacts*

- Improved access to services**
- Cost savings**
- Time savings**
- Reduced energy consumption
- Reduced environmental impact**
- Business development
- Job creation
- Improved competitiveness
- Other tangible impacts (specify)

#### *Intangible impacts*

- Building institutional capacity
- Raising awareness
- Changing attitudes and behavior
- Influencing policies
- Improving social cohesion
- Leveraging synergies
- Other intangible impacts

## Contact

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## Pilot leader

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## Electronic medicine dispensing

### T1.5 Navigational and safety support

Automated medicine dispenser to increase the autonomy of the patient and free up staff resources.

### Service end users

The target group is users who receive home health support and need some help from home care with taking their medications.

### Challenge

Frail older people and people who need support to take their medications. When medicines should be taken at specific time's individuals can need support by home service that requires visits 3-4 times/day for giving medicine. These visits require a lot of human resources and the individual therefore also get to meet many different people from home service. It also requires the individual to stay at home and wait for the staff to come and give the medicine and thereby limits their freedom of movement.

### Service provider roles and Collaboration

The social services of the municipality have the main responsibility to support the elderly in their homes. Home health care organization has responsibility for all medical efforts and work together with home care who are the ones who usually visit users and support their medicine intake.

### Service availability

- Luleå municipality i Norrbotten, Sverige

### Service Delivery, process and organization

The service is an electronic device for dispensing unit-dose packed drugs. The service helps the individual to take prescribed medication at the right time and in the right dosage. Thanks to this, the individual's health will improve and increase the feeling of independence. The individual belongs to the municipality's home health care and has been granted the effort with the help of medication. This means that home care comes and gives the medicine set times.

### Technology and tools

The device is placed at home by the individual and the responsible personnel have in their computer downloaded the program for the service and receive a notification if the individual did not take their medicine on time that it would take place.

### Service support

Staff needs to learn how the software and device works and how to introduce technology and equipment of the users. Service provider introduces and train one or more super users

in the equipment. The Super User and IT support introduce technology for staff who will work with this device. The staff then trains with the technology themselves before it is placed at users home. The service provider provides support by the internet for problems with the equipment.

### **Implementation process**

The implementation process started with a workshop. Participants in workshop were managers from the participant's municipalities, nurses from home health care, staff from home care and project leaders. The purposes of this workshop were to get a plan for implementation and when the test going to start. After that meeting project leaders together with care staff developed routines for the new working method. They also planned for which activities they have to do before the start. Then they tested the new working methods, local evaluation has been implemented by focus group with staff and questionnaires with patients, relatives and staff. These documents have been presented to managers as a basis for the broad implementation of the service.

### **Skills, knowledge and competences**

Provider of the equipment has introduced technology and how the service works for some nurses and project leader. Project leader has have taught the rest of the staff group and shown users how the equipment works.

### **Risks and Solutions found**

Risks;

- Poor internet access
- Fear to use new technology
- Find users who want and can participate
- The staff do not see the benefits of the service

Solutions;

- The staff identify people to the pilot and project leader show them how the service works
- Nurses and home care staff are trained in the service
- IT technicians check internet access and download software in affected personal computers / tablets

### **Communication and dissemination**

Home health care and home care inform users about the opportunity to be responsible for their medication through the use of the equipment. Project leader has disseminated information to municipalities in our county, at a local dissemination conference in Norrbotten to managers and staff in municipalities and Region Norrbotten and for staff in Sweden on the national conference for welfare technology (MVT mässan) in Stockholm.)

### **Service longevity**

Describe how will your output continue exist after the end of the project, be specific about the organizations involved and measures taken to ensure outputs' viability.

### **Output metrics**

- 6 users have used the service during the pilot
- about 10 professionals were introduced and trained in the service

*Tangible impacts*

**Improved access to services**

The same number of staff can provide service to more users.

**Cost savings**

Travel costs will be saved for staff and fewer cars need leased.

**Time savings**

Decreased travel frees up staff resources which means that staff can give service for multiple users.

**Reduced environmental impact**

Reduced car travel gives reduced environmental impact.

## Part 3: Visualization of Output



RemoAge is an EU-project that will find new ways of working with support to allow vulnerable older people to live longer in their homes in sparsely populated areas of northern Europe.

To support older people, family carers and healthcare staff, digital solutions and service packages will be tested and evaluated within the project.



## Electronic medication delivery

### What is it about?

Electronic medication delivery is safe drughandling. This is a services to help people with brain injury with their medication.

### Who is it for?

The target group was 6 patient/user in one municipality homecare.

### How does it work

The medical device ensures that the medicines are given at the right time and advised when the medicines should be taken. It also help the patient/user to take care of their medication themselves.

### Results

- The patient/user feel a increased independence
- It was a high level of patient/user security
- It could take away home visit from 2 patient/user
- The staff feel that the services were easy to use.

*The patient was too late in their brain injury so this services don't work, because they also need help to take the medication.*





**For More Information  
Please Visit [RemoAge.eu](http://RemoAge.eu)**



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