

Distance monitoring – Finland

Digital security system

—safety services 24 hours a day



Summary

In Finland, the national goal is to allow elderly people to live in their own homes for as long as possible. One of the main aspects of living at home is that a person feels safe there. Technology and a supportive service model can help support a sense of safety.

Many municipalities offer safety services to support living at home. Technology plays a key role in this model. It is important to have different kinds of solutions for supporting safety. Some solutions allow a person to send an alarm themselves when required, although there are also many intelligent solutions that can send an alarm automatically when required.

Also, many municipalities have created a model in which an alarm is sent directly to care workers at the municipality's own 24/7 service centre. The service centre receives calls and other input from users. Care workers are also available 24/7 to assist users.



Main effects of the solution

This solution impacts quality of life. The main thing is to create a sense of safety in elderly people. Elderly people know that in the event of an emergency, or if they are worried, they can easily call for assistance. There are also solutions for elderly people that call for assistance automatically when necessary. Such solutions also create a sense of safety with relatives and care takers.

These solutions support a sense of safety but are, of course, also real aids if there is an actual need for help.

Users

Users comprise elderly or handicapped people who are evaluated and selected based on criteria.

Elaboration

Needs and challenges

This user group needs this kind of service. The national emergency number is 112 but is for acute cases. Other issues, such as falls, are handled by the municipality's safety services.

Evaluation of user's needs has been given high priority. It is important to understand the users' needs in order to choose the best technological device.

When you work at a 24/7 call centre, it is good to know users and be aware of their needs. When a 24/7 call centre is run by a municipality, the personnel get to know their own users.

Solution and function

Here is a list of technological solutions that benefit different user's needs:

- Safety phone unit (GSM/internet) with a wristband (use case: when a person falls over, they call and the safety services will come and offer them assistance).
- Intelligent door alarm for elderly people suffering from memory loss (use case: it sends an alert when a door has been opened and a person leaves their place of residence, though not automatically when the door is opened).
- Different kinds of sensors to understand daily rhythms (use case: if the user has visited the bathroom and remained there for over one hour – this is not normal and will trigger an alarm).
- GPS tracker with safety zone (use case: the user moves beyond a safety zone defined on a map and an alarm is triggered).
- Motion detection based on an infrared camera.
- Temperature of room, CO2 level.

Users can adopt the solution in order to support living at home. All alarms must be incorporated in some kind of system or, if such integration is not possible, in one dashboard. Care personnel are available 24/7 to answer calls and offer assistance when necessary. When a safety service is a municipality's own service, trying new innovative solutions in order to find the best practices is easy.

Implementation

In many municipalities, safety services have been outsourced. However, if a municipality wants to use this model in which all services are provided by the municipality, it will require knowledge of procurement in order to understand all the technologies needed, as well as how alarms can be incorporated into one system.

Economy

Safety services help elderly people remain at home longer, offering potential costs savings compared to institutional care.

Costs to consider:

- Technological devices cost from a few euros to ten euros/user (including SIM card).
- An alarm centre system can cost thousands of euros.
- Own 24/7 call centre (personnel to respond to alarms and personnel to assist people in their homes) must have resources.

More about effects

People can stay longer in their own homes. They feel safe, which also impacts relatives and personnel.

Learnings and tips

- Technological solutions must be easy to use and, at their best, require no action on the part of the user.
- GSM is the most secure means of transferring data. It is also good to have a multi SIM card or roaming SIM card because this is a critical service, which must function on a 24/7 basis.
- Alarm centre systems are technically complex systems and it is important to compare them and understand them.
- Contracts entered into with technology providers should not be too long: new technologies and solutions enter the market all the time.

Further information

- [Report about Home care security equipment and other technology solutions »](#) (in finnish)
- [About the solution at ouka.fi »](#) (in finnish)

Context

Safety services are probably the oldest form of technical service to support living at home. However, new solutions are entering the market that can easily be incorporated into systems. This model can be used across borders.

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Name of the service

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