

HOME-based ICT solutions FOR the independent living of people with DEMentia and their caregivers

<https://neurodegenerationresearch.eu/survey/home-based-ict-solutions-for-the-independent-living-of-people-with-dementia-and-their-caregivers/>

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Country

Norway

Title of project or programme

HOME-based ICT solutions FOR the independent living of people with DEMentia and their caregivers

Source of funding information

RCN

Total sum awarded (Euro)

€ 294,173

Start date of award

01/09/2015

Total duration of award in years

2.5

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Research Abstract

The project will develop, test and bring to the market an innovative ICT solution, the so-called Home4Dem solution, which will include: – all the sensors already used by the Up-Tech solution;

– all the functions already available in the DomoCare solution; – additional sensors, such as the emergency button, new automatic lights, humidity and temperature alerts, anti-theft alarms, sensing vibration and other functionalities like rinsing water developed at the iHomeLab. Their purpose is to help in detecting and to differentiate activities of daily living. The platform is targeted to be open and adaptable. The platform is developed in a way that those sensors can be exchanged, removed or added and thus it can be adapted for most use cases. The sensors are optimized for low power usage. It is targeted to run for about two years without the need to exchange the battery. Different designs are evaluated to adapt the needs in carrying or fixing the node. Also the usability of the sensor node is a central goal. It has to be easily mounted and used without or only few and simple actions required by the user. A new kinect-based depth-analysis function, which can provide more accurate information regarding activities such as:- food intake by the person in the house; – adherence to drug prescriptions; – current ability of the person to carry out the Activities of Daily Living (ADL) and the Instrumental ADL (see the promising work by Mulin and colleagues); – falls or other home accidents. A prevention-oriented smart behavior analysis algorithm which will interact with the users of the ICT solution, providing real-time feedback regarding ongoing risk and/or other relevant events in the home (medicine reminder, lifestyle recommendation – e.g. reminder in case of low physical activity etc.).

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

Norway

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

N/A

Database Tags:

N/A