

DREAMING

Helping elderly to live independently and for longer at home, with safety and security



The EU-funded project DREAMING (EIDerly-friEndly Alarm handling and MonitorING) provides solutions – based on video, sensors, mobile communications and personal contact - to help elderly and patients needing continuous care to live safely and independently in their homes instead of being in a care institution or hospital, and to facilitate their social life and contacts with family, friends and caregivers.

Challenges and benefits

Europe's ageing population will further increase over the next decades, and healthcare costs are expected to reach 16% of EU countries' GDP by 2020. Remaining at home instead of being hospitalised or in a care home is often not an option for the elderly due to the need for continuous care and the risks they are exposed to when at home (such as falling, risks associated with forgetfulness etc.).

DREAMING addresses these challenges by helping elderly to stay in their home environment, extending their independent living, and improving their quality of life - as well as the life of their family, friends and care-givers - while reducing the costs of assisting them.



According to a study carried out before the project's kick-off, it is estimated that, if the technology were adopted by 30% of patients currently in care homes, cost savings in the six EU countries which are testing the project (Denmark, Estonia, Germany, Italy, Spain and Sweden) would be up to €6bn per year (this quote excludes potential savings on patients currently in hospitals); if extended to all EU countries, the annual savings would be around €15bn per year. In the long-term, savings would allow a wider coverage to the benefit of the elderly and of anyone requiring continuous support, thanks to the broad range of applications offered by DREAMING together with the traditional services provided by the DREAMING partners - such as delivery of hot meals, shopping, special transportation for people with limited mobility and house cleaning.

How does it work?

DREAMING's key added value is to integrate familiar devices - such as blood pressure cuffs, mobile phones and TV - in a unique platform, tailored to the user's needs and clinical profile. The DREAMING platform is monitored and maintained centrally, thus reducing maintenance costs. The system is based on a "box" installed at the user's home and connected to the network. It is linked to sensors which detect and collect information on the environment where the person lives and on his clinical parameters (e.g. his blood pressure). The information is sent to a Contact Centre which

decides upon the action to take and dispatches the appropriate resources: fire brigade, ambulance, GP on duty, nurse, social worker, etc. The user is also equipped with an easy-to-use **mobile phone** which incorporates services such as reminders to take medicines at a certain time of the day and a "panic" button plus a GPS: in case of need, the user can simply push the button and an alarm with his geographical coordinates is sent to his selected contacts via a "cascade" system – for example, first family, secondly the neighbours and then the Contact Centre, which intervenes in case there is no reaction from the other contacts. Finally, the **videoconferencing system** – which is connected to a normal TV and can be activated through a simple remote control – enables the elderly to get in touch visually with the Contact Centre and with his "community" (family, friends etc.), thus facilitating socialization.

Status and next steps

The project, to be completed by 2012, is currently in the testing phase, with **trials being carried out in six pilot sites - Denmark, Estonia, Germany, Italy, Spain and Sweden** - to assess its impact on economic and clinical indicators, its financial sustainability and users' satisfaction.

The test involves 350 elderly, who are randomly allocated either to a Study Group (receiving the DREAMING services) or to a Control Group (the others). This methodology allows getting results which are not "contaminated" by factors unrelated to DREAMING services, such as the introduction of a new medicine during the trial period.

Being based on state-of-the-art technologies which are available off the shelf, DREAMING allows a fast set-up of the pilot sites and enables trials long enough (24 months) to gather sufficient experimental data to strengthen the business case and plan the subsequent deployment phase.

DREAMING @ a glance

Funded by the EU **ICT Policy Support Programme (CIP - ICT PSP)**

Total cost: €5.54m

EU contribution: €2.77m

Duration: from 01/05/2008 to 01/05/2011

Consortium:

- Tesan-Televita S.r.l. - Italy (project coordinator)
- AGE - The European Older People's Platform - Belgium
- Azienda per i Servizi Sanitari n°1 - Italy
- County Council of Uppsala - Sweden
- East-Tallinn Central Hospital - Estonia
- Government of Aragon - Servicio Aragonés de Salud - Spain
- Health Information Management S.A. - Belgium
- Heby Kommun - Sweden
- Langeland Kommune - Denmark
- Pfliegewerk Managementgesellschaft - Germany
- Region Syddanmark - Denmark
- TB·Solutions Advanced Technologies S.L. - Spain
- Telemedicina Rizzoli S.p.A. - Italy

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To know more:

See the video: http://www.dreaming-project.org/DPMWvideos_RegionSyddanmark.html

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