

The Development of ICT based services for ageing people needs co-operation

Tuula Petäkoski-Hult, Senior Research Scientist, Juho Merilahti, Research Scientist, Miikka Ermes, Research Scientist, Mark van Gils, Senior Research Scientist

Abstract—Already in the beginning of the last decade it was noticed that our society is ageing and new kind of partnership will be needed to develop both services and technology. Therefore new concepts must be developed and they must be taken into a use to ensure that people needing services can also reach them. Elderly people are eager to use new services and new technology if it will support their daily living at their own home. In the coming years it is even more important than earlier that private and public sector are in close cooperation and are together responsible for the development work concerning also health care and social welfare applications. Because of the complexity of the topic there is a need to use different kind of methods and so to achieve multidisciplinary information to be used by decision makers.

INTRODUCTION

Technical Research Centre of Finland (VTT) and Technical University of Tampere, Finland (TUT) started a three years project, 'Smart Home in a Suitcase, new technologies supporting telemedicine, home care, rehabilitation and safety at home' in December 2005. This project, called UUTE, will end by the end of 2008.

Partners representing public health care and special health care organisations in the project are: Pirkanmaa Hospital District, Tampere University Hospital and Lempäälä Health Care Centre. Private companies represent information technology, building development for seniors, technology assisting independent living and home care services. A company providing first aid (ambulance) and safety services and a company interested in balance and walking problems joined the project during spring 2007.

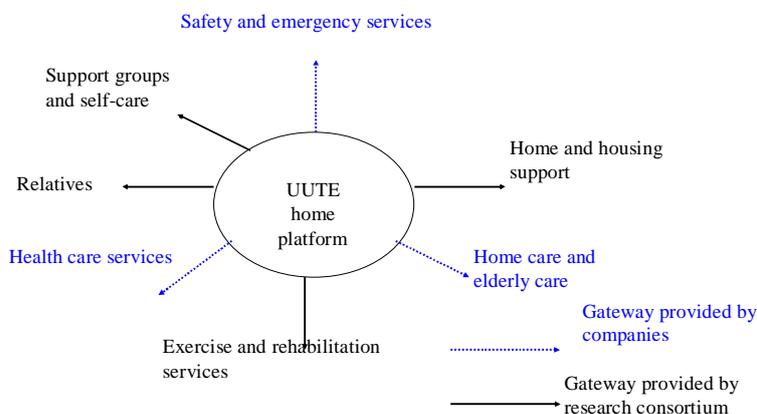


Fig.1. Integration into services provided by the participating organisations

AIM OF THE PROJECT

The aim of the project is to develop a general technical platform for personally adaptable solutions that will support a person in different living conditions at home. It should support a person to follow-up his or her physical condition during home exercises or at a training centre. One basic objective is that health care personnel can support an outdoor patient at his homecare after hospitalization phase.

Because of the challenge to provide good health care services including rehabilitation and safety services for a growing number of elderly people, more co-operation is needed between public, private and so called third sector actors.

In Finland, municipalities are responsible for arranging the health care and welfare services, but they can organise the services together with different kind of partners. As one example of the possible network in the future can be seen the co-operation between actors in our project as illustrated in the Fig. 1 (integration into services provided by the participating organisations).

METHODS

The project has used different kind of research methods from the viewpoints of technical, medical and human sciences. Methods used were: a) *Management group meetings*, b) *interviews*, c) *scenarios*, d) *questionnaires*, e) *Workshops and seminars* and f) *Testing and piloting the prototype with out patient and elderly people*.

RESULTS AND DISCUSSION

So far the results show that it is beneficial if ICT based applications and services meant for elderly people are developed in co-operation with different kind of actors. The need of services varies a lot among elderly people. Because of the variation it was important to take into account physical, mental and social factors when developing new technical solutions and services based on technical development.

It was found out that it is important to discuss with the representatives of health care personnel if you like to carry out a proper research process among patients and personnel. The personnel should be informed on the aim the project because nowadays the staff is working under quite a pressure and the time is limited for extra work. Motivation is a big issue that must be considered.

It is also very important to take into account the opinions and expectations of patients and elderly people if the aim is that they are willing to use new services based on technology.

Both professionals and elderly people are eager to participate in different kind of development work if they are motivated and interested enough and if they see that in the future there might be new ways to do work or new ways to get and use services at home.

VTT TECHNICAL RESEARCH CENTRE OF FINLAND

Visiting address: Tekniikankatu 1, TAMPERE

P.O. Box 1300

FIN-02044 VTT, Finland

Tel. +358 20 722 3329

Fax +358 20 722 3499

tuula.petakoski-hult@vtt.fi

www.vtt.fi

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