Lessons learned from three AAL-projects in developing meaningful supportive technologies

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Large national and international programs on developing supportive technologies reflect the growing interest in the potential of technologies in improving dementia care. For instance, the European Active and Assisted Living (AAL) programme had a total budget of € 700 million for research, development and implementation of supportive technologies between 2014 and 2020 ("AAL Programme," n.d.). Examples of supportive technologies that are developed in these programmes are sensor systems, smartphones with low complexity, reminiscence applications and electronic calendars. These (or combinations of) technologies can promote safety, foster communication, provide multi-sensory stimulation or act as memory aids (Evans, Brown, Coughlan, Lawson, & Craven, 2015). Earlier work emphasizes the importance of involving people with dementia in the development of meaningful supportive or assistive technologies (Holthe, Halvorsrud, Karterud, Hoel & Lund, 2018; Meiland et al., 2017; Span, Hettinga, Vernooij-Dassen, Eefsting, & Smits, 2013; Topo, 2009). However, actual co-designing supportive technologies together with people with dementia still remains challenging (Suijkerbuijk et al., 2019).

We present a synthesis of valuable lessons learned from three AAL-funded projects as a contribution to the collective understanding of co-designing supportive technologies with people with dementia. These projects (eWare, FreeWalker and MagicTable) have different aims and different consortia. The goal of the 'eWare' project is to introduce a novel eco-system of a lifestyle monitoring system and social support robotics to enhance the wellbeing of people with dementia and their informal carers. Within the project 'FreeWalker', a European consortium of eight partners is working together to develop a dynamic GPS-based safety zone for people with dementia. And in the 'MagicTable' project, we explore opportunities of technology to contribute to meaningful and fun activities in the home situation. We discuss the implications of the lessons from these different projects for improving the involvement of people with dementia in the development of supportive technologies.

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