

WHAT CAN WE LEARN FROM AN ICT PROJECT DEDICATED TO PEOPLE LIVING WITH DEMENTIA

O. Cramariuc¹, I. Mocanu², K. Broczek³, D. Krivec⁴, J. Kolakowski⁵, N. Samar Brencic⁶, Z. Nagymáté⁷, I. Nagy⁷, A. Consoli⁸

¹*IT Center for Science and Technology (ROMANIA)*

²*University Politehnica of Bucharest (ROMANIA)*

³*Department of Geriatrics, Medical University of Warsaw (POLAND)*

⁴*Spominčica - Alzheimer Slovenija (SLOVENIA)*

⁵*Institute of Radioelectronics and Multimedia Technology, Warsaw University of Technology (POLAND)*

⁶*IZRIIS Institute, Ljubljana-1000 (SLOVENIA)*

⁷*United Social, Health and Child Welfare Institution of Miskolc (HUNGARY)*

⁸*ECLEXYS SAGL (SWITZERLAND)*

Europe's demographic changes are bringing about not only an increasing number of dependent elderly but also a rising number of chronic diseases which further reduce independency. Among these, dementia is affecting worldwide an estimate of 50 million people with 11 million living in Europe. These numbers are expected to almost double by 2030 and are likely to rise to about 152 million by 2050. Dementia incidence increases with age and is one of the main key drivers of health care costs and the sustainability of health systems worldwide. In this context, and driven by initiatives worldwide which support information and communication technologies (ICT) in helping seniors to improve independence and retain dignity, we are presenting here the results obtained within a dementia dedicated ICT project.

IONIS, which stands for *Indoor and outdoor NITICSplus solution for dementia challenges*, is an Active and Assisted Living (AAL) funded project developing, within a user-centred approach, a complex ICT platform. The IONIS platform is designed for people living with dementia in its incipient stages and for their caregivers. While the technological challenges are foreseeable, the most valuable lesson learned within IONIS is about the needs, daily barriers and wishes of the intended users. A multinational survey followed by a well structured conjoint analysis approach have helped defining personas and ranking the platform's functionalities according to the end-users preferences.

Respondents from four countries (Hungary, Poland, Romania and Slovenia) have participated in the multinational survey. A total number of 121 elderly and 103 caregivers have answered dedicated questions designed by a group of specialists within the IONIS consortium. The elderly participants were selected based on their score in the Mini-Mental State Examination (MMSE) test, the eligibility criterion being the presence of mild cognitive impairment or mild dementia signs (MMSE score 19-27 points). The survey results have further guided the end-user involvement in a conjoint analysis approach to refine and rank the IONIS dementia specific functionalities. Not surprisingly, elderly and their informal caregivers expressed almost similar preferences, with only very small differences tipping the scale for the reminders functionality. This scored much higher (3rd) for the elderly than for the caregivers (5th), trumping both the disorientation detection and finding objects. Following technological development and pilot testing are currently shaping the IONIS platform.

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