

Innovative technology for cognitively impaired people

L. Spiru^{1,2}, E. Turcu¹, M. Marzan¹

¹*Research & Higher Education Department, Ana Aslan International Foundation, Romania*

²*Clinical Univ. Dept. of Geriatrics-Gerontology and Old Age Psychiatry, "Carol Davila" University of Medicine and Pharmacy, Romania*

Background There is a constant concern for innovative solutions able to meet the special motor and/or cognitive needs of old persons. Since 2006, the AAIF's R&D department is involved in this research area as medical partner and end-user organization in 16 EU funded projects, and as founder member of 6 communities in EU Joint programmes. Methods and Results AAIF has run the local field trials with primary (PEUs) and secondary end-users (SEUs) for testing, evaluating and validating advanced-technology-based platforms. PEUs were persons with Mild-to-Moderate Dementia (Confidence project), Parkinson Disease (LiveWell) or elderly with compensated motor and/or sensory disabilities (Mobile Sage , Senior TV, My Mate, TSBank). Two thirds of the end-users declared their interest to buy such services, but affordability remains an opened question. As regarding the clinical improvement after using the platforms, the temporo-spatial orientation, recent memory, attention and calculation, as well as the indoor/outdoor mobility may show an improvement with 1-2 points after more than 3 weeks of use. Melioration in SEUs proved noticeable on ZARIT burden interview, and on Yesavage scale for a possible depressive disorder. Conclusions and lessons learned Further developments must especially focus on user centred design. Specific guidelines must be proposed as contribution to standardization. The health care system shall be directed on the equal development of its non-human, complementary component of assisting the patient-caregiver-family unit, which could thus become an active participant and decision maker, and strengthen the principle of participatory medicine inside the AAL area.