

Y. SCHIKHOF. *Older adults and the use and acceptance of ICT: Videophones or computers?* *Gerontechnology* 2010;9(2):329; doi:10.4017/gt.2010.09.02.214.00

Purpose Why start introducing ICT when older people are ill, in need of professional care and experiencing immobility? ICT may help them to stay socially connected and stimulate their ability to cope and prevent social isolation. By using ICT while still active and managing themselves, they will gain experience for future use when restricted by circumstances. However, currently many older adults don't have computer experience, despite the high computer density in the Netherlands. This is especially true for senior citizens over 75, in the lower classes. A literature review study¹ included videophone projects in Japan, Germany, Portugal, UK and Australia. The use of videophones for health and social services hold promising benefits for older adults², if we understand their attitudes towards ICT and communication in general^{3,4}, and focus on user-friendly technology. Based on these studies and the results of projects⁵ in the Netherlands with video communication in health care, a project in Rotterdam was designed to stimulate social connectedness and innovative primary health care for approximately 112 older adults (53% over 75), living independently in 72 new apartments. Videophones were chosen because of their lack of computer experience. **Methods** The project is carried out using the principles of Human Centered Design, with emphasis on the users of communication technology. This design methodology relies on a mix of qualitative user research methods and actively involves the user groups during the design process (co-design). Older people can use video communication to contact each other, family and friends, or use the phone in the usual way. According to their wishes, communities can be established for receiving and giving neighbourly help, checking (in circles) if they are well, etc. Their attitudes towards communication and ICT will be explored and taken into account. They can also have video communication with care professionals in the Medical Centre and vice versa. These professionals will define their use in co-design. The user groups will be frequently consulted. The older adults will be screened for frailty⁶ and a pre-test/post-test control group design will be used to evaluate the results within two years. **Results & Discussion** We expect to gain a better understanding of how ICT may promote well-being, independence and participation in society than in other projects, also how older adults experience the quality of care and how ICT can help primary care professionals to improve care for (frail) older adults. The results will be shared within the project consortium and disseminated as agreed upon with the subsidizer. We hope to compare our findings with a similar project in Ireland and to expand videophone facilities in the nearby future. The general expectation is that in the foreseeable future computer experience in older adults will grow so that ICT will be part of everyday life and a positive attitude will help further innovations⁷. At this moment, however, we will have to meet older adults' actual demands and adapt ICT to this age group and acceptance requirements.

References

1. Magnusson L, Hanson E, Borg M. A literature review study of Information and Communication Technology as a support for frail older people living at home and their family carers. *Technology and Disability* 2004;16(4):223-235.
2. Amaert A, Klooster J, Chow V. Attitudes Toward Videophones, An Exploratory Study of Older adults with Depression. *Journal of Gerontological Nursing* 2007;33 (9):5-13
3. Demiris G, Parker Oliver DR, Hensel B, Dickey G, Rantz M Skubic M. Use of Videophones for Distant Caregiving. An Enriching Experience for Families and residents in Long-Term Care. *Journal of Gerontological Nursing* 2008;34(7):50-55
4. Lindley SE, Harper H, Sellen A. Desiring to be in Touch in a Changing Communications Landscape: Attitudes of Older Adults. In 27th CHI, 2009 April 4-9, Boston: ACM; 2009
5. Grin J, ter Haar-Van Twillert E, Stevens P. Kwalitatieve rapportage 2008 van de monitor zorgopafstand. Report No:08016. Utrecht: Universiteit van Amsterdam; 2008 (October)
6. Steverink N, Slaets JPJ, Schuurmans H, Lis M van. Measuring frailty: Development and testing of the Groningen Frailty Indicator (GFI). *The Gerontologist* 2001;41(Suppl 1):236-237
7. Wilkowska W, Ziefle M. Which Factors Form Older Adults' Acceptance of Mobile Informaton and Communication Technologies? In Holzinger A, Miesenberger K, editors. 5th USAB; 2009. Berlin: Springer; 2009; pp 81-101

Keywords: ICT acceptance, older adults, videophones, human centered design, primary care
Address: Rotterdam University, Netherlands; E: y.schikhof@hro.nl