TRACK: WORK - LEISURE - VOLUNTEERING Presentation: Smart home in care

E.R.C.M. HUISMAN, C.A.M. HUISMAN, H.S.M. KORT. Use of smart home automation and implementation in care organisations. Gerontechnology 2012;11(2):408; doi:10.4017/gt.2012.11.02.625.00 Purpose The population in the Netherlands is ageing rapidly and this will cause a shortage of (in)formal carers and professionals in the near future<sup>1</sup>. Moreover, most older adults prefer to stay at home, live independently and be active in society. There is a clear societal need to delay the demand for professional care and to stimulate architectural and technological solutions<sup>2</sup>. In the Netherlands, the Dutch Ministry of Health, Welfare and Sport (MINVWS) encourages the use of smart home automation (SHA) in small-scale senior accommodations (SSSAs). Within a national program SSSAs are being supported to implement SHA, to remain or enhance quality of care and to contribute to quality of life of residents. In total thirteen initiatives participate in the national program. Each initiative can be defined as a pilot collaboration between a care organisation and a housing corporation or a welfare organisation. Participating initiatives of SSSAs have been supported from 2009 onward in design and implementation of an ICT-infrastructure. Moreover, they were supported to have appropriate requirements for SHA, and in writing a social business case (SBC). The SBC is a structured social cost-benefits analysis combining social and economic benefits. The initiatives were evaluated in order to determine which of the smart home automation systems contribute to enhance quality of care and improve the quality of life of residents. Secondly, we investigated the consequences of SHA for implementation in care organisations. With these data we aim to describe best practices about the use SHA in SSSAs. Method We evaluated thirteen initiatives for use of SHA in the Netherlands between October 2011 and the end of March 2012. The evaluation was divided into four phases: (i) document analysis, (ii) semistructured intake interviews with a board member or a representative of the board, (iii) on-site visits, and (iv) observations in experience sessions. The principles of this evaluation were: (a) process, benefits, and costs compared with the expectations as written into the SBC, (b) the requirements for SHA, (c) the design and the implementation of ICT-infrastructure, and (d) the 7 A's<sup>3</sup> consisting of awareness, availability, accessibility, affordability, acceptability, appropriateness, and adequacy. Results & Discussion In general, preliminary results show that the pilot initiatives have raised awareness on the possibilities of home automation within their care organisation. In case of the SBC, the first results illustrate that the SBC is useful for the initiatives to understand home automation and the impact on their care model. Furthermore, the initiatives should be aware of the costs and benefits. It was proven that it was difficult to make a realistic estimation of costs and benefits. The selected SHA-applications were divided into four groups, namely, (i) safety, (ii) communication, (iii) monitoring, and (iv) support. The preference for home automation depends on (a) target audience, (b) model of care, and (c) aims. This means that care organisation should be aware of what is needed to design and implement an ICT-infrastructure that fits their care model. We expect to discuss do's and don'ts of the use of smart home automation in SSSAs.

## References

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