

Domestication of a telehealthcare system

S. FRENNERT, B. ÖSTLUND. **Domestication of a telehealthcare system.** *Gerontechnology* 2014; 13(2):197; doi:10.4017/gt.2014.13.02.105.00 **Purpose** This paper evaluates the implementation of a telehealthcare system in older people's homes. The research is situated within an EU funded project (GiraffPlus). The GiraffPlus system collects daily behaviour and physiological data from sensors, performs context recognition, and does long-term trend analysis. The system consists of a network of non-invasive wireless home sensors and a semi-autonomous telepresence robot. The goal of the project is to ensure user centered design (UCD) that actively involves users during the entire development cycle so that they can obtain a product that is integrated into daily life, given specific experiences and needs. Users include elderly persons' relatives or friends they have appointed as secondary users, and professional caregivers. In this presentation, we will focus the different experiences of these three user groups and discuss drivers and barriers to the system's success. **Method** The analytic approach is inspired by theoretical framework of Silverstone et.al of domestication, where the user is seen as an active consumer, taming new technologies by defining their nature, scope, and function¹. In this framework the adoption of new technologies is seen as a process that involves different phases, i.e., appropriation, objectification, incorporation, and conversion. The phases are not fixed and the domestication of innovations is not a linear process². The qualitative evaluation involves comprehensive interviews with the older participants, their relatives, and formal caregivers; before the telehealthcare system is installed; a month after the telehealthcare system is installed; 6 months after the telehealthcare system is installed; and two weeks after the telehealthcare system 'moved' out. **Results & Discussion** So far, the results confirm in part that the elderly need new technology for around-the-clock contact with healthcare professionals, around-the-clock case detection, and health status monitoring, as well as alerts if something is wrong with the individual's health status. The older participants believed that they would easily be able to use the system. Issues were raised about surveillance and who had access to the collected data. The formal caregivers also find the system useful when assessing their elderly patients' needs. They wished that the system would increase the quality of interaction with patients (e.g. seeing the patients via the GiraffRobot instead of talking to them via the telephone). The formal caregivers had difficulties seeing the telehealthcare system as long-term installation in patients' homes; instead they believed it would be useful for patients as a form of post-hospitalisation monitoring or for assessing the care needs of a potential patient. They could see many barriers within their own organisation, such as the need for training. **Conclusion** This study proves that both the elderly and their relatives are prepared to take on semi-autonomous telepresence robots but that the health care providers are not. Deficiencies in the organization of the introduction of the new approach pose an obstacle and a challenge for the development of modern medical care.

References

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