

A. SPONSELEE, B. SCHOUTEN, D. BOUWHUIS. *Telecare for elderly users: Needs and benefits. Gerontechnology 2010;9(2):249; doi:10.4017/gt.2010.09.02.277.00* **Purpose** Until recently, the deployment of telecare technology in home care situations was mainly technology driven. To understand the acceptance of home care technology, we should not only look at the technology itself, but also consider its users, their needs, the context of use, and how to introduce the technology^{1,2}. The Technology Acceptance Model (TAM) introduced by Davis^{3,4}, however, can not explain the low acceptance and usage rate of telecare technology by elderly users^{5,6}. In the revised TAM⁶ 'Benefits' play a crucial role in predicting telecare use, while personal 'Needs and Dependence' are expected to determine the added value of the technology. If there is no need, i.e. no personal or contextual problems are experienced or expected; the technology will not be evaluated as beneficial, and thus not be used. This study shows what 'Need' variables indeed increase the experienced benefits of telecare. **Method** Personal 'Needs' depend on the person's situation; their level of dependence; their level of current support by spouse or family; and experienced difficulties in activities of daily living (ADL). 'Benefits' of telecare involve an increased sense of safety, independence, and well-being, as well as the evaluation of the product and the usage. 75 Participants (mean age: 76.7 years) were interviewed in order to retrieve their 'Needs' and level of 'Dependence' in relation to telecare. After usage, 61 (post-1) and 42 (post-2) participants evaluated the benefits of a telecare application (personal alarm, video-communication with care and welfare organizations, and family members). By means of ANOVA, Mann-Whitney U-tests, and Kruskal-Wallis tests the effect of 'Needs' on 'Benefits' was tested. **Results & Discussion** As expected, health related restraints that cause difficulties in daily life, increase the need for telecare, and therefore increase the beneficial outcome effects of technology for those people. However, some daily restraints such as forgetfulness, bad sight, and hearing difficulties actually appeared to be limitations for optimal effectiveness of the technology. Besides their current health status, people's marital status, their current care indication, their experience with the personal alarm, the need for more contact with family members, as well as difficulties with ADLs in some way increased the experienced benefits of telecare. In accordance with Maslow's pyramid, the most important functionality of the system is the alarm (with care support). Once the most important needs (safety & care) are met, then higher order needs become more important (social contact). However, the benefits seem to vary depending on the personal needs (Figure 1).

References

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Address: Fontys University of Applied Sciences, Netherlands;
 E: a.sponselee@fontys.nl

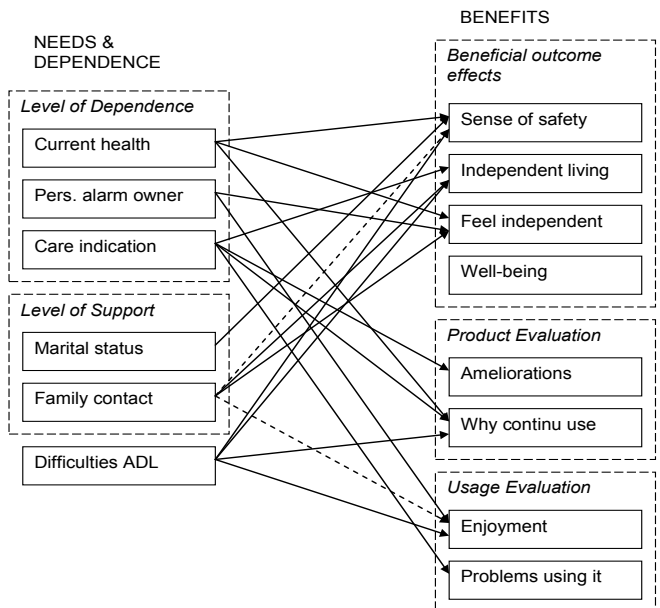


Figure 1. Connections between telecare related needs and benefits