Independent and confident in old age-Assessment of the demand for the use of an emergency wrist watch based on functional health in people aged 70+ living at home

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The use of technologies by elderly people is a challenge due to their lack of acceptance towards new technologies. The results of counseling in seniors in Austrian confirmed that 75.9% of 345 elderly people with a mean age of 83 years and 33% with a minimum frequency of one fall in the previous year did not make use of an emergency wrist watch (EWW). The aim of the study was to identify groups of people who are at risk considering their health indicators and who did not use an EWW in order to be able to provide individually tailored counseling. Based on the WHO ICF-Classification, the functional health of 70+ aged people living at home was assessed. Classification and regression trees served to identify potential groups and their health indicators for the non-use of an EWW in order to identify potential candidates for further analyses. Five trees, which represented the five components of the ICF-Classification, were created on the basis of the CHAID method in order to produce homogeneous branches. The result was validated using the tenfold cross-validation. The following health indicators best characterize four out of five groups of people who did not use an EWW: Group, who lived together with family members (p≤0.001), who took sleep-inducing drugs on an irregular basis and who did not use any objects or tools for their own safety in the flat (p=0.003), who had urine continence (p=0.045), and who made use of household assistance once per month (p=0.001). It can be assumed that with the applied assessment procedure groups of elderly people were identified to whom the use of EWW is not important or relevant. Further analyses for the use of EWW are required.

Biography
Eva Schuc studied Sports and Health Sciences and is a registered physiotherapist. She completed her PhD in Nursing Science at UMIT, the Health & Life Sciences University, in Tyrol/Austria in 2010. She has worked as a Scientist at the Institute of Nursing Science at UMIT since 2006. Her research focuses on mobile care provided to elderly people.

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