

Digital tools for improving quality in 24-hour home care

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Abstract.

Introduction: 24-hour caregiving is a key element of the Austrian care system to support elderly people who need care. 24-hour caregivers commute between their country of origin (mainly Slovakia, Hungary and Romania) and Austria every two or more weeks, which is time-consuming and stressful. Furthermore, working conditions are aggravated due to language barriers, living with chronically ill people, isolation from family and friends and little or no relevant education in care. These challenges not only affect the 24-hour caregivers themselves but also their clients, relatives, registered nurses and care agencies.

Objectives: The aim of the interdisciplinary research project is the user-centred development and evaluation of a distributed software solution for the support and quality assurance of 24-hour home care. The main areas of the developed solution are the e-learning platform with 33 multi-lingual training courses and 35 training videos and the individually adjustable e-documentation with integrated emergency management.

Methods: The evaluation of the prototype includes a mixed-methods design with a 3-armed RCT over 12 months combined with a qualitative survey. In the qualitative evaluation, including the methods focus group, group interview and usability walkthrough, caregivers, relatives and registered nurses evaluated the prototype. The collected data refer to the usability, acceptance, suggestions for improvement and organizational conditions.

Results: The results of the qualitative survey demonstrate the need of an intensive onboarding process and a specific contact person for ongoing support during the use of the digital tools. The e-learning platform in particular is seen as helpful in the daily care routine due to the innovative format, the provided courses in the language of origin and the possibility to repeat the courses several times. For using the e-documentation, some 24-hour caregivers need further help at the beginning. One strength of our presented e-documentation lies in the saving of time resources.