



## **Pilot study of usability and feasibility of a mobile application to support independent rehabilitation periods**

Parkinson's disease (PD) is a progressive neurological disorder including variations of motor and non-motor symptoms. The incidence of PD increase after 60 years of age. Functional movement rehabilitation has been shown to be effective in improving the quality of life of PD patients. GASEL-project aims to test different technological solutions for older adults both in daily activities and in rehabilitation.

The aim of this pilot study was to assess the feasibility and usability of exercise software for independent exercising in between of intensive rehabilitation periods in a small-scale study. The tested software (PTMomentum from PhysioTools) is an mobile application designed for encouraging and reminding people to physically exercise independently according to a program designed by a professional therapist. The pilot test included three PD patients, aged 59-64 years, participating PD rehabilitation program. They were given an exercise app on the tablet computer for testing at home between two intensive periods.

The exercise application was successfully initialized into personal use of older PD rehabilitation patients, and according to users own estimate, two out of three participants exercised more due to the device. The usefulness and ease of use were rated neutral. The initialization phase was not easy. According to this pilot, the application seems to be feasible for supporting independent exercising, but needs usability modifications to receive better acceptance.

In general this pilot supports the use of mobile technologies for rehabilitation and for wellness supporting systems.