RehaCAT Transfer

Implementation of Computer Adaptive initial- and follow-up assessment of health-related functioning in orthopaedic and cardiological rehabilitation

Short description

Computer-adaptive tests (CAT) are an economic and high psychometric solution of recording functional health in the orthopedic and cardiological rehabilitation. The translation of existing techniques are still missing in clinical practice.

Aim of this transfer project is to implement, evaluate and validate the computer-aided diagnostic system RehaCAT for recording functional health in the orthopedic and cardiological rehabilitation. The opportunity of a mobile- and/ or browser-based version is beeing tested. RehaCAT contains the test dimensions: Functionality in Daily Living, functionality of upper and lower extremities, work capacity, pain, treatment motivation, depression and anxiety.

In two project phases of the DRV-granted project the proving and evaluation of this diagnostic system are getting proofed. To assess the process, quality and quantitative methods are beeing used to examine the acceptance, appropriateness, reach, exhaustion, feasibility and sustainability of this system.

Moreover further validation and standardization of the test dimensions are made. In the event of a successful implementation of RehaCAT, RehaCAT offers a high psychometric and economic solution to record clinical routine data of functional health in orthopedic and cardiological patient during the rehabilitation process. A mobile and browser-based testing could lead to new opportunities of patient assignment and patient follow-up. The recorded clinical routine data could lead to develop routine data banks as a structural step to promote healthcare research and rehabilitation research in Germany.

Project management

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Project team

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Publications

Publications of the department can be found here: https://www.uni-ulm.de/en/in/psy-klips/publications/

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Publications

Kallinger, S.M., Scharm, H., Boecker, M., Forkmann, T., Baumeister, H. (2019). Calibration of an item bank in 474 orthopedic patients using Rasch analysis for computer-adaptive assessment of anxiety. *Clinical Rehabilitation, 33,* 1468-1478. Doi: 10.1177/0269215519846225.

Scharm, H., Kallinger, S.M., Eder, S., Boecker, M., Forkmann, T., Baumeister, H. (2019). Development of Rasch-based short screenings for the assessment of treatment motivation in patients with cardiovascular diseases. *Disability and Rehabilitation.* Doi: 10.1080/09638288.2018.1561959.