Human centered design for a flexible, multi-professional telerehabilitation system: Results from an initial real-life evaluation within the project REHA2030

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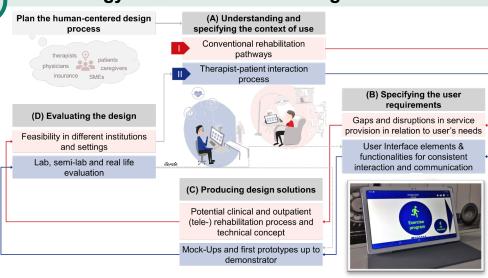






bad.....good

Methodology: Human Centered Design



Krainer, D., Wohofsky, L., Schubert, P. (2022): Design Requirements for a (Tele-) Rehabilitation Platform: Results from a Participatory Process. Studies in health technology and informatics, 293, 224–231. https://doi.org/10.3233/SHTI220373.

Technology Platform: Components

- 1. Patient data administration: personal data, assessments, therapy goals and plans
- **2. Exercise program**: tailored exercises or programs, scheduled in the calendar, with images or videos, device supported exercises, serious games
- **3. Activity monitoring:** statistical data and visualization of conducted exercises, success rate (games) or measured parameters (e.g. hand force from Pablo)
- 4. Communication: video call and chat function
- **5. Feedback and diary**: direct feedback on the daily condition and the exercises and a private diary for the patient
- **6. Therapy reporting:** regular documentation and semi-automatic creation of therapy reports

Trial Setting and Evaluation Design

Clinical setting

- outpatient tele-therapeutic aftercare
- 6 therapists (occupational, physio, speech)
- 3 patients
- instruction in clinics; 4 weeks post-clinical aftercare

requests at the

support hotline

Freelance Setting

- 1 occupational therapist
- 1 patient
- 10 sessions (f2f & synch)
- 10 weeks

Research Questions

- How does REHA2030 work in real life?
- Is it usable and user friendly?
- Does it support the therapy and training?
- Is it practicable?

Evaluation Methods

- Technology affinity
- · Telehealth Usability Questionnaire
- Pre/Post test interview
- Usage characteristics

First Results

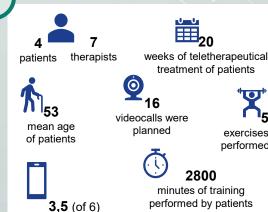
technology affinity

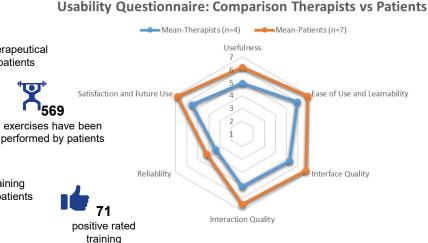
score of patiens

4,2 (of 6)

technology affinity

score of therapists





programs

by patients

(of 73)

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