Improved quality of care and patient involvement in rehabilitation

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Improved quality of care and patient involvement in rehabilitation

Individuals with anterior knee pain and patellofemoral pain syndrome (PFPS) need long-term rehabilitation tailored specific at their needs in order to achieve successful outcome. Long-term commitment to rehabilitation requires collaboration between healthcare professionals in both the private and the public sector. Unfortunately, vital information often gets lost during the transition between sectors, which leads to reduction in the quality of care.

BACKGROUND AND AIM
The aim of this project was therefore to develop a video-based mobile rehabilitation system and integrate the ability to collect patient-reported outcomes (PROs) in the solution. The goal was to increase patient involvement, gain knowledge of adherence to exercise and pain fluctuations and improve the quality of care.

METHODS
Digital platforms
A virtual rehabilitation system consisting of two platforms was developed. One platform was web-based and designed to meet the demands of healthcare professionals (selection of exercises and defining exercise progression etc.), while the other platform (app) was developed to support home-based or on-the-fly access to the tailored rehabilitation program and to support more extensive user interaction.

User involvement
Patients and healthcare professionals participated in the development of both platforms through co-creation workshops, interviews and think aloud sessions. This agile development process was chosen to ensure ongoing user feedback but also to meet the demands of the users and facilitate the implementation.

PRO integration
The use of validated and self-developed questionnaires is necessary to improve quality in care. Patients can interact with the app and complete questionnaires, report exercise related pain and monitor their adherence to training.

APPLICATION
Healthcare professionals and patients can access the collected information. Healthcare professionals can use the information to track and monitor their progress. A systematic collection of health data also provides evidence for the effect of rehabilitation and can be used in research.

IMPLEMENTATION
We are currently testing the solution in three municipalities and in one hospital.

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LESSONS LEARNED
The development of both platforms became more time-consuming than expected and required the use of the IT Project Management Tool (JIRA). JIRA, however, was well suited for our agile development process and helped us achieve detailed task descriptions with screen drawings and time estimates. The detailed task descriptions were essential for the collaboration with the software developers and helped us achieve higher quality in the deliverables.