



Qualitative Monitoring of Compliance

QuMoCo



MOBILAB

K.H.Kempen University College

Project Details

Project coordinator	MOBILAB - K.H. Kempen University College
Other applicants	ETRO – Vrije Universiteit Brussel K.U.Leuven
Sector	Biomedical and Rehabilitation Technology Health Care Innovation
Call of Interest	<input checked="" type="checkbox"/> CORNET <input type="checkbox"/> EraSME



Project Details

Proposal summary:



For both **prevention** and **rehabilitation** it is often important to perform **specific exercises correctly and on a regular basis at home**. For the physiotherapist it is not only important to know that the patient exercises at home but also to know the **quality** with which the necessary exercises are executed.

This project aims at building a **framework for monitoring both the quantity and quality** with which the patient follows his **therapy at home**.

To test the efficiency of the platform, two cases will be implemented. In the first case, we will focus on prevention and rehabilitation of **functional knee instabilities** and the second case will target diagnosing and treating **balance disorders**.

The sensors used to monitor these exercises include a **knee brace** that measures the **knee angle** and **accelerations** of the knee, a **3D-camera** (e.g. the Primesense camera used in Microsoft's Kinect) and a **pressure plate** (e.g. Wii BalanceBoard).





Project Details

Advantages for SMEs, trade or industry:	- Direct access to a new generation of telemonitoring devices.
Profile of partners sought:	<ul style="list-style-type: none">- Research groups with relevant and complementary expertise.- SMEs with hands-on knowledge in rehabilitation industry and/or elderly care.- Health care providers

Summary

- Application field:
 - Health care
 - Rehabilitation industry
 - Biomedical research
 - (Serious) Gaming
 - Biosignal processing
 - Sensor Development
- Objectives and outcomes:
 - Development of platform for telemonitoring of therapy follow-up
 - Testing of two real-life test cases
 - Automatically determining compliance (therapy follow-up) from sensor data
 - Investigate rehabilitation progress from instrumented knee brace (when performing everyday activities)



innovation for SME

transnational funding opportunities for European SME

- Actors of the project:



www.mobilab-khk.be



www.etro.vub.ac.be



www.kuleuven.be

- Benefits for future partners
 - Direct access to a new market of rehabilitation technology and research
 - Transfer of technology and knowledge to create future commercial products
- Estimated costs and duration
 - €480.000
 - 2 year



Contact details

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