

Project Study

Market Analysis and Development of a Go-to-Market Strategy for a Physical Therapy System for the Rehabilitation of Stroke Patients

When: Part-time, winter semester 2023 (starting mid-October)

Team: 2-3 Management and Technology students (specialization in medicine, mechanical engineering or informatics)

Partner: MedTech startup at the TUM School of Engineering and Design

Project:

Every 20 seconds a person in Europe suffers a stroke, because of which around 5.9 million stroke patients in Europe currently live with an impaired upper extremity. The best possible neurological recovery requires fast and intensive rehabilitation, but the lack of physical therapists in Germany does not support this kind of care for all patients. To improve the care situation in stroke rehabilitation, a system is needed that supports therapists and enables patients to independently receive intensive therapy.

The system currently under development consists of a sensor suit, a patient interface and a therapist dashboard. Several different sensors are integrated into the suit, which, among other things, record movements and muscle activity while the patient performs therapy exercises that are displayed on the patient interface. The therapist receives a summary of the patient's activity and an overview of the rehabilitation progress on his dashboard. In a first step the system is to be used in inpatient rehabilitation clinics and outpatient physical therapy practices under the supervision of therapists, where patients can use it in a controlled environment. If the concept proves successful, the system is also intended to be used for independent exercise sessions at home.

Task:

In this project study, a market analysis is to be carried out, investigating the care situation of stroke patients and the market for physiotherapeutic aids. On this basis, a go-to-market strategy is to be developed for the first product, in which not only the health benefits for patients need to be considered, but primarily the financial incentives for rehabilitation centers and physiotherapists. This includes, for example, billing models with health insurance companies or the parallelization of patient care. Furthermore, different sales models need to be considered, such as leasing models from the manufacturer, inclusion of therapists as sales partners or direct sales to self-paying patients. As part of this study it is expected to gather the relevant information through field research and interviews with health care professionals, health insurance providers and clinic administrators.

Contact:

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