Conference Abstract

Individualized telerehabilitation for heart patients across municipalities, hospitals and medical disciplines: preliminary findings from the Teledialog project

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**Abstract**

**Introduction:** The rehabilitation offered to cardiac patients and patients who have had surgery in Denmark is inadequate. Only 3% of the more than 86,000 Danes hospitalized every year with cardiovascular disorders participate in rehabilitation activities. The same low level of participation in cardiac rehabilitation is found in Europe and in the U.S. Review of the literature show that the low participation is caused by long transportation time to the rehabilitation centers, lack of individualized rehabilitation program, poor information about the rehabilitation offered, or patients’ unable to recognize the importance of rehabilitation. Based upon user-driven innovation, we have developed a telerehabilitation programme called Teledialog for use in cardiac rehabilitation across hospitals, healthcare centers in municipalities, and as part of cardiology and thoracic traditional rehabilitation guidelines. At discharge, the patients are interviewed and an individualized three-month rehabilitation plan is formulated. At home, the patients measure their own blood pressure, pulse, weight and steps. The data are then transmitted to a digital platform where it can be accessed by healthcare professionals and patients, who can then communicate together. The platform also offers patients additional video content, information about rehabilitation and a forum for communication with other patients. The patient can choose to participate in rehabilitation activities at a call center, healthcare center or hospital. A randomized control trial of the telerehabilitation programme has been conducted (n=175 patients) from December 2012- Marts 2014.

**Aim:** The aim of this substudy is to assess the effects of the implementation of the telerehabilitation programme in large scale viewed from an inter-organisational perspective.

**Methods:** Documentary material has been studied. Participant observation has been carried out (n= 76 hours). Qualitative interviews have been conducted with healthcare professionals: physicians (n=4); physiotherapists (n= 6); nurses at healthcare centers (n= 4); nurses at hospitals (n=6); management at hospital (n=4). All interviews lasted between 55-90 minutes. The interviews have been recorded. All data has been analyzed using NVivo 10.

**Theory:** Inter-organisational theory has been applied.
**Findings:** The implementation of the telerehabilitation programme enabled interdisciplinary decision-making and collaboration across healthcare centers between healthcare professionals in municipalities and hospitals at scale. Joint cardiac and thoracic rehabilitation guidelines communicated via social media and a mutual communication platform allowed healthcare professionals to plan a more individualized rehabilitation for the patients.

**Conclusions:** The preliminary findings indicate that the Teledialog telerehabilitation programme enabled a more individualised rehabilitation for the cardiac patients. The technology facilitated interdisciplinary rehabilitation of cardiac patients at scale across municipalities and hospitals.

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**Keywords**

telerehabilitation; heart patients; inter-organizational theory; service concept at scale

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**PowerPoint presentation:**