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## Conference Abstract

### Patient-driven Health Care Models: The Future Patient using Self-tracking Technologies

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## Abstract

**Purpose:** The aim of this study has been to identify new models of care that emerge when cardiac patients/citizens use self-tracking technologies for telerehabilitation.

**Context:** There is a growing phenomenon of self-quantification, defined as patients who observe and monitor their health conditions for various reasons (e.g., chronic diseases, wellness, etc). Patients have rapidly adopted the new self-tracking technologies, and patient-driven health care systems are gradually emerging. Health care professionals need to integrate this trend in their design of new services in the future healthcare organization [1]. In the Teledi@log project [2], a telerehabilitation programme for heart patients with self-tracking technologies has been developed and tested in a randomized controlled trial (n=151) during 2012-2014. In the cardiac telerehabilitation programme, three models of care were developed and tested: call center, healthcare center and hospitals in two municipalities. At home, the patients measured their own blood pressure, pulse, weight and steps, and the data was transmitted to a digital platform where the data could be accessed by patients, relatives and healthcare professionals. The platform also offered patients additional video content, information about rehabilitation and a forum for communication with peer collaborators.

**Methods:** Through a user-driven process (workshops with patients, relatives, healthcare professionals, researchers and representatives from companies), new models of care for telerehabilitation of cardiac patients have been developed and tested. Semi-structured interviews with cardiac patients (n=19) and healthcare professionals (n= 15) were carried out. A systematic review of the literature on new models of care based upon self-tracking technologies has been performed. Data have been analyzed using the software program NVivo 10.

**Results and discussion:** The following models of care for cardiac patients using self-tracking technologies have been identified: call center; healthcare center, hospital and self-tracking scenario. The majority of the cardiac patients and healthcare professionals stated that their use of self-tracking technologies and the model of care preferred depended on the needs of the individual patients. Some patients stated that the call center model gave them the freedom to monitor themselves, be able to go to work and still have the possibility to be in contact with a healthcare professional. Performing self-tracking without interaction with a healthcare professional is used mostly in the final phase of a telerehabilitation programme. The literature predicts that self-tracking and mastering self care will be a growing trend, with new stakeholders in the healthcare system and new patient-driven health care models.

## **Keywords**

**self-tracking technologies; new models of care; cardiac patients**

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## **References**

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