

# Telerehabilitation in patients with recent hospitalization due to acute decompensated heart failure: protocol for the Tele-ADHF randomised controlled trial

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**11372****Telerehabilitation in patients with recent hospitalization due to acute decompensated heart failure: protocol for the Tele-ADHF randomised controlled trial**

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**Background/introduction:** Cardiac rehabilitation (CR) has favourable effects in chronic heart failure (CHF) patients on exercise capacity, the risk at hospital (re-)admission and quality of life. Although CR is generally recommended, it is still under-utilized in the daily clinical practice partly due to logistics reasons, limited availability, and patient-related barriers. Cardiac telerehabilitation (CTR) could solve some of these barriers, and have the same favourable outcomes.

**Purpose:** The aim of this study is to investigate if CTR in recently hospitalized CHF patients improves their physical functional capacity when compared to no rehabilitation.

**Methods:** This randomised controlled trial compares CTR with no rehabilitation after hospitalization for acute decompensated heart failure (ADHF). 64 patients will be included during hospitalization, and start with Remote Patient Management (RPM). After a short period of stable CHF, the patients will be randomised for RPM combined with CTR (intervention group), or RPM alone (control group). The intervention group will start with an 18-weeks program with exercise training, supported by a (remote) technology-assisted dietary intervention and mental health guiding. The training program starts with three centre-based and two home-based video training sessions followed by video coaching sessions. The primary endpoint is physical functional capacity, evaluated using the Short Physical Performance Battery (SPPB) score. Secondary endpoints are recovery after submaximal exercise by evaluating VO<sub>2</sub> recovery kinetics ( $\tau$ -rec), subjective health status, health related quality of life, compliance and acceptance, and readmission rate.

**Future implications:** This will be the first study to use an CTR program with integrated RPM after hospitalization for ADHF.