

Future Health regions North Brandenburg (Fontane) - Health economic consultancy and evaluation

Summary:

Chronic heart failure is one of the most frequent diseases in developed countries. Prevalence of heart failure is estimated to be around 1-2%, annual incidence cases are around 5-10 per 1,000 persons. 371,000 patients were hospitalized because of heart failure in the year 2010, according to the Federal Statistical Office. Heart failure was therefore the most frequent reason for hospitalization. Heart failure constitutes for around 1% of all expenses in the German health care system. As the health economic relevance of heart failure is still increasing, there is a need for new therapeutic approaches. Telemedicine is the key to these new approaches. Telemedicine does not require - as opposed to face-to-face medicine - a geographical and temporal proximity between patient and health care professional. Particularly in heart failure new technologies have the potential to improve therapies. In heart failure telemedicine can be used for monitoring vital signs continuously as well as generating well-structured therapies based on networking of the respective health care professionals (GPs, cardiologists, nephrologists, diabetologists, etc.)

The primary aim of the Fontane-project is an improvement of the ambulatory care of chronic heart failure patients in a structurally weak area (North Brandenburg) via telemedicine.

The health economic evaluation, performed by the institute of social medicine, epidemiology and health economics, will focus of the following sub questions:

What costs are associated with a telemedicine approach as compared to a conventional therapy and what is the ratio of costs and effects in case the telemedicine approach is superior to the conventional therapy? To answer these questions we plan to conduct cost- as well as cost-effectiveness analyses. A collaboration with several statutory health insurances exists to enable the inclusion of invoice data in the analysis.

Principal investigator:

Willich, MD, MPH, MBA
Reinhold, PhD

Project coordinator:

Reinhold, PhD

Research associate:

Data management:

Project coordination office:

Cooperation:

Institut für Telemedizin Charité -
Universitätsmedizin Berlin, Statutory health
insurance companies

Biometrics:

Project duration:

2012-offen

Project status:

analysis phase

Funding:

Bundesministerium für Bildung und Forschung
(BMBF)

Publication:

<http://www.gesundheitsregion-fontane.de/>

<https://telemedizin.charite.de/forschung/fontane/>

Tütüncü S, Honold M, Koehler K, Deckwart O, Koehler F, Haeusler KG. Non-invasive telemedical care in heart failure patients and stroke: post hoc analysis of TIM-HF and TIM-HF2 trials. ESC Heart Fail. 2020 Jun;7(3):884-891. doi: 10.1002/ehf2.12679.

Koehler F et al. Efficacy of telemedical interventional management in patients with heart failure (TIM-HF2): a randomised, controlled, parallel-group, unmasked trial. Lancet. 2018 Sep 22;392(10152):1047-57

Koehler F, Koehler K, Deckwart O et al. Telemedical Interventional Management in Heart Failure II (TIM-HF 2), a randomised, controlled Trial investigating the impact of telemedicine on unplanned cardiovascular hospitalisations and mortality in heart failure patients: study design and description of the intervention, Eur J Heart Fail, 2018, doi:10.1002/ejhf.1300

Prescher S, Schoebel C, Koehler K, Deckwart O, Wellge B, Honold M, Hartmann O, Winkler S, Koehler F. Prognostic value of serial six-minute walk tests using tele-accelerometry in patients with chronic heart failure: A pre-specified sub-study of the TIM-HF-Trial. Eur J Prev Cardiol. 2016 Oct;23(2 suppl):21-26. doi: 10.1177/2047487316671438.

Prescher S, Deckwart O, Koehler K, Lücke S, Schieber M, Wellge B, Winkler S, Baumann G, Koehler F. [Will telemonitoring be adopted by patients with chronic heart failure?]. Dtsch Med Wochenschr. 2014 Apr;139(16):829-34. doi: 10.1055/s-0034-1369849.

Jehn M, Prescher S, Koehler K, von Haehling S, Winkler S, Deckwart O, Honold M, Sechtem U, Baumann G, Halle M, Anker SD, Koehler F. Tele-accelerometry as a novel technique for assessing functional status in patients with heart failure: feasibility, reliability and patient safety. Int J Cardiol. 2013 Oct 12;168(5):4723-8.

Prescher S, Deckwart O, Winkler S, Koehler K, Honold M, Koehler F. Telemedical care: feasibility and perception of the patients and physicians: a survey-based acceptance analysis of the Telemedical Interventional Monitoring in Heart Failure (TIM-HF) trial. Eur J Prev Cardiol. 2013 Jun;20(2 Suppl):18-24. doi: 10.1177/2047487313487483e