

European Regional Development Fund

Hospitalization at home: Mid-term Achievements

NWE-Chance is assessing the feasibility for Heart Failure patients to get **hospital-level care at home** – average duration 5 days –with the support of a newly developed integrated technology platform and by working on an **operational organization plan**.

All relevant stakeholders are involved in the project: hospitals, patients, MedTech companies and universities.

Preparation phase

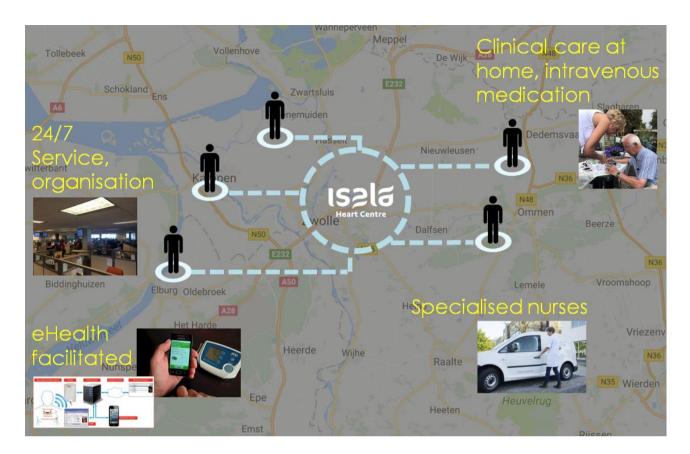
Technical developments: integrated platform

The project is developing an **integrated platform to deliver home-hospitalisation** to patients with acute decompensation of heart failure. Three MedTech companies work together to integrate their technology in an easy to use and safe platform for heart failure patients. The platform will be developed in such a way that other companies, developing new technologies, will be able to link and connect their innovations for home hospitalisation.

Operational organisation plan: a blueprint

The blueprint describes the health care process both with respect to the patients as well as the care path. It elaborates an **organisation model**, with tasks and responsibilities as well as the organisation of work. It also identifies and describe the **logistic conditions and the technology to use**. It organises the quality management of the care process and defines standard (operating) procedures and work instructions.

The current version of the blueprint cannot be seen as a final; it is merely a first attempt to describe all relevant organisational aspects related to hospitalisation at home for heart failure patients, based on the information momentarily available.



The outcomes and experiences of the small scale pilots will definitely provide additional information and shall further improve the blueprint (May 2021).

Study protocol

Jessa Hospital is taking the lead for this 'feasibility study' organised with three small scale pilots in three different hospitals in the NWE region.

Stakeholders involved

The participating hospitals are ISALA Hospital in Zwolle (The Netherlands), Jessa Hospital in Hasselt (Belgium) and MUMC+ in Maastricht (The Netherlands). Hasselt University (Belgium) will scientifically support this study. During the three small scale pilots, **100** patients with an acute decompensation of heart failure will be included.

The intervention will be different for the three hospitals as a result of the level of experience with home hospitalisation.

ISALA Hospital has already ten years of experience with home-hospitalisation of heart failure patients. They have a well-structured organisation with specialised nurses who are trained to deliver home-hospitalisation treatment to patients. Therefore, ISALA will include 50 patients with acute decompensation of heart failure and will take medical decisions on the basis of the eHealth platform technology.

MUMC+ has no experience with delivering home-hospitalisation. However, they have already experience with providing infusion therapy at the home of the patients. MUMC+

will include 25 patients and will take medical decisions on the basis of the eHealth platform technology.

Jessa Hospital has no experience with either home-hospitalisation or remote infusion therapy. Jessa Hospital will include 25 patients at the end of their heart failure hospitalisation, and they will not provide infusion therapy at the home of the patient. So, in Jessa Hospital, we will study the feasibility of the home-hospitalisation organisational strategy for a hospital with no experience in home care.

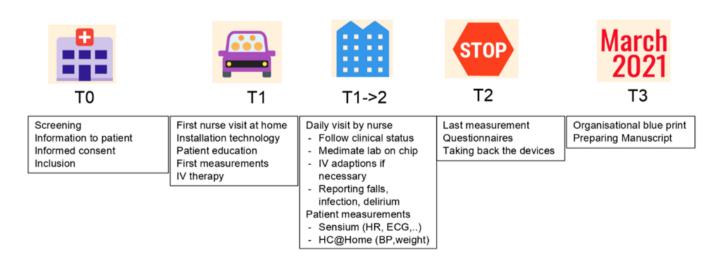
The intervention

In general, the home-hospitalisation process will consist of 5 phases:

To for recruitment, T1 for the first home hospitalisation day, T1->2 for the home hospitalisation period, T2 for the end of the home hospitalisation and T3 for the long-term follow-up of 30 days to record all major cardiovascular events such as re-hospitalisation. During the home hospitalisation period, monitoring data will be collected from patch (heart rate, respiratory rate, posture, activity, ...) and other devices (blood pressure and weight).

Caregivers can monitor these parameters on a clinical dashboard but also patients are able to monitor their parameters on a smartphone they receive during the homehospitalisation.

Intervention: Timeline



For more information, visit **NWE-chance website**.



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