Heart failure is a chronic disorder, the medical care of which could potentially benefit from a remote patient management (RPM) approach.

In 2018, the results of the TIM-HF2* trial showed for the first time the superiority of RPM in terms of mortality and morbidity.

The RPM intervention consists of:

- a daily transfer of vital signs such as heart rate and body weight,
- a 24/7 treatment by physicians and nurses in a telemedical center and
- patient education in handling the home devices and their own chronic disease.

* Koehler F et al. Lancet 2018
Technical innovations using artificial intelligence to achieve scalability are required:

- Development of machine learning algorithms based on the annotated data set from the TIM-HF2 trial (> 2 million measurements)
- Implementation of algorithms to support the clinical decision process
- Wearables and smartphones to integrate new vital parameters
- Voice analysis to diagnose a hydropic decompensation using deep neural networks
- Physical activity as a marker for mortality and morbidity

**PROJECT PARTNERS**

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