

# **A facilitated home-based cardiac rehabilitation intervention for people with heart failure and their caregivers: a research programme including the REACH-HF RCT**

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## Plain English summary

### A facilitated home-based cardiac rehabilitation intervention

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## Plain English summary

**H**ear failure can be classified by the percentage of blood pushed out of the left ventricle when the heart beats – the ‘ejection fraction’. Half of all people with heart failure have heart failure with reduced ejection fraction (ejection fraction of < 45%) and the rest have heart failure with preserved ejection fraction (ejection fraction of  $\geq$  45%).

Rehabilitation for people with heart failure improves their quality of life and reduces hospital admissions. Most rehabilitation has taken place in groups in hospital settings, but poor levels of participation mean that alternative ways of accessing rehabilitation, such as home-based programmes, are recommended.

The Rehabilitation Enablement in Chronic Heart Failure (REACH-HF) intervention comprises three printed components: (1) an ‘HF Manual’ with information for patients and an exercise programme, (2) a ‘Family and Friends Resource’ for caregivers and (3) a ‘Progress Tracker’ booklet for patients to chart their progress. The programme is delivered by trained nurses or physiotherapists.

We carried out two studies of the REACH-HF intervention. In our main trial, we allocated at random 216 people with heart failure with reduced ejection fraction from four UK centres to receive the REACH-HF intervention or usual medical care alone. The results of this study suggest that those who received the REACH-HF intervention had a better quality of life. Economic modelling demonstrated that the intervention is well within the willingness-to-pay limits recommended by the National Institute for Health and Care Excellence. However, the economics analysis from the full trial did not show significant differences between the two groups in hospital admissions. The cost of the intervention was £418 per patient.

We also undertook a pilot trial of the same design in a single centre in 50 patients with heart failure with preserved ejection fraction. The findings of this pilot study showed that the intervention and study design were well accepted and these results support a future full trial of REACH-HF in patients with heart failure with preserved ejection fraction.



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