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# Home-based rehabilitation for heart failure: we need to act now

Hasnain M Dalal<sup>1,2</sup>, Rod S Taylor<sup>1,3</sup> and Patrick Doherty<sup>4</sup>

We thank Professor Zwisler for her positive endorsement editorial on our REACH–HF multicentre randomised trial published in the journal recently.<sup>1</sup> We feel privileged to be considered as ‘a candidate for one of the most important methodological landmark studies in cardiac rehabilitation’.<sup>2</sup> However, in response to the conclusion that ‘...there are still more questions to be answered before a standard home-based rehabilitation intervention can be recommended for implementation in clinical practice’,<sup>2</sup> we want to share in this letter two recent important pieces of available evidence that mean we need to act now.

First, this journal has recently accepted our cost effectiveness modelling analysis that provides evidence that REACH–HF is not only clinically effective in improving health-related quality of life but also provides good value for money and confirms the long-term cost effectiveness of home-based cardiac rehabilitation (CR) programmes like REACH–HF. Our analysis indicates that REACH–HF has an average cost per quality adjusted life year gained (QALY) of £1720 with a 78% probability of being cost effective at the UK accepted threshold of £20,000/QALY gained.<sup>3</sup>

Second, the updated Cochrane systematic review and meta-analysis of exercise-based rehabilitation for heart failure has recently been published<sup>4</sup> utilising 44 randomised trials (5783 heart failure patients) confirming improvements in health-related quality of life and a reduction in the risk of hospitalisation. Importantly, nearly a quarter of studies included in the Cochrane systematic review were based on a home-based mode of delivery.<sup>4</sup>

In the UK, less than 20% of patients discharged from hospital after a diagnosis of heart failure are referred for CR, and in those that do have a referral there is a 6% better mortality outcome at 12 months.<sup>5</sup> The lack of implementation has prompted the National Institute for Health and Care Excellence (NICE) to recommend ‘a personalised, exercise-based CR programme – in a format and setting (at home, in the community or in the hospital) that is easily accessible’.<sup>6</sup>

We need to act now. Commissioners and providers in the UK and elsewhere should be looking at

alternatives to conventional, supervised, centre-based rehabilitation including CR options supported by telemedicine.<sup>7</sup> Affordable home-based programmes like REACH–HF can make CR more available and should be included as part of the CR offer, especially as this is supported by evidence of cost effectiveness.

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