# Improving the Effectiveness of Psychological Interventions for Depression and Anxiety in Cardiac Rehabilitation: The PATHWAY Research Programme Including 4 RCTs

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# Plain language summary

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# Plain language summary

Depression and anxiety are common among cardiac rehabilitation patients. Cardiac patients with anxiety and depression are at greater risk of death, further cardiac events and poorer quality of life and use more health care, leading to higher NHS costs.

Current talking-based therapies have small effects on anxiety and depression in patients with cardiovascular disease. It is important that more effective treatments for mental health are added to cardiac rehabilitation. We applied two versions of a recent treatment called metacognitive therapy in cardiac rehabilitation: a group version and a home-based (self-help) paper-based manual.

The programme had three work streams conducted across seven NHS trusts. In work stream 1, we ran a pilot trial showing that adding group-metacognitive therapy to cardiac rehabilitation was feasible and acceptable A full-scale trial (work stream 2) followed, and this showed that adding group-metacognitive therapy to cardiac rehabilitation was associated with greater improvement in anxiety and depression than cardiac rehabilitation alone.

In work stream 3, we created a home-based version of metacognitive therapy and ran a feasibility trial, which was extended to a full-scale trial and showed that home-metacognitive therapy plus cardiac rehabilitation was associated with improved anxiety and depression outcomes compared with cardiac rehabilitation alone.

Interview studies of patients' needs, treatment preferences and reactions to treatment were included, and our patient and public involvement group advised the research team throughout the trial.

The originator of metacognitive therapy, Adrian Wells, was the chief investigator of the study and is the director of the Metacognitive Therapy Institute. He has funding for the study 'Implementing Group Metacognitive Therapy in Cardiac Rehabilitation Services (PATHWAY-Beacons; NIHR29567)' as chief investigator. To maintain objectivity along with the trial statistician and research assistants he did not know patient treatment allocation, data were managed by a separate clinical trials unit and a plan for analysis was devised before analysis took place. Project oversight and monitoring were undertaken by an independent Trial Steering Committee.

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