

Appendix 2: Top 30 Unanswered Questions

Access and Remote Delivery:

1.	What is the long-term clinical and cost-effectiveness of web-based interventions used in secondary prevention of coronary heart disease?
2.	What are the long-term effects of digital approaches to cardiac rehabilitation (including adverse events)?
3.	What is the best way to assess exercise remotely when a face-to-face test is not possible?
4.	How can assessment of health and digital literacy be incorporated into cardiac rehabilitation?
5.	Can digital health technology increase accessibility to cardiac rehabilitation for more diverse patient groups?
6.	Can cardiac rehabilitation programmes meet the needs of those with multi-morbidity?

= select top 2 questions

Exercise and Physical Activity:

7.	What is the effectiveness of high intensity interval training versus moderate intensity continuous training at specific frequency, duration, and intensity for all coronary heart disease patients, and incorporating elderly and women?
8.	What is the optimal exercise-based cardiac rehabilitation frequency, intensity, time, and type to improve aerobic fitness in people diagnosed with coronary heart disease?
9.	Determine the benefit of regular exercise on survival in patients diagnosed with heart failure.
10.	Determine when to restart moderate to high intensity exercise and sport after an acute event and decompensated heart failure.
11.	Determine the safety profile of unsupervised home-based high intensity interval training following supervised exercise-based cardiac rehabilitation in patients diagnosed with cardiovascular disease.
12.	What is the definitive objective assessment of impact of exercise-based cardiac rehabilitation upon physical activity?

= select top 2 questions

Optimising Outcomes from Programmes:

13.	What are the long-term clinical outcomes and adverse events across home-based, centre-based and hybrid exercise-based cardiac rehabilitation for those diagnosed with coronary heart disease?
14.	What is the efficacy of cardiac rehabilitation collaborative care management incorporating exercise, mental health, and behaviour strategies?
15.	Is a traditional 8-week comprehensive exercise-based cardiac rehabilitation multidisciplinary-delivered programme more clinically and cost-effective than usual practice?
16.	What is the clinical and cost-effectiveness of exercise-based cardiac rehabilitation upon symptoms and quality of life in those with stable angina?
17.	What is the optimal intensity and duration of behavioural change components required to achieve effective secondary prevention of coronary heart disease?
18.	What is the short and long-term clinical, cost-effectiveness and impact upon physical and psychological outcomes (including complications) of exercise-based cardiac rehabilitation following heart valve surgery?
19.	What are the long-term clinical outcomes from exercise-based cardiac rehabilitation in heart failure patients treated with cardiac resynchronisation therapy?
20.	How do content and intent of cardiac rehabilitation educational interventions compare on risk factors, behaviour, and hospitalisation in those diagnosed with coronary heart disease?
21.	Can the short-term benefits of exercise-based cardiac rehabilitation on exercise capacity in transplant patients be maintained in the longer term?

= select top 3 questions

Psychosocial Health

22.	What is the impact of physical and psychological components of cardiac rehabilitation on promoting return to work up to six months following diagnosis of coronary heart disease?
23.	What is the impact and acceptability of dedicated mental health practitioners delivering enhanced psychological care for patients with new-onset depression?
24.	What is the effectiveness of remote delivery of psychological support versus computerised cognitive behavioural therapy for anxiety and depression in patients with cardiac disease?
25.	What is the effect of mindfulness on mental health and risk factors in coronary heart disease patients with at least mild depression?
26.	What is the role of peer group sessions on normalising and reducing psychological stress in patients with cardiac disease?

= select top 2 questions

The Impact of the Pandemic:

27.	Are there any adjustments needed to rehabilitation delivery and exercise prescription for individuals with long covid?
28.	What impact on patient outcomes did the reduction in access to face-to-face general practice services and cardiac rehabilitation have?
29.	What is the long-term impact on patient health outcomes (major adverse cardiac events) in people who failed to access or delayed accessing healthcare services during the covid-19 pandemic?
30.	How do the outcomes of traditional centre-based programmes compare to hybrid flexible delivery programmes that have developed during the pandemic?

= select top 1 question