Exercise-Based Cardiac Rehabilitation Programs for Coronary Artery Disease: A Systematic Clinical and Economic Review

Setting the scene:
This report assesses the clinical- and cost-effectiveness of Cardiac Rehabilitation (CR) programs and the potential policy and research implications for the health sector.

What did they do?
Randomized controlled trials of CR programs with an exercise component were systematically reviewed in two groups: comprehensive care or exercise-only. The study population was men and women of all ages, with documented coronary artery disease, in hospital and community-based settings. The main outcome measures were total mortality and cardiac mortality. Forty-six clinical trials were analyzed in the clinical meta-analysis. Economic studies using the same population and interventions were also systematically reviewed; three full economic evaluations and three cost studies. Comprehensive searches of the literature and consultations with clinical experts were used to review the potential impact of CR programs on health policy.

Takeaway message:
CR programs that include exercise, both exercise-only and comprehensive care programs have beneficial effects on cardiac mortality. However, with respect to total mortality, exercise-only programs show a statistically significant reduction, whereas the comprehensive care programs showed a trend in that direction. The literature reports that these programs are cost-effective and may reduce costs to the health care system, particularly when patients fully participate in maintaining the required level of exercise over the long term.