

Cardiac disease is a leading cause of death in Canada; approximately 90% of Canadians have at least one risk factor for heart disease.¹ Physiotherapy is integral to effective multi-disciplinary cardiovascular rehabilitation (CR). Treatment by a physiotherapist has a significant impact on the physical function and overall quality of life (QOL) in individuals with cardiac disease.

Role of Physiotherapy in Cardiovascular Rehabilitation (CR)

CR is a team-based intervention that incorporates physical, psychosocial and educational components to improve outcomes for individuals following a cardiac event. The physiotherapist has a central role in the physical and educational components of CR programs. Physiotherapists prescribe individualized exercise programs and contribute to education programs on lifestyle changes, such as smoking cessation.

CR programs are delivered in public facilities, and in the community and home settings. CR programs, in which a physiotherapist is centrally involved, are highly effective for improving the individual's health outcomes.¹

Impact on Patient Experience

Physiotherapist involvement in the delivery of CR programs improves patient compliance and results in better health outcomes for participants.¹

- CR programs can be delivered at home or in a facility, and both delivery models are equally effective at improving health outcomes.²
- Physiotherapy in CR provides tailored care that leads to improvements in physical and psychosocial function and high patient satisfaction.³
- Physiotherapists support the transition from hospital to on-going community services, which improves the individual's experience in the care process following a cardiac event.¹

Impact on Population Health

CR reduces the risk of cardiac and general mortality by 15-25% and prevents the occurrence of acute events over time.⁴

- Physiotherapy promotes social engagement, adoption of healthy behaviours and supports self-management strategies resulting in improvements in QOL.⁵
- Participation in a CR program following a cardiac event reduces hospitalization rates.⁴
- CR improves QOL, smoking cessation rates, systolic blood pressure, weight loss and total cholesterol, reduces depression and improves physical activity.^{2,6,7}

Impact on Health Care Costs

There is evidence that CR programs that include a physiotherapist can result in an estimated \$4,950 per life year saved (\$2,193-\$28,193) and \$12,000 per life year gained (\$668-\$16,118).⁸

- Standard CR programs, over a three-month period, are more cost effective for high risk patients compared with usual care.⁹
- Home-based CR programs are a low-cost alternative to hospital-based programs for stable patients.⁶
- Costs of CR programs per patient are significantly lower than for other interventions, including drug therapy, while also demonstrating an increase in quality-adjusted life years gained.¹⁰

Summary

CR programs that include physiotherapy are an effective low-risk intervention that emphasizes exercise, education and lifestyle modifications. CR increases physical activity in patients following cardiac events and encourages the adoption of healthy behaviours leading to a reduction in hospitalization rates, subsequent cardiovascular events and mortality. CR programs are cost effective across all delivery models and have a significant impact on QOL.

Key References:

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The value of a health care service is more than its proven cost-effectiveness. Quality of life, access, and continuity of care and integration of services are equally important criteria when looking at the broader concept of value.