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for

CARDIAC REHAB

Physiotherapy-led cardiac rehabilitation is a clinical and cost-effective intervention for those living with cardiovascular disease.

What is cardiovascular disease?

Cardiovascular disease includes conditions such as angina, heart attack and stroke. Heart disease is caused by a gradual build up of fatty deposits in the coronary arteries, causing them to narrow and leading to angina. If a piece of this fatty deposit breaks away from the artery wall it can cause a clot to form which may then travel in the blood stream, lodging and cutting off blood supply to the heart (resulting in heart attack) or brain (leading to stroke).

Many patients with cardiovascular disease have additional health problems, with approximately 38% having arthritis, 26% back pain, 16% diabetes, and a further 14% with respiratory disease, including asthma.¹

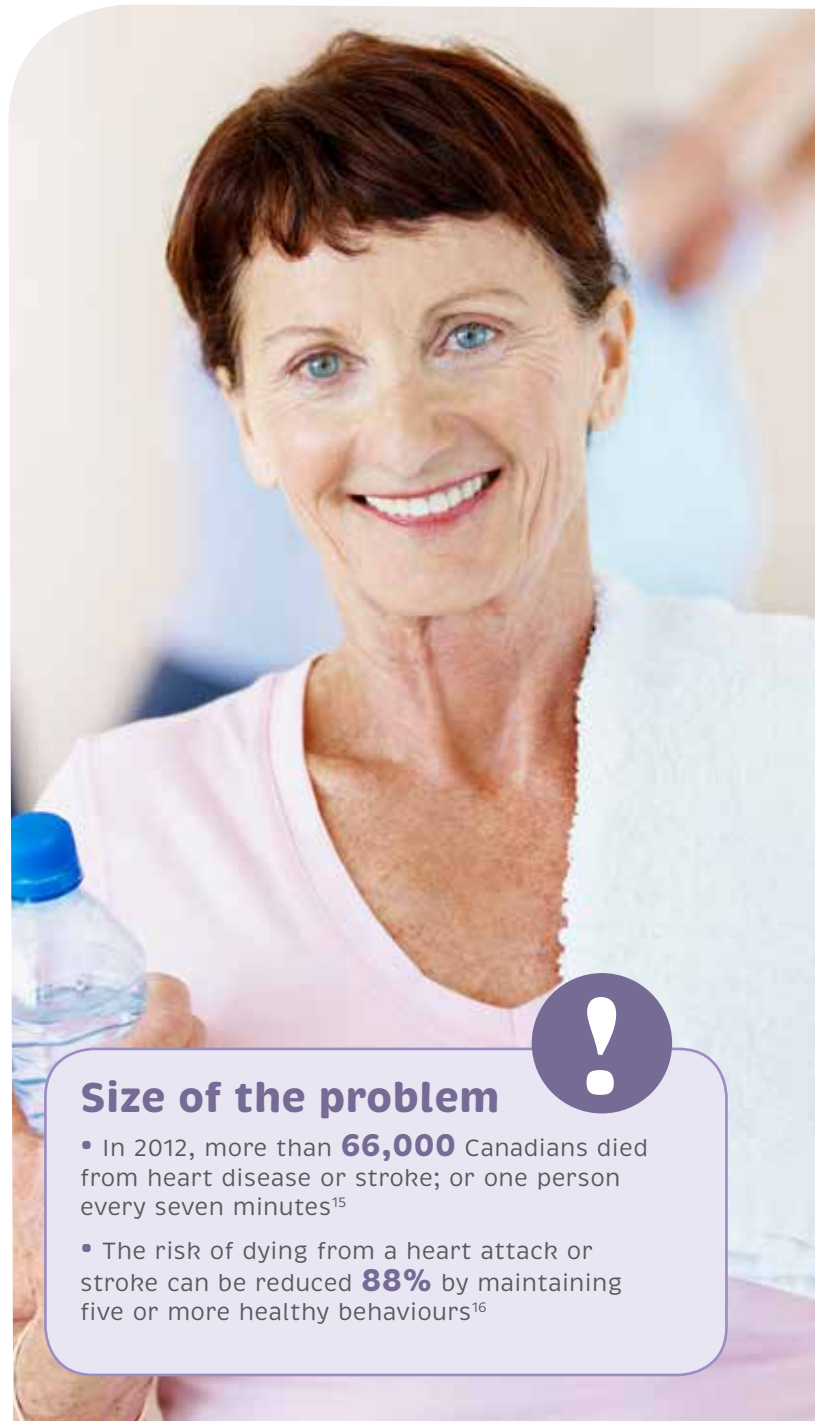
Rehabilitation

Exercise-based cardiac rehabilitation programs are clinically effective in reducing mortality, improving health and quality of life, reducing length of hospital stay, and reducing the number of hospital readmissions.^{2,3} The programs also support the individual's return to work and ability to self-manage their condition.⁴

A physiotherapist's knowledge and clinical experience is invaluable in the assessment of cardiac patients, as many present with non-cardiac conditions such as arthritis, back pain, joint replacements, stroke, and respiratory problems. These conditions can contribute to the patient's function and activity limitations and should be considered in management strategies.¹ They need to be identified and assessed in order to adapt therapeutic interventions that will enable patients to engage safely with exercise sessions.

Cardiac rehabilitation is safe, effective and well tolerated by patients with stable conditions.⁵

The exercise component of a rehabilitation program is essential, and demonstrates better outcomes than traditional care.^{6,7} Physiotherapists are integral members of a multi-disciplinary team, prescribing individually tailored exercise programs to their patients as they learn to be physically active and to include activity as part of lifestyle improvement measures. The team approach is cost-effective and leads to a better prognosis.⁴



Size of the problem

- In 2012, more than **66,000** Canadians died from heart disease or stroke; or one person every seven minutes¹⁵
- The risk of dying from a heart attack or stroke can be reduced **88%** by maintaining five or more healthy behaviours¹⁶

Reducing the cost burden

A Canadian retrospective study showed that cardiac rehabilitation has the potential to reduce the risk of cardiac mortality by up to 50% in the five years following an acute cardiovascular hospitalization.⁸ However, cardiac rehabilitation program attendance is low. In Alberta, a recent regional analysis showed that less than 50% of those referred for cardiac rehabilitation participated.⁷

Cardiac rehabilitation has been shown to be cost-effective compared with traditional care. A recent cost analysis found that over a two-year period, the benefits of reduced mortality and readmissions gained with cardiac rehabilitation could save the health system just under \$400,000.⁹

There is evidence that exercise-based cardiac rehabilitation may be safe and beneficial for seniors with coronary heart disease.¹⁰ Improved physical function can restore their ability to complete daily tasks and live independently.¹¹

Physiotherapists are key to implementing cardiac rehabilitation programs that are accessible and appropriate for all patients.¹ Exercise-based cardiac rehabilitation programs improve cardiovascular fitness which in turn decreases mortality. A recent Alberta study showed that for each metabolic equivalent in cardiovascular fitness gained, there was a 30% reduction in mortality within the 'low fitness' group of cardiac rehabilitation participants.¹²

In 2010, the Canadian Association of Cardiac Rehabilitation (CACR) and the Canadian Cardiovascular Society (CCS) released a joint position statement calling for increased utilization of cardiac rehabilitation, targeting 85% of the eligible patient population.¹³ CACR publishes the evidence-based Canadian Guidelines for Cardiac Rehabilitation and Cardiac Disease Prevention: Translating Knowledge into Action (3rd edition) to promote and support quality clinical practice of cardiac rehabilitation.¹⁴

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Conclusion

Cardiac rehabilitation is an inexpensive treatment that saves lives. It enhances independent living in seniors and improves function and capacity in stroke survivors. Physiotherapists have a vital role in cardiac rehabilitation. Their clinical expertise prepares them to tailor cardiac rehabilitation programs to meet individual needs, deliver public health messages and support individuals making lifestyle changes, thereby improving their quality of life and reducing the economic burden on Canadian healthcare.



Cost of cardiovascular disease

- Cardiovascular disease is a serious public health issue, affecting **1.6 million** Canadians¹⁸
- Heart disease and stroke costs the Canadian economy more than **\$20.9 billion** every year in physician services, hospital costs, lost wages, and decreased productivity¹⁹
- Heart disease and stroke costs Alberta **\$373 million** annually¹⁷

Physiotherapy Works
Cardiac Rehabilitation

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