

Canadian Guidelines for Cardiac Rehabilitation and Cardiovascular Disease Prevention 3rd Edition

Translating Knowledge into Action

The overall objective of these Guidelines is to improve the clinical practice of Cardiac Rehabilitation (CR) through knowledge translation, knowledge transfer, and the professional development of persons working in the field of CR or interacting with CR professionals. The clinical questions or subject areas covered by these Guidelines include all areas of CR service delivery and additional relevant information regarding the prevention, diagnosis, treatment, management of cardiovascular disease and the evolving impact CR can have on Chronic Disease Management. The following is a brief overview of the chapters.

Chapter 1. *Introduction: Translating Clinical Knowledge into Clinical Actions.* Provides readers with a broad overview of Clinical practice Guidelines (CPG). Examines the continuum of CVD care, the action gap between clinical knowledge and clinical practice implementation, why CR should be integrated into standard CVD care, and how CR historically was, and remains, the quintessential example of chronic disease care management.

Chapter 2. The Burden of Cardiovascular Disease in Canada. Examines the epidemiology of CVD with a unique emphasis on the demographics and geography of Canada.

Chapter 3. The Pathophysiology of Atherosclerosis and Cardiovascular Disease. Examines the current thinking and scientific evidence regarding atherosclerosis with particular emphasis on the chronic inflammatory, relapsing and recurring nature of this disease process.

Chapter 4. The Principles of Chronic Disease Care. Provides a detailed description of chronic disease management, and in particular, the chronic care model as described by Wagner et al., 2001.

Chapter 5. Cardiac Rehabilitation as Chronic Disease Care. Provides new and emerging evidence with respect to the beneficial effects of exercise therapy and CVD risk factor modification on vascular biology and cellular DNA stability is presented. Information regarding the cost-effectiveness of CR and the potential cost-savings that may be realized by CR programs is also presented.

Chapter 6. Behavioural and Psychosocial Issues in Cardiovascular Disease and Cardiac Rehabilitation. Presents the complex issues of behavioural modification, psychosocial assessment, sexual health and their appropriate treatments.

Chapter 7. Return to Work. Emphasizes the essential nature of vocational assessments within CR programs, the importance of establishing medical stability before returning to work, and the need to consider physical requirements, job characteristics, environmental factors and the individual's functional capacity in return to work decisions.

Chapter 8. *Nutrition and Diet Therapy.* Outlines the basic building blocks of a healthy diet including protein, fat, carbohydrate, fibre, trace elements, and antioxidants and highlights some of the latest research concerning plant-based diets and low-carbohydrate diets.

Chapter 9. Health Behaviour Interventions and Cardiovascular Disease Risk Factor Modification. Written in conjunction with the Canadian Vascular Coalition, presents the first fully consolidated and harmonized presentation of cardiovascular health recommendations with respect to physical activity, diabetes, hypertension, and dyslipidemias, obesity, and smoking cessation in Canada.

Chapter 10. *Risk Stratification, Exercise Prescription, and Program Safety.* Explores how an individual's cardiometabolic fitness (functional capacity + CVD risk factor burden) is one of the major determinants of sustained CVD wellness.

Chapter 11. *Program Models for Cardiac Rehabilitation.* Using experience gained from the Ontario CR Pilot Project, it expands on these concepts with an emphasis on comprehensive CR services in both the in-patient and out-patient settings.

Chapter 12. *Program Administration and Human Resources.* Expands on the personnel section and core competencies for CR professionals have been identified. In addition, basic and preferred qualifications for CR personnel are presented.

Chapter 13. Information Management, Quality Metrics, Performance Measures and Outcomes Assessment. Explains the concept of performance measures, particularly those contained within the CACR CR Registry.

Chapter 14. *Special Populations.* Expands on the previous Guidelines and includes extensive new information on pacemaker and ICD patients along with information on CR in children and adolescents with congenital heart disease.

Chapter 15. *Research Opportunities in Cardiac Rehabilitation.*. Presents a number of potential research projects and ideas within a wide array of cardiovascular topics.

Chapter 16. *The Future of Cardiac Rehabilitation and Chronic Cardiovascular Disease Care.* Expands on many of the goals of the Canadian Heart Health Strategy, particularly the leading role CR programs need to take in the provision of chronic CVD services. If chronic disease care programs such as CR are to be effective, they must begin to function within a social environment that respects and fosters the principles of healthy living and healthy communities.

