# International Charter on Cardiovascular Prevention and Rehabilitation: A CALL FOR ACTION

#### PROPOSED VERSION 13

# RATIONALE

Cardiovascular disease remains the leading killer of adult women and men globally. However, as substantial gains in reducing acute cardiovascular mortality have been realized the prevalence of persons living with cardiovascular disease has increased significantly. Without systematic access to formal and informal programs of chronic cardiovascular disease prevention such as cardiac rehabilitation, these individuals will suffer multiple recurrent acute care events and/or unnecessarily premature death.

# AIMS AND FOCUS

The two aims of this Charter are:

- i. to bring together national associations from around the world, to harmonize efforts in promoting cardiovascular prevention and rehabilitation; and
- ii. to document, for the first time, consensus among national associations globally, regarding the internationally-common core elements and benefits of cardiovascular disease prevention and rehabilitation.

The focus of this Charter is on secondary prevention, which has well-established models supported by a robust evidence base. This Charter is visualised to fit within a continuum of care from primary prevention in public health initiatives, through to secondary prevention.



## **DEFINITION**

The World Health Organization (1993) has defined cardiac rehabilitation as:

"The sum of activities required to influence favourably the underlying cause of the disease, as well as to provide the best possible physical, mental and social conditions, so that the patients may, by their own efforts, preserve or resume when lost as normal a place as possible in the community."

This process includes the facilitation and delivery of prevention strategies.

# BENEFITS

Cardiovascular prevention and rehabilitation programs are shown to significantly reduce mortality and repeat hospitalizations (Clark et al., 2010; Davies et al., 2010; Heran et al., 2011). These benefits are demonstrated in patients with acute coronary syndromes, stable chronic angina, stable chronic heart failure, and post-percutaneous coronary intervention, coronary artery bypass surgery, cardiac valve surgery, cardiac transplantation and cardiac resynchronization therapy. There is a growing evidence base on the same benefits of cardiovascular prevention and rehabilitation principles being applied to individuals at high risk, yet not diagnosed with cardiovascular disease (Wood et al., 2008).

In addition to these improved clinical outcomes, cardiovascular prevention and rehabilitation is also highly cost effective (Brown et al., 2003; Papadakis et al., 2005). Furthermore, comprehensive programs of cardiovascular prevention and rehabilitation reach across the continuum of patient care between acute disease and chronic disease care, thus easing the transition of patients from life-threatening illness to lifelong productivity and well-being.

# ACCESS

The only proven chronic disease care process that significantly and substantially reduces the mortality and the morbidity (physical and psychological) associated with this disease is cardiovascular prevention and rehabilitation. Despite the proven clinical and economic benefits of cardiovascular prevention and rehabilitation, it remains a chronically-underutilized resource (Candido et al., 2011; Suaya et al., 2007).

The strong evidence base for cardiovascular prevention and rehabilitation is such that any person diagnosed with cardiovascular disease should be offered a comprehensive program, which is respected in equal importance to the medical or surgical interventions they receive following such a diagnosis. For these reasons, proven mechanisms to facilitate universal access for indicated and eligible patients across sexes, age, ethnocultural and socioeconomic diversity should be instituted, such as systematic referral strategies (Grace et al., 2011). Referral to cardiovascular prevention and rehabilitation as a performance measure provides a major step to help facilitate accountability for implementing this quality indicator within processes of care (Thomas et al., 2010).

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## STRUCTURE

Cardiovascular prevention and rehabilitation programs facilitate chronic cardiovascular disease care by specifically targeting patients' cardio-metabolic health and psychosocial well-being. The core components of contemporary cardiovascular prevention and rehabilitation programs are therefore intended to mitigate the atherosclerotic disease processes that drive cardiovascular disease progression and the related effects this has on psychosocial health. These components include individualized programs of cardio-protective pharmacological therapies in conjunction with health behaviour and education interventions of physical activity and exercise, nutrition, weight management, psychological health, and smoking cessation that are sensitive to and reflective of the socio-economic and cultural mosaic in which they are offered (Stone et al., 2009; BACR, 2007; Balady et al., 2007). Secondary prevention, including blood pressure and cholesterol management and the prescription of cardio-protective medication also forms an integral part of effective cardiovascular prevention and rehabilitation. Likewise, defining the core competencies of professionals providing these core components help align health care providers, educators, students, and administrators with defined expectations for knowledge and skills in providing cardiac rehabilitation/secondary prevention services (Hamm et al., 2010).

Cardiovascular prevention and rehabilitation programs may be offered and are equally effective in institution-based, community-based and home-based settings (Clark et al., 2010; Taylor et al., 2010; Dalal et al., 2010, Wood et al., 2008; Jolly et al., 2006). The Secondary Prevention of coronary heart disease for All in Need (SPAN) framework forwards a flexible model that can be adapted to diverse settings while ensuring a minimum care standard (Redfern et al., 2011). These parameters, if appropriate, can be applied to primary prevention.

# **ACTIONS**

Both government and private organizations responsible for the provision of patient care services can no longer deny patients with cardiovascular disease access to cardiovascular prevention and rehabilitation.

We call to action cardiovascular prevention and rehabilitation organizations and established associations around the world to partner and collaborate with those responsible for administering patient care:

- To establish cardiovascular prevention and rehabilitation as an obligatory, not optional service
- 2. To support both low-to-middle and high-income countries to establish and augment, respectively, programs of cardiovascular prevention and rehabilitation (adapted to local needs and conditions) to ensure broader access to these proven services

We aim to maintain and grow this consortium through partnership with international organizations, to consider and communicate on-going consensus on evidence-based standards for cardiovascular prevention and rehabilitation.

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### **ENDORSING ORGANIZATIONS**

## International Charter on Cardiovascular Prevention and Rehabilitation: A CALL FOR ACTION

#### Endorsed by the following organizations:

- American Association of Cardiovascular and Pulmonary Rehabilitation
- American Society for Preventive Cardiology
- Australian Cardiovascular Health and Rehabilitation Association
- The Brazilian Group of Cardiopulmonary and Metabolic Rehabilitation of the Brazilian Society of Cardiology
- British Association for Cardiovascular Prevention and Rehabilitation
- Canadian Association of Cardiac Rehabilitation
- Canadian Cardiovascular Society
- Cardiac Rehabilitation Association of New Zealand
- Centre for East-meets-West in Rehabilitation Sciences, Department of Rehabilitation Sciences, Hong Kong Polytechnic University
- Chinese Society of Cardiac Rehabilitation
- Iranian Heart Foundation
- Irish Association of Cardiac Rehabilitation
- National Society for the Prevention of Heart Disease and Rehabilitation (India)
- The Saudi Group for CardioVascular Prevention and Rehabilitation
- Sociedad Cubana de Cardiología

































