

Cardiac Rehabilitation Program Design: From Hospital to Community

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LAU: Cardiac Rehabilitation Program Design: From Hospital to Community. Cardiac rehabilitation should commence in hospital and continue in the community. Designing the program has to start with planning followed by logistics for administration. Evaluation for performance is the prerequisite of progressive adjustment. The program should comprise of the core components of cardiac rehabilitation including patient assessment, nutritional counseling, lipid management, hypertension management, smoking cessation, weight control, diabetes management, psychosocial management, physical activity counseling as well as exercise training. Program design for different patient categories should be adapted to the setting and suit the individual patient. (*J HK Coll Cardiol* 2006;14(Suppl 2):B76-B78)

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摘要

心臟病復康規劃應開始於醫院，並在社區中延續。規劃的設計應跟隨後勤和管理而制定。執行的評估對於不斷的調整是尤為重要的。規劃應當包括心臟病復康的核心組成部分，包括病人的評估、營養諮詢、血脂的控制、高血壓的控制、戒煙、體重控制、糖尿病的控制、社會心理指導、體育鍛煉諮詢和運動訓練。對於不同種類的病人，規劃的設計應有針對性，並且適合於每個病人。

關鍵詞：心臟病復康 規劃設計

Introduction

Cardiac rehabilitation should be an integral component of the long term comprehensive care of cardiac patients. The program commences in hospital and should be continued in the community and accomplish a sustained lifelong commitment. However, the establishment, provision and participation are far from ideal in many situations. The planning and design of a practical and effective program will be discussed.

Aim of Program

Cardiac rehabilitation is that process through which cardiac patients return to an active and satisfying life and aimed at preventing the recurrence of further cardiac events.

Candidates

The World Health organization has stated that cardiac rehabilitation should be made available to all cardiac patients and their families. The traditional programs are originally designed for post myocardial infarction patients. The other category of patients included chronic ischaemic heart disease, post percutaneous intervention, post coronary artery by pass grafting, post-transplant, post device implantation, post valvular surgery and congestive heart failure.

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Program Planning

Cardiac rehabilitations need evidence of their value and proper on going planning to ensure program efficacy. Traditional Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis can be applied in program analysis. Subsequently, a suitable program can be formulated to the specific needs of the locality and individual patients. Program implementation should go according to action plans and procedures. The plan should include establishment of policies, procedure manual, administrative structure, treatment protocol and budgets.¹

Program Administration

The medical director as leader of the multidisciplinary team should assure that secondary prevention programs function effectively to improve quality of care for patients with cardiovascular diseases.² Effective program management include program structure and schedule, policies and procedures, program personnel, equipment and facilities, program evaluation, emergency procedures and documentation.

Program Evaluation

The performance of the program has to be monitored against the projected performance followed by corrective actions all the time. The program has to make adjustments or reorganization subsequent to changes in the external and internal environment.

Program Structure

Traditionally, there are 4 phases of cardiac rehabilitation. The inpatient phase 1, out-patient phase 2, the early maintenance phase 3 and the lifelong maintenance phase 4. Arbitrary dividing the program

into phases serve as guidance in planning the program but is by no means a rigid structure. After the inpatient phase 1, the phase 2 program could be inpatient, hospital based out-patient or in the community. Long term maintenance phase is usually conducted in the community setting. Irrespective of the phases, the structured program should contain the core components.

Core Components

Cardiac rehabilitation /secondary prevention programs should contain specific core components that aim to optimize cardiovascular risk reduction, foster healthy behaviors, reduce disability and promote an active lifestyle for patients with cardiovascular disease.³ The core components included patient assessment, nutritional counseling, lipid management, hypertension management, smoking cessation, weight management, diabetes management, psychosocial management, physical activity counseling as well as exercise training.

Treatment to Target

To achieve management of the risk factors to target with optimal benefit is the therapeutic goal of the cardiac rehabilitation programs.⁴ Patients in the cardiac rehabilitation programs are monitored for the progress.

Variability and Alternative Delivery Models

It is well known that different countries or geographical area have very different characteristics due to difference in healthcare delivery, settings and participants. The local practice should be matched to the requirements and expectations. When traditional outpatient cardiac rehabilitation programs does not fit

the participants, alternative models include nurse-coordinated care management programs, Self directed individual patient monitoring using various tools, community-based group follow-up using nurses and other allied healthcare providers to assist patient in maintaining adherence.⁵ A modular approach for the secondary prevention of coronary heart disease where by the participants will participate in risk factor modules of their choice with exception of the mandatory blood cholesterol module have been tried.⁶ Efficient referral procedures and flexibility may enhance the participation rate.

Hospital to Community

Patients are motivated and could be recruited and started in cardiac rehabilitation program when they are admitted to hospital for an event, procedure or operation. Subsequent return to community and designing of programs with convenient and easy access, economical, pleasurable and effective in maintaining adherence should be the target.⁷

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