



**Service Priorities and Programmes**  
**Electronic Presentations**

**Convention ID:** 368

**Submitting author:** Ms Pauline Wai Kuen FONG

**Post title:** Physiotherapist I, Prince of Wales Hospital, NTEC

**The Effect of Trial Cardiac Rehabilitation Phase II for post coronary artery bypass graft (CABG) patients in PWH**

*Fong WK, Kam SW, Ho SY, Wong I*

*Physiotherapy Department, Prince of Wales Hospital*

**Keywords:**

physiotherapy

cardiac rehabilitation

post-operative care

exercise

CABG

**Introduction**

Cardiothoracic Surgery Unit of Prince of Wales Hospital performed around 340 cardiac operations in 2013. Over one third of the patients were under the age of 60, and most of them were still working. A supervised exercise program (Cardiac Rehabilitation Phase I) run by physiotherapists is implemented to facilitate recovery immediately after surgery in the in-patient setting. However, there is no follow up rehabilitation training (Cardiac Rehabilitation Phase II, CRP II) post discharge. Patients are lack of confidence and guidance in sustaining exercises. CRP II for patients after surgery is essential to fill in this gap.

**Objectives**

It is to determine the effect of CRP II program on post cardiac surgical patients in the aspects of physical ability, lung function and health-related quality of life

**Methodology**

Patients below 70 years old with EF >50%, undergone elective CABG operations were invited to attend a trial CRP II program (10 sessions) within 1-2 weeks after discharge. Incremental shuttle walking test (ISWT), lung function test (LFT), self reported health-related questionnaire was done pre-operatively, pre-discharge, pre-CRP II, post-CRP II and three months post-CRP II. The study period was from 16 Oct 2012 to 16 July 2013

**Result**

There were 7 patients (5 males and 2 females) completed the trial course of CRP II. The mean height, weight and BMI of them were 72.5kg, 1.63m and 27.1 respectively. There were significant increase on ISWT distance ambulated (42.89%) and Force Vital Capacity result (FVC, 19.25%) within subjects after the completion of CRP II,  $p < 0.001$ . Pairwise comparison showed significant increase when comparing FVC post-operatively and three months post CRP II,  $p = 0.034$ . SF-36 physical and mental summary scores (PCS & MCS) also showed significant increase of score when

comparing post-operative and post CRP II condition. The result of this trial program showed that CRP II run by physiotherapist and nurse could significantly improve patients' exercise endurance, lung function and subjective health-related quality of life. Further large-scale program should be implemented to facilitate recovery and rehabilitation of patients underwent cardiac surgery.