

# Service Priorities and Programmes Electronic Presentations

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### Novel Physiotherapy Service in Phase II Cardiac Rehabilitation Program

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#### Introduction

Cardiac Rehabilitation Program with physical activity and training is a Class I recommendation in most contemporary cardiovascular clinical practice guidelines. However, non-adherence and high drop-out rate in traditional CRP would lead to compromised long-term clinical outcomes. A novel physiotherapy (PT) service model for Phase II Cardiac Rehabilitation Program (CRPII) was developed to optimize patient adherence on exercise therapy, acquisition of self-management skills and patient satisfaction.

# **Objectives**

This quality improvement initiative were to investigate:

- 1. Patients' perceived effectiveness for different components of the novel PT service model
- 2. Patient satisfaction
- 3. Correlation between different PT components and patient satisfaction

## <u>Methodology</u>

In addition to the traditional Hospital-based Exercise Training, two new and important components, Physical Activity Counselling and Self-Directed Outdoor Exercise Session, were integrated into this novel PT service model for CRPII. It was aimed to facilitate long term exercise habit and adherence, with promotion of patient autonomy and acquisition of self-management skill for home-/community- based exercise training.

Outcome measures, including patient perceived effectiveness on different PT components and patient satisfaction in terms of net promoter score (NPS) were measured with the Likert Scale (0-10). The difference in NPS between the exercise groups with and without outdoor exercise session was analyzed with Mann-Whitney U test. Further, Spearman's rho correlation among different PT components and the NPS were calculated.

#### Result

From August 2015 to February 2017, 59 patients completed CRP II, in which 55 were

male. Their mean age was 58, ranging from 31 to 79.

The perceived effectiveness of different PT components were: Hospital-based Exercise Training:  $7.51 \pm 1.89$ , Physical Activity Counselling:  $8.92 \pm 1.06$ , Self-Directed outdoor Exercise Session:  $7.59 \pm 2.24$  (ANOVA; F=12.09, p<0.001, between-group difference).

The overall NPS were  $8.73 \pm 1.62$ , with those who attended the Self-Directed Outdoor Exercise Session showed apparently higher satisfaction ( $8.92 \pm 1.61$ ) than those who received the Hospital-based Exercise Training ( $8.43 \pm 1.62$ ) (p=0.156, between-group difference).

A moderate correlation was found between the NPS and physical activity counselling (rs=0.544, p<0.001) while there was a low correlation between the NPS and self-directed outdoor exercise session (rs=0.359, p=0.031).

Physical activity counselling and self-directed outdoor exercise session were found to have significantly higher perceived effectiveness. In addition, these two novel PT components were correlated with better patient satisfaction.