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### A RANDOMISED, CONTROLLED TRIAL OF PULMONARY REHABILITATION, WEEKLY EXERCISE AND BETTER HEALTH SELF-MANAGEMENT IN COPD

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Pulmonary Rehabilitation (PRP) improves health outcomes in COPD, but the benefits of ongoing PRP are less clear. Similarly, the Stanford Better Health Self Management program (BHSMP), which empowers the chronically ill to self manage their health has been shown to improve health outcomes. We sought to compare the efficacy of these different approaches.

**Methods** 79 adults with COPD (Mean FEV<sub>1</sub> 0.94 L (SD 0.48, 42 male, mean age 69 (SD 9 years) were randomized to the 6 week Stanford Model BHSMP, a 6-week PRP alone or PRP and weekly, maintenance exercise. All subjects had baseline, post program, 6 and 12 months outcome assessments of physiological, psychological and health care utilization.

**Results** Data collection is ongoing and initial Incremental Shuttle Walk Test (ISWT) results are presented below (mean (SD)).

	CDSMP		PRP alone		PRP & maintenance	
	n	ISWT	n	ISWT	n	ISWT
Baseline	19	163 (1.4)	53	170 (3.5)		
Week 7	18	204(14)	42	229 (81)	16	257(2.6)
Week 26	11	202(15)	23	214 (104)	11	245(95)

All groups improved during the initial programs and no statistically significant difference in improvement was observed between the groups.

**Conclusions** Both BHSMP and PRP improve exercise tolerance and quality of life. Further, longitudinal data will demonstrate the duration of these benefits.

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**Keywords:** Pulmonary Rehabilitation, Self-efficacy, COPD

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### OUTCOMES OF A COMMUNITY BASED PULMONARY REHABILITATION PROGRAM

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Pulmonary rehabilitation improves exercise capacity and quality of life (QOL) in patients with COPD. Outpatient pulmonary rehabilitation programs are usually conducted in hospitals. There has been a reluctance to locate programs in the community, possibly due to a lack of respiratory expertise in community healthcare and a concern about safety.

**Aim** To determine if a 6-week pulmonary rehabilitation program (PRP) conducted in the community was practical, safe and able to obtain improvements in QOL and exercise capacity.

**Methods** 48 patients with a diagnosis of chronic lung disease (mean  $\pm$  SD) (predicted FEV<sub>1</sub> 45  $\pm$  18%, mean age 68 range 38–84 years) were enrolled in a PRP. Measurements of exercise capacity (Incremental Shuttle Walk Test (ISWT)) and QOL (Chronic Respiratory Disease Questionnaire (CRDQ)) were made before and after the program.

**Results** 37 patients (77%) completed the program. All participants were satisfied with the venue chosen for the program and no serious adverse events were recorded. Following the PRP 56% of patients exceeded the minimal clinically important difference (MCID) for dyspnoea, 39% for emotional function, 58% for fatigue and 56% for the mastery domains of the CRDQ. The ISWT was unchanged following rehabilitation ( $P = 0.24$ ) with only 27% of patients obtaining an improvement that exceeded the MCID.

**Conclusions** A PRP conducted in the community is safe, effective and acceptable to patients. Further investigation will evaluate the effect of the program on acute healthcare utilisation.

**Keywords:** Pulmonary rehabilitation, Chronic Obstructive Pulmonary Disease, Incremental Shuttle Walking Test

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### BUILDING SUSTAINABLE HEALTH CARE PARTNERSHIPS SUPPORTING INFORMED PATIENT/GP CHRONIC CONDITION SELF-MANAGEMENT APPROACHES

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**Aim** To implement a Chronic Condition Self Management (CCSM) model within the framework of the Enhanced Primary Care (EPC) package.

**Method** A model care plan was developed and provided to participating GPs and practice nurses in the intervention arm trained in the principles of CCSM using the Flinders Partners in Health (PIH) and Cue and Response interview tools.

**Results** Utilization of the EPC items by GPs met with mixed success. No case conferences were initiated by GPs. Care plans facilitated by practice nurse 100%, without practice nurse support 50% of care plans completed.

**Discussion** The multitiered and itemised nature of the new payments created significant administrative burden for GPs and a perception that they did not provide sufficient financial incentive. Different models were used in this study in which the practice nurse played a greater role in facilitating integrated service delivery using the Flinders Cue and Response and PIH interview approaches to support the GPs prepare the care plans. When the practice nurse was not involved it necessitated some patients attending two to three times for their GP to complete the EPC care plans. Some of the patients found this time consuming and perceived it as a barrier not dissimilar to what has been reported with the Asthma 3 + Visit plans. Supported by the South Australian Department of Human Services and the Flinders Human Behaviour & Health Research Unit

**Nominations for Awards** Nurse

**Keywords:** self management, practice nurse, General Practice

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### A RESPIRATORY HOTLINE FOR CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) PATIENTS REDUCES HOSPITAL USE AND IS COST EFFECTIVE – 12 MONTHS EXPERIENCE

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The hospital costs associated with acute exacerbations of COPD are high. Early intervention may avoid hospitalisation but after-hours nonhospital medical care may not be available. Western Sydney RAC established a Respiratory Hotline (24- h/7 days) in September 2002 to support early intervention for patients with COPD. Patients referred to RAC are given the Hotline number plus an individualised action plan, are educated about implementation of the plan and encouraged to call for support if usual medical care is unavailable.

**Aim** To evaluate the usage and efficacy of the Hotline.

**Methods** A retrospective review of all calls to the Hotline.

**Results** Since September 2002, 192 calls have been received, with 57 000-calls averted, 12 planned hospital admissions arranged and advice/reassurance given in 102 calls. 64% of calls occurred after hours. Callers ( $n = 59$ ) had more severe COPD compared with noncallers ( $n = 322$ ) (FEV<sub>1</sub> 0.81  $\pm$  0.42 L vs. 0.99  $\pm$  0.44 L, respectively,  $p < 0.005$ ,  $t$ -test), lower exercise capacity (6MWD 332  $\pm$  130 m vs. 375  $\pm$  130 m,  $p < 0.03$ ), more symptoms (St George Respiratory Questionnaire Symptom score 67  $\pm$  20% vs. 60  $\pm$  23%,  $p < 0.04$ ) and greater prescription of home oxygen (39% vs. 24%,  $p < 0.03$ , Chi-square test), but were not more anxious (Hospital Anxiety Score 8.6  $\pm$  4.1 vs. 7.9  $\pm$  4.5,  $p > 0.05$ ). Non-callers were more likely to live alone (23% vs. 7%,  $p < 0.01$ ) Conservative cost analysis (prevented admissions) estimates savings with the Hotline of ~\$250 000.

**Conclusion** The Hotline (staffed by experienced nurses) reduces unplanned Emergency Department presentations and is cost effective.

Appropriately, patients with more severe COPD (assessed by lung function, exercise capacity, quality of life and oxygen use) are using the Hotline.

**Keywords:** Respiratory Hotline, COPD, action plans