Poster sessions

were integrated care/case management packages with significant self-management components. RCT follow-up ranged from 3-12 months with a total of 1113 (range 33-464) patients enrolled. Results from n=4 RCTs indicate a reduction in re-admissions of borderline significance (OR 0.65 (95% CI 0.42, 1.00)) but no significant effect on mortality (OR 1.22 (95% CI 0.79, 1.86)). Effect on overall quality of life was heterogeneous with large loss-to-follow-up. There were no cost-effectiveness studies.

Conclusions There is a paucity of good quality large RCTs of supported self-management delivered at discharge. Interventions are disparate and few studies report significant benefits in important outcomes. However, effect sizes for reduction in admissions are consistent with published evidence of self-management interventions delivered whilst patients are stable.

P47

PATIENT CHARACTERISTICS OF THOSE REFERRED AND NOT REFERRED FOR EARLY POST-HOSPITALISATION PULMONARY REHABILITATION

¹SE Jones, ¹SSC Kon, ²SA Green, ²D Bell, ¹JL Canavan, ¹CM Nolan, ³AL Clark, ⁴M Dickson, ⁴A-M Nolan, ¹S Fleming, ⁴M Haselden, ¹WD-C Man; ⁷Respiratory NIHR Biomedical Research Unit, Royal Brompton & Harefield NHS Foundation Trust and Imperial College, Harefield, Middlesex, United Kingdom; ²NIHR CLAHRC for Northwest London, London, UK; ³Harefield Pulmonary Rehabilitation Unit, Royal Brompton and Harefield NHS Foundation Trust, Harefield, Middlesex, United Kingdon; ⁴The Hillingdon Hospital NHS Foundation Trust, Uxbridge, UK

10.1136/thoraxjnl-2013-204457.197

Background Early post-hospitalisation pulmonary rehabilitation (PR) following acute exacerbation of COPD (AECOPD) has been shown to improve health-related quality of life (HRQOL), increase exercise capacity and reduce rate of hospital readmission. However, only a minority of eligible patients are referred for (or receive) this intervention. The aim of this study was to determine differences in baseline characteristics between those referred or not referred for early post-hospitalisation PR. We hypothesised that those with poorer lung function, worse functional capacity, increased muscle weakness and cachexia would be less likely to be referred for early post-hospitalisation PR.

Methods Two hundred and twenty six patients hospitalised for AECOPD were consecutively recruited on day of hospital discharge. All fulfilled the eligibility criteria for PR, which included the ability to walk 5 metres independently. The following measurements were performed on day of hospital discharge by the research team: spirometry, anthropometry (body mass index: BMI and fat free mass index (FFMI)), lower limb muscle strength (Quadriceps Maximum Voluntary Contraction: QMVC), functional capacity (4-metre gait speed (4MGS)), HRQOL (COPD Assessment Test (CAT)) and Hospital Anxiety and Depression scale (HAD)). Length of stay (LOS), previous admissions to hospital in past year, social deprivation scores (based on postcode) and smoking history were also recorded. The decision to refer was made by the clinical team, blinded to results of outcome measurements.

Results The results are seen in Table 1. Seventy three patients (32%) were referred for early post-hospitalisation PR. Contrary to our hypothesis, there was no difference in spirometry, muscle strength, functional capacity or muscle mass between patients that were referred or not referred for early post-hospitalisation PR. There were also no differences in HRQOL, anxiety or depression scores, smoking status, social deprivation score or number of hospitalisations in past year. The only significant

difference was a slightly reduced length of hospital stay for those referred to PR

Conclusion Reasons for non-referral for post-hospitalisation PR cannot be simply explained by physiological characteristics at hospital discharge, and are likely to be secondary to complex interactions between patient and healthcare professionals. Further qualitative work is required to understand these interactions and relationships.

	Referred to PR (n = 73)	Not referred to PR (n = 153)	p value
Age (years)	71 (64, 79)	74 (66, 82)	p = 0.10
MRC Dyspnoea score	4 (3, 5)	5 (3, 5)	p = 0.39
BMI (kg/m²)	25.8 (21.8, 31.5)	25.5 (22.0, 29.4)	p = 0.45
FEV ₁ (% predicted)	35.0 (24.8, 49.5)	34.0 (26.0, 48.3)	p = 0.73
QMVC(% predicted)	40.3 (27.2, 52.8)	41.5 (28.6, 58.4)	p = 0.44
FFMI (kg/m²)	15.3 (13.3, 17.4)	15.5 (14.0, 17.5)	p = 0.52
4MGS (metres/second)	0.64 (0.24)	0.57 (0.28)	p = 0.09
CAT	25 (7)	24 (8)	p = 0.47
HAD A	7 (4 , 11)	7 (4, 10)	p = 0.94
HAD D	6 (3, 9)	6 (4, 9)	p = 0.53
Length Of Stay (days)	2 (1, 4)	3 (2, 6)	p < 0.01
Smoking Pack Year History	45 (27, 59)	36 (20, 55)	p = 0.08
Current smoking status	25:48	57:96	p = 0.77
(current:former)			

Data expressed as mean (SD) and median (25th, 75th percentile).

34

Hospitalised in past year (%)

Social Deprivation IMD

MRC, Medical Research Council dyspnoea score; BMI, body mass index; FEV₁, forced expiratory volume in 1 second; QMVC, quadriceps maximum voluntary contraction; FFMI, fat free mass index; 4MGS, 4-metre gait speed; CAT, COPD assessment tool; HAD, Hospital Anxiety and Depression.

38

20.99 (12.60, 28.03) 20.22 (12.17, 27.38)

p = 0.66

D/10

AN EVALUATION TO UNDERSTAND THE USE OF TECHNOLOGY WITHIN A COPD POPULATION

¹M Gibb, ¹V Willott, ¹S Lohar, ¹S Ward, ²C Bolton, ³P McAlinden, ⁴A De-Soyza, ⁵S Singh; ¹University Hospital of Leicester, Leicester, United Kingdom; ²University of Nottingham, Nottingham, United Kingdom; ³Sir William Leech Centre for Lung Research Freeman Hospital, Newcastle Upon Tyne, United Kingdom; ⁴Institute of Cellular medicine, Newcastle University and COPD Service Freeman Hospital Newcastle, Newcastle Upon Tyne, United Kindom; ⁵Faculty of Health and Life Sciences Coventry University, Coventry, United Kingdom

10.1136/thoraxjnl-2013-204457.198

Introduction and Objectives There is a desire to employ technology to support patients with long term conditions. However there is little data available that describes familiarity with technology in the COPD population. We have an interest in developing alternative forms of pulmonary rehabilitation deploying technology. Therefore the aim of this evaluation was to understand the use of technology in this population.

Methods Patients attending a consultant led COPD follow up clinic were asked to fill out a 10 itemed survey regarding their physical activity levels, if they had an interest in pulmonary rehabilitation and technological devices they may use.

Results 191 patients returned the surveys, 168 from the Glenfield Hospital Leicester and 23 from the Newcastle upon Tyne Hospitals. The population surveyed consisted of 76 males, 81 females and 34 who did not specify their gender. The age range

A96 Thorax 2013;68(Suppl 3):A1–A220