

Appendix 7: Table of Systematic Reviews Evaluating the Effect of Self-Management in COPD

Authors	Design	Studies included	Participants n=	Aims	Intervention	HRQoL	All-cause hospitalisations	Respiratory-related hospitalisations	Mortality	ED pres	Anxiety & depression	Dyspnoea	6MWD	Respiratory-related mortality	Medication use	Urgent health care	
Dickens et al., 2014	RCT	32 studies, database inception-2013	3941	To examine the characteristics of complex interventions intended to reduce the use of urgent and unscheduled healthcare among people with COPD	Multiple components and/or professionals, individual, group, phone or computer. Including education, rehabilitation, psychological therapy, social intervention, organisational intervention (e.g. collaborative care or case management), psychological drug trials. Simple interventions, e.g. new treatment for underlying long term condition, compared to treatment as usual excluded												😊
Zwerink et al., 2014	RCT, CCT	29 studies, 1995-2014	3688	To assess the efficacy of self-management interventions for individuals with COPD	Structured interventions aimed at improvement of self health behaviours and self-management skills. Interventions required at least an iterative process of interaction between participant and healthcare provider, and ideally included formulation of goals and provision of feedback. Interventions with < 2 contact moments were excluded.	😊	😊	😊	😞			😊	😞				
Majothi et al., 2015	RCT	9 studies, Moderate-severe COPD, database inception-2012	1466	To evaluate the effect of COPD self-management following admission to hospital	1+ components commonly included in self-management interventions, e.g. action plans, exercise, education, inhaler technique, bronchial hygiene and breathing techniques, stress management and relaxation, nutritional programs, patient empowerment, support groups and telecare, provided in hospital or community setting with a usual care, control, sham intervention or other self-management intervention comparator	😊	😞		😞	😞							
Cannon et al., 2016	RCT	25 studies, 1990-2016	4082	To analyse the outcome of self-management RCTs and their impact upon COPD patients' health outcomes using meta-analysis	Self-management intervention including at least 4 of the following: Exacerbation action plan, COPD education, medication information, management of exacerbations, management of stress and/or anxiety, nutritional guidance, exercise program/information, or managing a healthy lifestyle.	😊	😞				😞		😊				

Howcroft et al., 2016	RCT, quasi RCT	7 studies, Database inception - 2015	1550	Compare COPD exacerbation action plans with a single short educational component + ongoing support directed at use of action plan	Action plan with a single educational component of short duration allowing time for the clinician to personalise plan. Ongoing support delivered by phone or direct contact. Studies with broader self-management support interventions, e.g. education in multiple sessions over a longer period or exercise programmes, with or w/out an action plan were excluded. Active intervention was compared to 'usual care'.	😊			😞	😊	😞					😊	
Jolly et al., 2016	RCT	173 studies, database inception-2012	n/a	To identify the most effective components of interventions to facilitate self-management of health care behaviours	Include 3+ components e.g. structured group-based PR programs (to teach self-management skills); educational self-management interventions delivered in an outpatient setting or at home, sometimes with telephone follow-up; integrated disease management with multidisciplinary input and often some element of monitoring by health professionals; exercise-only interventions (with some dyspnoea management) and respiratory muscle training using threshold devices.	😊	😞										
Jonkman et al., 2016	RCT	14 studies, 1985-2013	3282	Determine if self-management programs were associated with better outcomes and if any subgroups benefit more	Interventions providing information to patients and including 2+ of: stimulation of sign/symptom monitoring; education in problem solving skills, i.e. self-treatment of acute exacerbations and stress/symptom management; smoking cessation; and stimulation of medical treatment adherence; physical activity; or improving dietary intake. Components aimed at enhancing the patient's active role and responsibility.	😊	😊	😊	😞								
Lenferink et al., 2017	RCT	22 studies, 1995-2017	3854	To evaluate the efficacy of COPD-specific self-management interventions that include an action plan for exacerbations	Must include a written action plan for AECOPD and an iterative process between participant and healthcare provider(s) in which feedback was provided.	😊	😞	😊	😞	😞		😞		😞			

Table 😊= improved, 😞= no change, 😟= worsened., grey shading indicates outcome was not analysed. HRQoL= health related quality of life, 6MWD= six minute walk distance, RCT= randomised controlled trial, CCT= controlled clinical trials, COPD= chronic obstructive pulmonary disease, ED= emergency department, PR = pulmonary rehabilitation