

Rice KL, Dewan N, Bloomfield HE, Grill J, Schult TM, Nelson DB, Kumari S, Thomas M, Geist LJ, Beaner C, Caldwell M, Niewoehner DE. Disease Management Program for Chronic Obstructive Pulmonary Disease: A Randomized Controlled Trial. Am J Respir Crit Care Med 2010;182:890-6.

The authors investigated the effect of disease management on chronic obstructive pulmonary disease admissions and emergency room visits. The study was designed as a randomized, controlled trial at five VA medical centers. The study included high risk COPD patients defined as hospital admission or ED visit for COPD, home oxygen or systemic corticosteroid use for COPD within one year.

The no intervention group received usual care. The intervention group received a 1 to 1.5 hour session usually ran by a respiratory care therapist. The session included education on COPD, smoking cessation, use of inhalers, appropriate vaccines and an action plan. Patients were educated on early detection and treatment of their disease. They were also followed up with monthly phone calls.

743 patients were randomized and followed for one year. VA electronic records were used to follow patients. Hospital admissions and ED visits outside VA system were reported by the patients.

There was statistically significant 41% decrease in the primary outcome at the end of one year. All cause hospitalization and ED visits were also decreased by 28% ($p < 0.05$).

This study demonstrates that a relatively simple intervention for disease management can improve hospital admission and ED visits. Although there is a question of how COPD exacerbations were defined; the potential over use of medication; and whether the intervention is cost effective, this study lends credence to the concept that patient education may have a positive effect in severe COPD.

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