management. Data was collected pre and post program, and at 3 month and 6 month follow up visits. There were 16 patients (59.3%) who had complete data and attended all follow-up appointments. Outcomes included the six minute walk test (6MWT) and chronic respiratory questionnaire (CRQ). Follow up visits also assessed exercise adherence and readmissions for respiratory problems.

Results: Repeated measures analysis of variance showed improvement in 6MWT and average metabolic equivalent (MET) from pre to post program ($P < .05$) which remained stable up to 6 months follow-up. The same analysis did not show improvement for any of the variables measured in the CRQ. Exercise routine, as reported by patients at 6 months, was 4.7 days per week for 28 minutes per session. Readmissions for pulmonary problems were reported by 3 patients, 2 at the 3 month assessment and 1 at the 6 month.

Conclusions: Preliminary program results show improvement in physical outcomes and impressive exercise adherence at 6 months follow-up. The small sample size is an obvious limitation, but being an ongoing program, future data will reveal if these initial findings persist.

A Model Applied to a Real Life Situation: Self-Management with a Written Action Plan for Early Treatment of COPD Exacerbations

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Background: We hypothesized that self-management education with the use of a written action plan provided by a nurse case manager can help patients to gain the proper skills to start an early treatment for an acute exacerbation.

Methods: COPD patients from an outpatient clinic with access to a written action plan and self-administered prescription were instructed to initiate

their antibiotics and/or prednisone in case of exacerbation, and call their nurse case manager for supervision. The following data was collected: symptoms change, patients delay in taking action to treat their exacerbations (starting antibiotics and prednisone, calling the case manager) and use of hospital services.

Results: We report on 187 exacerbations occurring in a cohort of 113 moderate / severe COPD patients with FEV₁ of $37 \pm 16\%$ predicted (mean $\pm$ SD). 161 exacerbations were supervised by the case manager at the time of the event. The remaining 26 exacerbations were detected after the event. 87% of the supervised exacerbations presented with 2 major symptoms (increased dyspnea, increased sputum volume and/or purulent sputum). Patient's delay to initiate treatment in supervised exacerbations was 2.04 ± 1.8 days; 85% took action to treat the exacerbation within 3 days. The treatment for supervised and unsupervised exacerbations was similar (slightly more antibiotics and prednisone were used for unsupervised ones) and they had similarly favourable outcomes in terms of health services use, with 68.5% of the exacerbations not requiring any hospital services.

Conclusions: Patients can take an active role, acquire the skills to recognize exacerbation symptoms and start an early treatment of antibiotics and prednisone according to the directives of their written action plan.