physical activity, results obtained from a pilot study show us that 70% of our patients maintain their level three months after their discharge.

**Conclusion:** This type of intervention could be used in other type of settings (rehabilitation or prevention): hospital, school, CLSC’s and community centers.

**An Incremental Shuttle Walk Test to Estimate Maximal Aerobic Functional Capacity**

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**Background:** The goal of the present study was to compare the maximum walking speed and peak oxygen consumption (VO2 peak) obtained during the 6-min walk test (6 MWT) and an incremental shuttle walking test (ISWT) in a trained older population.

**Methods:** A total of 22 older adults (16 female and 6 male) with a group mean age of 70±5.8 yr (range 58 to 79) completed the 6 MWT and ISWT within a 2 wk period. Heart rate (HR) and VO2 peak were measured during each test with a portable metabolic cart (Cosmed, K4B2). The VO2 peak, the maximum walking speed and the total distance walked measured during both tests (6 MWT and ISWT) were compared.

**Results:** A total of 110 recordings for the VO2 peak were obtained and analyzed. Strong correlations were found for the VO2 peak and the walking speed (r=0.91 and r=0.89, respectively, for 6 MWT and ISWT). VO2 peak values obtained with the ISWT were significantly greater (P<0.05) than with the 6 MWT (21.6 ± 5.3 vs 18.9 ml/kgmin ± 4.5, respectively). There was no difference between sexes. In addition, the maximum heart rate as predicted from age during the ISWT was reached by all participants while it was not during the 6 MWT.

**Conclusion:** Thus, the ISWT appears to a better tool to assess the maximal aerobic functional capacity in older healthy adults based on the higher VO2 peak values obtained in comparison to the 6 MWT.

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**Systemic Changes in Patients with Chronic Obstructive Pulmonary Disease (COPD): Two Years of Follow-up**

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**Background:** There is a lack of information concerning the natural evolution of the systemic manifestations related to COPD. The aim of this study was to observe the evolution of the systemic manifestations (muscle wasting, inflammation) related to COPD over a two-year period and to assess their relationships with clinical outcomes (exacerbations and worsening in quality of life) in a longitudinal prospective cohort.

**Methods:** Forty-eight patients with COPD (FEV1: 42 ± 14 % predicted, lean mass: 49 ± 10 kg, 6-min walking distance: 422 ± 112 m, total SGRQ score: 45 ± 17) were included. Baseline and annual follow-up for body composition by DEXA scan, blood cytokines (CRP, IL-6), arterial blood gases, pulmonary function tests and quality of life were obtained. The number of acute exacerbations was recorded.

**Results:** Overall, FEV1, lean body mass, 6-min walking distance and blood inflammatory markers did not change over the two years. During this time, the SGRQ scores decreased by 4 ± 11 points (P=0.021) and 2.7 ± 2.4 exacerbations per patient were observed. There was no relationship between the changes in physiological measures and the fall in SGRQ or the exacerbation rate. A loss in lean body mass > 3% was observed in 11 (23%) patients but this was not associated with any adverse clinical outcomes nor with fur-