16% pred.; SpO₂ (%) rest: 95± 2) were equipped with a portable Jaeger Oxycon Mobile® metabolic system and followed an audio signal for stepping up and down a single 20 cm step for 3 minutes. Borg dyspnea scores were obtained at the end each stepping bout. A 10-min rest was given between each stepping bout.

Results: Of the 43 patients, 80% completed stages 1 and 2, 74 and 37% stages 3 and 4 while no patient of MRC class 4 or 5 (n=8) completed stage 1. Breathing frequency (breaths.min⁻¹) spanned from 26.5± 4.1 to 39.0±6.4 but VT (L) remained unchanged (1.4± 0.3 vs. 1.5±0.4) from stage 1 to 4 while Borg scores were 3 ± 1, 4 ± 1, 5 ± 2, 6 ± 3 respectively and SpO₂ (%) were 92±5, 91±4, 91±4 and 90±4.

Conclusions: Preliminary findings indicate that a 3-min constant rate step test may present a feasible alternative to laboratory testing to assess exertional dyspnea in moderately severe COPD. In this population, a stepping rate of 26 steps·min⁻¹ could be sustained by the majority of patients while producing a level of dyspnea potentially amenable to therapy.

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Quality Assurance and the Service Domain in Cardiac and Pulmonary Rehabilitation

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Background: Little is known about the quality assurance methods used on cardiac and pulmonary rehabilitation. Also, little is known as to what extent the service domain is evaluated and what methods are employed. Knowledge of what is being done in these regards may facilitate programs effectively and efficiently measuring these outcomes.

Methods: A survey was mailed to 1/3 of the programs (approximately 400) in both cardiac and pulmonary rehabilitation listed in the AACVPR Program Guide 2004. The survey included questions that would add to the knowledge of what is the extent of practice and

methods. 12 components of quality assurance were listed and 14 components of patient satisfaction were assessed as to the frequency of use. It was pilot tested and revised.

Results: The usable return rate was 48%. Program directors of both types of programs claimed daily formal assessment of most of the 12 areas listed for quality assurance. The three highest being assessment of adverse events, safety, and patient satisfaction. The three lowest use was in the area of efficiency, timeliness and continuity of care. The service domain was assessed as comparable to the other three: health, clinical and behavioral domains. Patient satisfaction was the most commonly assessed component of the service domain with more than 90% of both types of programs measuring program effectiveness, overall program quality and friendliness of the staff. Managers most commonly cited the acquisition of new equipment as the endpoint as the end results of patient satisfaction assessment.

Conclusions: There was surprising similarity in results from programs in cardiac and pulmonary rehabilitation. Quality assurance is very frequently assessed in both. Concern for adverse events, safety, and patient satisfaction predominate.

Use of Preparatory Stability Exercises with Chronic Obstructive Pulmonary Disease Patients (COPD) to Prevent Iatrogenic Injuries during Rehabilitation

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Background: The increasing incidence of injuries sustained by clients during pulmonary rehabilitation, created a need to develop a prevention strategy. A pre-pulmonary rehabilitation stability exercise class was created based on best practice principles from the orthopaedic literature. It has been discussed in the literature that patients who have COPD have poor stability strategies based on the dominance of the need to drive the respiratory system. If successful, it was felt that this program would decrease the incidence of in-