

#### 4.07 Investigating strength in patients completing pulmonary rehabilitation programme – improved results for patients with sarcopenia

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**Background:** Musculature changes in patients with chronic respiratory disease often result in a decrease in strength. This has an impact on dyspnoea and community integration. Sarcopenia causes further deterioration in this cohort. Use of dynamometry is not a standard part of care for patients attending a pulmonary rehabilitation programme (PRP). The purpose of this study was to investigate the effects of a PRP on grip strength. **Methods:** Grip strength was measured using a hand grip dynamometer as part of their pre and post PRP assessments. Sarcopenia was defined as grip strength <16kg for females and <27kg for males. Descriptive statistics analysed results. **Results:** Of 79 patients who completed PR strength assessments, 61% improved and 21% dis-improved. Thirty-one patients were identified as sarcopenic. Female sarcopenia group grip strength increased significantly 14.3 SD (1.75)kg to 17.15 (5.1)kg. Male sarcopenia group grip strength increased significantly 21.7kg SD(3.62)kg to 23.6kg SD (1.98)kg. **Conclusion:** Improvements in strength were demonstrated particularly in patients with sarcopenia. Access to PRPs for sarcopenic patients assists in managing this condition. Further integration could occur with our dietetic colleagues in PR examining increased focus on oral intake. **Conflict of Interest:** Authors declare no conflict of interest.