|  |
| --- |
| **A retrospective analysis comparing home-based tele-rehabilitation and centre-based pulmonary rehabilitation** |
| Sally Wootton1,2, Aimee Fraser1,2, Zoe McKeough2 |
| *1Chronic Disease Community Rehabilitation Service, Northern Sydney Local Health District, Sydney, New South Wales, Australia*  *2Sydney School of Health Sciences, Faculty of Medicine and Health, University of Sydney, Sydney, New South Wales, Australia.* |
| **Introduction/Aim:** This study aimed to determine if a tele-rehabilitation pulmonary rehabilitation (TRPR) program had comparable effects to a centre-based program (CBPR) on exercise capacity and quality of life in people with chronic respiratory disease.  **Methods:** A retrospective analysis of data from five pulmonary rehabilitation programs in Sydney over a 2-year period was performed. The TRPR and the CBPR programs consisted of twice weekly supervised exercise for eight weeks with disease management education. At baseline and program completion, exercise capacity was measured by the six-minute walk test (6MWT) and the 1-minute sit-to-stand test (1minSTS). Quality of life was measured by the St George’s Respiratory Questionnaire (SGRQ). ANOVA was used to determine differences between groups with prespecified equivalence levels (EL) set at 25m for 6MWT, 3 repetitions for 1minSTS and -4 points for SGRQ.  **Results:** Data from 84 participants (mean [SD]: age 78 [10] years; FEV1 69 [21] % predicted; females: 58%; COPD 42%) in the TRPR program and 134 participants (mean [SD): age 76 [11] years; FEV1 65 [21] % predicted; females 58%; COPD 43%) in the CBPR program were analysed. There were no significant between group differences in the change from baseline to follow up in 6MWT distance (mean difference 10 m, 95% CI -10 to 30), the 1minSTS time (mean difference 2 repetitions, 95% CI -0.1 to 3.3) or SGRQ total score (mean difference -1.6 points, 95% CI -5.1 to 1.9) however, the upper end of the CI’s for both 6MWT and SGRQ fell outside of the EL demonstrating that superiority of the CBPR programs could not be ruled out.  **Conclusion:** This retrospective analysis demonstrated that a clinical TRPR program achieved comparable benefits to a CBPR program although superiority of the CBPR could not be ruled out. TRPR may be an effective delivery mode when CBPR is not accessible.  **Grant Support:** Nil |