been shown to be  $\pm 100 \text{ s}^2$  and it is proposed the practise walk may not be needed. Completing the standard ESWT protocol presents a considerable burden to patients and clinicians alike; being able to drop the practise walk would be of benefit. This study investigated the need for a pESWT when measuring change after 8 weeks.

**Method** A retrospective analysis of the data collected from ESWTs performed as part of another study was carried out. A 2-walk and a 1-walk protocol were defined. Both protocols required 2 ISWTs; the 2-walk protocol used 2 ESWTs, the longest taken as the outcome, the 1-walk protocol used the first walk as the outcome. Completion rates, floor and ceiling effects, same-day limits of agreement, and limits of agreement for change over 8 weeks were calculated for the protocols.

**Results** 41 COPD patients (26 male) were recruited; mean (SD) age 68(11) years, FEV1% predicted 47(15.80)%. Results of comparison of protocols are given in Abstract P42 Table 1. At 80%, the limits of agreement for the protocols was less than the 92% change expected from pulmonary rehabilitation<sup>3</sup> and less than that described<sup>2</sup> as 'somewhat better' (113%) but greater than the MCID of 68%.<sup>2</sup> The 1-walk protocol had superior completion but higher ceiling rates.

**Conclusion** The data presented here suggests that, in clinical practice when measuring change related to an exercise intervention, only one ESWT is required. For research purposes, particularly for non-exercise interventions, the standard protocol should be retained as it is more likely to identify marginal difference and demonstrates less of a ceiling effect.

## REFERENCES

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## P43 DO CHANGES IN OBJECTIVE OUTCOME MEASURES MATCH PATIENT-REPORTED EXPERIENCE OF PULMONARY REHABILITATION?

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**Introduction** There are a variety of different objective outcome measures that are currently used to assess patients' response to pulmonary rehabilitation (PR) and the effectiveness of service delivery. Most of these measures have well defined minimal clinically important difference (MCID) thresholds, including the Incremental Shuttle Walk (ISW), Chronic Respiratory Questionnaire (CRQ) and the Hospital Anxiety and Depression scale (HAD). However, it is not clear how many outcome measures are needed to encapsulate patient-reported improvement following PR.

**Methods** 101 patients, completing an 8 week supervised outpatient pulmonary rehabilitation programme, were asked to rate their response with the following question: 'How do you feel your overall condition has changed after rehabilitation?' Responses were categorised according to a Likert scale ranging from 1 'I feel much better' to 5 'I feel much worse'. All patients were blinded to the results of their objective assessments. For every patient responding category 1, we determined whether the MCID was achieved for each of seven different outcome measures: the ISW (>48 m), the four domains of the CRQ (mean change >0.5 per domain), HAD-anxiety (<-1.5) and HAD-depression (<-1.5).

**Results** 64 patients (63%) recorded a response of 'I feel much better'. Of these, the proportion of patients achieving the MCID for the seven different outcome measures is seen in Abstract P43 Table 1 below. 6 patients (9%) achieved the MCID for all outcome measures tested, whilst one patient (1.6%) did not achieve the MCID in any of the outcome measures. Four patients (6.25%) did not achieve the MCID in either the ISW or any of the CRQ domains.

Abstract P43 Table 1 Percentage of patients achieving MCID, who rated their overall condition as being 'much better' after a course of pulmonary rehabilitation

	ISW	CRQ-D	CRQ-F	CRQ-E	CRQ-M	HAD-A	HAD-D
%	50	61	69	61	64	44	55

**Discussion** Patient-reported positive response to PR is probably determined by several factors, which differ from individual to individual, and cannot be captured by use of only one outcome measure. More than 98% of patients who reported feeling much better following pulmonary rehabilitation achieve the MCID in at least one of ISW, CRQ domains or HAD.

## P44 COPD PATIENTS DERIVED BENEFITS FROM ATTENDING PR: 'THIS HAS GIVEN ME MY LIFE BACK'

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**Objectives** The effectiveness of Pulmonary Rehabilitation (PR) diminishes over time. Little is known about the role of patients' beliefs and experiences of PR in the maintenance of outcomes. The aim of this study was to explore COPD patients' experiences of PR in completers and non-completers.

**Methods** Purposive sampling was employed to recruit COPD patients referred to an outpatient PR. Participants were interviewed pre (n=15) and post (n=10) PR, approximately 1–2 weeks after the programme. Eight participants completed PR, two dropped out and five were lost to follow-up. Data were analysed using Thematic Analysis.

Results A strong theme to emerge was 'empowerment through attending PR' as physical improvements derived from PR gave participants a sense of freedom and inspired the motivation to reengage with life again. Participants regained greater control over the condition, and improvements in mood prompted a renewed sense of optimism and hope for the future. Social re-engagement was often the most highly valued aspect of PR, which provided companionship and normalised the condition. Collectively, positive outcomes inspired determination and 'efforts to maintain the benefits'. Peer support was vital in motivating participants to continue exercise regimes. Potential barriers to maintaining exercise were discussed. 'Improvements to service provision' were felt necessary to facilitate longterm maintenance, in the form of formalised follow-up sessions and telephone calls. A few had ongoing issues with anxiety, suggesting the need for individual counselling. 'Reasons for drop-out' included a threatened sense of autonomy and control, negative illness perceptions, inappropriate timing of PR as well as practical and medical issues. These participants were still smokers, and lacked desire for behaviour change. Participants who didn't attend displayed overwhelming scepticism about PR effectiveness.

**Conclusions** These findings indicate that immediately following PR, patients feel empowered to continue exercising, due to perceiving multiple benefits. The value placed on peer support demonstrates that this is an important motivator in promoting maintenance. This study highlights COPD patients' preferences in terms of how service provision aimed at facilitating long-term maintenance of outcomes could be improved, and has implications for the development of psychosocial interventions for patients who are reluctant to attend.