

# The use of a lay health worker intervention to improve uptake of pulmonary rehabilitation in chronic obstructive pulmonary disease: a focus group and questionnaire study.

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## 1 Introduction

Referral to pulmonary rehabilitation (PR) is a target in the NHS Quality and Outcomes Framework in primary care, and referrals are rising. PR is the most effective treatment for the symptoms of chronic obstructive pulmonary disease (COPD), however the impact of PR is restricted by poor rates of uptake and completion.

Community Health Workers or Lay Health Workers (LHWs) are common in low-income countries.<sup>(1, 2)</sup> Use of peer supporters within the NHS is becoming more widespread as a strategy to enhance patient outcomes, particularly in the context of chronic disease management such as diabetes and mental health.<sup>(3)</sup>

IMPROVE is testing a behaviour change intervention to promote uptake and completion of PR, delivered by volunteer LHWs (called PR-buddies), in a multi-centre cluster randomised controlled trial.

**Objective:** this study explores the acceptability of the training and the PR-buddy role to volunteer PR-buddies using focus groups and a postal questionnaire.

## 2 Methods

84 PR-buddies were recruited, trained and managed by trained PR staff in 14 intervention sites. Training materials were provided by the IMPROVE research team. PR-buddy training included communication skills, role boundaries, confidentiality and selected behaviour change techniques.

Eight focus groups were held with 41 trained PR-buddies.

Postal questionnaires, which included a free text box, enabled more PR-buddies to provide feedback.

## 3 Results: PR-buddy focus groups

Focus groups were audio-recorded and transcribed verbatim for coding and inductive thematic analysis

### Motivations for becoming a PR-buddy

The PR-buddies' strong belief in PR and their desire to help others with the same condition motivated them to volunteer

### Views about training received

The training helped their understanding of the role and its boundaries, However, they felt it was not always realistic for 'real-world' settings. They believed that their experiences were key in helping them support patients

### Personal impact of bring a PR-buddy

The role of being a PR-buddy was rewarding and it improved their self-confidence. It also helped them connect and feel less socially isolated

## Results: PR-buddy postal questionnaires

72 sent, 53 replies (73.6% response rate)

	Average score	Response option (lowest and highest)	
How confident were you in your ability to support patients using what you learnt and what you understood during the training?	5.5	1 = Not at all	6 = Completely confident
Overall, were you satisfied with the training and support for PR-Buddies?	5.7	1 = Very dissatisfied	6 = Very satisfied
How motivated did you feel about being a PR-Buddy when you were supporting patients?	5.4	1 = Not at all	6 = Extremely motivated
How much effort was involved in being a PR-Buddy? <b>Note: reverse scoring</b>	4.7	1 = A lot of effort	6 = No effort
How acceptable to you was the amount of <u>your time</u> your role as a PR-Buddy took?	5.6	1 = Not Acceptable	6 = Completely acceptable
Overall, how helpful did you think the IMPROVE research was for patients who got PR-Buddy support?	5.2	1 = Not very helpful	6 = Very helpful

*The best part of the experience of the trial for me was meeting other buddies. The trial started well with the training but was too slow in pairing up PR-buddies with clients.*

*I feel that [the] buddy support role should be continued as it seems to get through to those who are unsure the PR course is worthwhile.*

*...I was eager to support others during their time doing the rehab course. The training was excellent.*

*More roleplay in the course would be helpful.*

## 4 Discussion and conclusions

There was a strong motivation to support others, enthusiasm for PR and loyalty to PR staff which encouraged people living with COPD to volunteer as PR-buddies.

The PRB role was acceptable to the buddies and they were mostly satisfied with the training received.

The training was important to boost their confidence and prepare the volunteers to support patients.

Using a train-the-trainer model of training PR staff to recruit and train PR-buddies enabled efficient dissemination of the training and set-up of the PR-buddy services across 14 intervention sites. One PR service dropped out after PR staff training due to staff having insufficient time to carry on with the trial.

### References

<sup>1</sup> Perry HB. A Comprehensive Description of Three National Community Health Worker Programs and Their Contributions to Maternal and Child Health and Primary Health Care: Case Studies from Latin America (Brazil), Africa (Ethiopia) and Asia (Nepal). 2016. (<https://chwcentral.org/wp-content/uploads/2017/01/Perry-CHW-Programs-in-Brazil-Ethiopia-and-Nepal-2016.pdf>). Accessed 30 August 2025.

<sup>2</sup> Mwai, G.W., Mburu, G., Torpey, K., Frost, P., Ford, N. and Seeley, J., 2013. Role and outcomes of community health workers in HIV care in sub-Saharan Africa: a systematic review. *Journal of the International AIDS Society*, 16(1), p.18586.

<sup>3</sup> Repper, J. and Carter, T., 2011. A review of the literature on peer support in mental health services. *Journal of mental health*, 20(4), pp.392-411.