

# Feasibility of brief training to support pulmonary rehabilitation referral and attendance in chronic obstructive pulmonary disease

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<b>Registration date</b> 05/05/2026	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 05/05/2026	<b>Condition category</b> Respiratory	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Chronic obstructive pulmonary disease (COPD) is a lung condition which causes people to get breathless. A treatment that helps with breathlessness is an exercise and education programme called pulmonary rehabilitation (called rehab for short). However, only a small number of people are referred for and start rehab. In the past, there were similar problems with the referral of smokers to stop smoking services. However, having a short, structured conversation as a way of changing people's behaviour, called Very Brief Advice (or VBA for short), has increased the number of people referred for support and who stop smoking. Changing VBA so it can be used by healthcare workers to discuss a rehab referral with people with COPD may be a way to increase the number of people who agree to be referred to rehab.

We have developed an e-learning programme on pulmonary rehab and framework to help healthcare professionals discuss a referral with their COPD patients. We believe this may be a way to increase the number of COPD patients who agreed to be referred for and start rehab. However, we need to test if delivering the e-learning programme in the NHS is feasible and acceptable to healthcare professionals and COPD patients.

### Who can participate?

1. Any healthcare professional who can refer patients to pulmonary rehabilitation services
2. Adults (aged 18 years and over) with a diagnosis of COPD who are eligible to be referred to pulmonary rehabilitation

All participants must be able to provide informed consent to take part in the study

### What does the study involve?

#### Main study (feasibility study):

50 healthcare professionals from four NHS sites will be invited to complete an online training programme and use a new framework to help them to refer people with COPD to a programme

called pulmonary rehabilitation. We will measure the number of referrals made and whether the people referred attend the programme. We will also be collecting other information on whether it is possible to do this in a bigger study with more NHS sites.

Assessing whether the short, structured conversation is being carried out as intended (intervention fidelity and receipt sub-study):

15 clinical conversations will be audio-recorded. During this conversation the healthcare professionals (who are also involved in the main study) will discuss a pulmonary rehab referral with their patient with COPD.

The patient with COPD will have a telephone call with the study team to talk about the conversation they have had.

Asking people involved in the study what they think (acceptability sub-study):

16 healthcare professionals will meet in small online meetings to discuss their experience of completing the online training programme and using the new framework with their patients. 16 people living with COPD will meet in small online meetings to discuss their experience of having a pulmonary rehab referral conversation with their healthcare professional. They will have the option of a one-to-one interview if they prefer.

What are the possible benefits and risks of participating?

Healthcare professionals may benefit from having access to a new e-learning programme and free continuous professional development (CPD).

Patients may benefit from the structured short conversation by helping to improve their motivation to be referred to and attend pulmonary rehab.

If the participant takes part in the sub-studies (intervention fidelity and receipt sub-study and acceptability sub-study), they will be offered a shopping voucher for £25.

Possible risks include participants feeling distressed during study activities. Steps to avoid this include pausing, postponing or stopping the research activity and reiterating to participants that involvement in the study is voluntary. The study team will encourage the participant to seek support from relevant healthcare professional(s) as needed and will offer to contact them on the participant's behalf.

Where is the study run from?

Brunel University of London (UK)

When is the study starting and how long is it expected to run for?

June 2026 to December 2027

Who is funding the study?

This study is funded by the National Institute for Health Research (NIHR) as part of Dr Claire Nolan's Advanced Fellowship (NIHR) Award ID: NIHR303175 and Brunel University of London as part of Rachel Tuffnell's Doctoral Studentship.

Who is the main contact?

1. Prof. Cherry Kilbride, chat\_study@brunel.ac.uk
2. Rachel Tuffnell, chat\_study@brunel.ac.uk

## Contact information

Type(s)

Scientific, Public

**Contact name**

Mrs Rachel Tuffnell

**Contact details**

Department of Health Sciences, College of Health, Medicine and Life Sciences, Brunel University of London, Uxbridge  
London  
United Kingdom  
UB8 3PH  
+44 (0)7551 311641  
rachel.tuffnell@brunel.ac.uk

**Type(s)**

Principal investigator

**Contact name**

Prof Cherry Kilbride

**Contact details**

Department of Health Sciences, College of Health, Medicine and Life Sciences, Brunel University of London, Uxbridge  
London  
United Kingdom  
UB8 3PH  
-  
Cherry.Kilbride@brunel.ac.uk

## **Additional identifiers**

**Integrated Research Application System (IRAS)**

355215

**Central Portfolio Management System (CPMS)**

68836

**National Institute for Health and Care Research (NIHR)**

303175

## **Study information**

**Scientific Title**

Feasibility and acceptability testing of a very brief behavioural change approach to assist healthcare professionals discuss pulmonary rehabilitation with people living with chronic obstructive pulmonary disease (CHAT-2)

**Acronym**

CHAT-2

**Study objectives**

## Aim 1:

To investigate the feasibility of conducting a large-scale cluster-randomised controlled trial (CRCT) of Very Brief Advice for Pulmonary Rehabilitation (VBA-PR)

### Objectives:

1. Identify the duration to set-up sites
2. Investigate the feasibility of recruiting 50 healthcare professionals (HCPs) and associated timeframe
3. Estimate the cluster size for the large-scale trial (i.e., how many individual patients are assessed for each healthcare professional)
4. Investigate the feasibility of collecting data on intervention implementation (e-learning programme completion)
5. Investigate the feasibility of collecting referral and uptake data, the quality of data and associated timeframe
6. Identify whether the primary outcome of the large-scale trial will be referral or uptake by using the information collected in objective 5 and Patient and Public Involvement (PPI) input
7. Use data collected in objective 5 and 6 to inform the sample size calculation for the large-scale trial
8. Evaluate intervention fidelity and receipt against pre-specified intervention components
9. Investigate the feasibility of collecting intervention development and implementation costs

## Aim 2:

Explore the acceptability of VBA-PR amongst healthcare professionals, patients and their carers /family

### Objectives:

10. Explore the experiences of HCPs of the online training programme, e.g., acceptability, clinical utility, relevance, ease of use, modifications required
11. Explore HCPs' experiences of using VBA-PR during consultations with patients, e.g., acceptability, ease of use, change in behaviour, patient reaction, modifications required
12. Explore the experiences of patients and/or their carers/family, of the conversation about PR with their HCP, e.g., experience and acceptability of the conversation, knowledge attainment, likelihood accepting a referral, modifications required
13. Modify VBA-PR based on the focus group findings

## **Ethics approval required**

Ethics approval required

## **Ethics approval(s)**

approved 15/01/2026, North West - Greater Manchester Central Research Ethics Committee (2 Redman Place, Stratford, London, E20 1JQ, United Kingdom; +44 (0)207 104 808; gmcentral.rec@hra.nhs.uk), ref: 25/NW/0365

## **Study design**

Non-randomized study

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

## **Health condition(s) or problem(s) studied**

Chronic obstructive pulmonary disease (COPD)

## **Interventions**

Very Brief Advice for Pulmonary Rehabilitation (VBA-PR), which includes an e-learning programme and 'ask, assess, ask' framework for healthcare professionals to discuss a PR referral with their COPD patients.

Healthcare professional participants will be recruited to this part of the study from four NHS sites. Consented participants will be sent the link to the National Centre for Smoking Cessation and Training VBA-PR e-learning platform via email. The participant will be asked to complete the 30-minute e-learning, including a short knowledge questionnaire before and after the e-learning programme.

The e-learning training programme includes education for referrers about pulmonary rehab, e.g., referral criteria, what pulmonary rehab involves, benefits, local pulmonary rehab programme information and a framework to help referrers discuss pulmonary rehab with their COPD patients. It includes text-based information, videos, and patient and healthcare professional testimonials.

Participants will be encouraged to use what they learned from the programme when discussing pulmonary rehab with their COPD patients for the duration of the study (the subsequent 3 months) during relevant healthcare consultations, e.g., primary care consultations and secondary and tertiary care inpatient, outpatient and home-based consultations.

### **Intervention fidelity and receipt sub-study:**

This sub-study involves the assessment of intervention fidelity and intervention receipt, that is the use of the VBA-PR referral discussion framework by the healthcare professional when discussing PR with their patients. The consultation between 15 healthcare professionals and 15 COPD patients will be audio-recorded using an encrypted audio recorder to evaluate the referral discussion against pre-specified intervention components (intervention fidelity). The study team will complete a telephone questionnaire with patient participants to evaluate the referral discussion recall against pre-specified intervention components (intervention receipt).

### **Acceptability sub-study:**

This study involves online focus groups or online/telephone interviews for HCPs (n = 16) and people living with COPD (n = 16), with separate focus groups for both groups. People living with COPD will be offered a one-to-one interview should this be their preference.

## **Intervention Type**

Behavioural

## **Primary outcome(s)**

1. Time taken to set up each study site (reported in days), measured using the study set-up file, at from HRA approval to site activation and from capacity and capability approval to site activation
2. Recruitment rate recorded as the number of eligible participants who consent to participate in the study (by 1 month), assessed using the screening and recruitment log
3. Time taken to recruit participants (reported in days) from site activation to final participant recruitment, assessed using the recruitment log

4. Reasons for not participating in the study (reported as categorical data), assessed using the screening log
5. The cluster size for the full-scale trial, assessed using the number of individual patients assessed by each HCP, assessed on study completion using the HCP's data log
6. E-learning programme completion rate assessed following the 1-month training period, assessed using e-learning programme back-end data
7. Post-intervention referral rate measured during the 3-month data collection period, assessed using service audit data
8. Pre-intervention referral rate measured during the same 3-month period as the post-intervention referral rate but in the previous year, assessed using service audit data
9. Post-intervention PR assessment rate assessed from the start of referral rate data collection for 3 and 6 months (depending on the PR service waiting list), assessed using service audit data
10. Pre-intervention PR assessment rate assessed in the same data collection period as post-intervention assessment rate but in the previous year, assessed using service audit data.
11. Time taken to collect pre- and post-intervention referral and assessment rates (see the previous four outcomes for the time period), assessed using the study database
12. Proportion of missing data for pre- and post-intervention referral and assessment rates (see previous related outcomes for the time period), assessed using the study database
13. Confirmation of the primary outcome of the full-scale trial assessed, assessed using referral and assessment rates outcome data, as well as Patient and Public Involvement (PPI) and Independent Advisory Group input
14. The sample size for the full-scale trial, calculated on study completion using referral and assessment rate data
15. Proportion of pre-specified intervention components delivered per consultation measured on the intervention checklist, assessed using consultation audio recordings
16. Proportion of pre-specified intervention components recalled by patient participants following their consultation with the HCP measured on the intervention checklist, assessed during a phone call with the patient participant
17. Estimation of intervention development costs on study completion, assessed using the intervention development log
18. Estimation of intervention implementation costs on study completion, assessed using intervention development and implementation logs
19. E-learning programme acceptability amongst HCP participants within 4 months, assessed by analysing interview and/or focus group data
20. Acceptability of using VBA-PR during consultations amongst HCP participants, within 4 months, assessed by analysing interview and/or focus group data
21. Acceptability of PR referral discussion to patient participants within 1 month after the clinical consultation, assessed by analysing interview and/or focus group data
22. Modification of VBA-PR on study completion based on the previous three outcomes

### **Key secondary outcome(s)**

There are no secondary outcome measures

### **Completion date**

31/12/2027

## **Eligibility**

### **Key inclusion criteria**

Healthcare professionals:

Feasibility study:

1. Any healthcare professional, e.g. doctor, nurse, physiotherapist, pharmacist, paramedic, who refers people living with COPD for pulmonary rehab
2. Able to provide informed consent

Intervention fidelity and receipt sub-study:

1. Healthcare professional, e.g. doctor, nurse, physiotherapist, pharmacist, paramedic, who consented to participate in the feasibility study
2. Able to provide informed consent

Acceptability sub-study:

1. Healthcare professional, e.g. doctor, nurse, physiotherapist, pharmacist, paramedic, who consented to participate in the feasibility study
2. Able to provide informed consent

COPD patients:

Intervention fidelity and receipt sub-study:

1. Adult aged  $\geq 18$  years with a healthcare professional confirmed diagnosis of COPD as per GOLD criteria
2. Eligible for referral to pulmonary rehab in line with national quality standards
3. Able to provide informed consent

Acceptability sub-study:

1. Adult aged  $\geq 18$  years with a health professional confirmed diagnosis of COPD as per GOLD criteria, whose healthcare professional has discussed pulmonary rehab with them as part of the feasibility study
2. Able to provide informed consent

**Healthy volunteers allowed**

No

**Age group**

Mixed

**Lower age limit**

18 years

**Upper age limit**

120 years

**Sex**

All

**Total final enrolment**

0

**Key exclusion criteria**

Healthcare professionals:

Feasibility study and intervention fidelity and receipt sub-study:

1. Cognitive impairment that would preclude taking part in an e-learning training programme

Acceptability sub- study:

1. Cognitive impairment that precludes participation in a focus group or interview

COPD patients:

Intervention fidelity and receipt sub-study

1. Cognitive impairment that precludes participation in a discussion about PR referral

Acceptability sub-study:

1. Cognitive impairment that precludes participation in a focus group or interview

**Date of first enrolment**

01/06/2026

**Date of final enrolment**

31/12/2026

## **Locations**

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

**The Hillingdon Hospitals NHS Foundation Trust**

Pield Heath Road

Uxbridge

England

UB8 3NN

**Study participating centre**

**Royal Cornwall Hospitals NHS Trust**

Royal Cornwall Hospital

Treliske

Truro

England

TR1 3LJ

**Study participating centre**

**Leicester Royal Infirmary**

Infirmary Square

Leicester

England

LE1 5WW

**Study participating centre**  
**Manchester University NHS Foundation Trust**  
Cobbett House  
Oxford Road  
Manchester  
England  
M13 9WL

## Sponsor information

**Organisation**  
Brunel University of London

**ROR**  
<https://ror.org/00dn4t376>

## Funder(s)

**Funder type**  
Government

**Funder Name**  
National Institute for Health and Care Research

**Alternative Name(s)**  
National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

**Funding Body Type**  
Government organisation

**Funding Body Subtype**  
National government

**Location**  
United Kingdom

**Funder Name**  
Brunel University London

**Alternative Name(s)**

BUL

**Funding Body Type**

Private sector organisation

**Funding Body Subtype**

Associations and societies (private and public)

**Location**

United Kingdom

## **Results and Publications**

**Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Data sharing statement to be made available at a later date