Community-based recruitment of patients with COPD into clinical research

Abstract Identifying subjects for clinical trials is difficult and the evidence base for recruitment strategies is limited, particularly in the field of COPD. We compared the efficiency and patient characteristics of different community-based recruitment strategies during a non-commercial COPD trial in the UK. Recruiting from general practice COPD registers was less efficient and identified patients with significantly milder disease than recruiting through pulmonary rehabilitation and patient groups. We report our experience and propose that pulmonary rehabilitation and patient groups may represent an enriched pool of COPD patients to recruit into clinical trials.

Trial registration number: EudraCT 2011-001063-43

INTRODUCTION
Recruitment of patients into clinical trials is challenging and many publicly funded trials in the UK miss their targets. Many studies investigating COPD may wish to recruit from patient groups or primary care; however, in contrast to the low rates reported by recent large interventional trials (eg, 7%2), evidence suggests that patients on UK general practice (GP) databases do not fulfil diagnostic criteria for COPD when retested.3 Optimal strategies for recruiting these patients have not been adequately explored.

METHODS
Recruitment pathways Three approaches were used during recruitment of subjects to a recent non-commercial trial of oral antibiotics in stable COPD.
1. Local GP surgeries wrote to patients on their COPD register, and interested patients replied directly to the study team using preaddressed reply slips.
2. Similarly, local pulmonary rehabilitation (PR) groups wrote to COPD patients on their database.
3. Study team members gave educational talks to local PR and patient support groups, and at the end described current research plans. Interested patients approached the study team directly.

Centres were reimbursed for sending letters according to standard research tariffs.

Screening Interested patients were contacted and a screening visit arranged which included a full medical history and postbronchodilator spirometry. Patients were considered eligible if COPD was confirmed with FEV1 <80% predicted and FEV1 to FVC ratio <0.7.

RESULTS Between January 2012 and May 2013, 37 GP surgeries and four PR groups sent letters to 2300 and 469 patients, respectively. Reply rates were similar from both sources (21% and 22%) and 156 (7%) and 37 (8%) of these patients attended screening. The educational talks identified 53 patients, of whom 23 (43%) were screened. Approaches 1 and 2 had screen failure rates of 35% and 19%, while approach 3 had the lowest (13%). Figure 1 summarises these pathways and gives information on the estimated time and financial commitments per eligible patient identified.

Eligible patients recruited from GP surgeries had significantly milder disease than those from PR and patient groups (mean (SD) FEV1 63% predicted (20) vs 53% (18, p=0.003), FEV1 to FVC ratio 0.55 (0.11) vs 0.50 (0.11, p=0.007), exacerbations in the previous year 1.7 (2.0) vs 2.7 (3.4, p=0.029), as well as lesser smoking history and fewer medication

Figure 1 Flow diagram detailing the three different recruitment pathways.
prescriptions. Further information is
detailed in the online supplement.

DISCUSSION
We found that recruiting patients from GP
COPD databases was less efficient, more
costly, and identified patients with milder
disease than through PR and patient
groups. However, the pool of patients
accessible via GPs was larger and more rep-
resentative of the wider population.
Recruitment via PR and patient groups may
therefore target an enriched population
useful for smaller studies, and researchers
planning future studies of COPD should
prioritise resources accordingly.

Simon E Brill,1 Ethaar El-Emir,1
James P Allinson,1 Gavin C Donaldson,1
Irwin Nazareth,2 Jadwiga A Wedzicha1
1Centre for Respiratory Medicine, University College
London Medical School, London, UK
2Department of Primary Care & Population Health,
University College London Medical School, London, UK

Correspondence to: Dr Simon E Brill, Centre for
Respiratory Medicine, University College London
Medical School, Royal Free Campus, Rowland Hill
Street, London NW3 2PF, UK; simon.brill@ucl.ac.uk

Contributors SEB, EE-E, GCD, IN and JAW planned
the study and recruitment strategies and wrote the
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the individual patient identification centres to organise
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groups, contacted and screened the patients and
collected the data. SEB wrote the first draft and
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