despite evidence to suggest they should be considered. We have also discovered that ADO and GSF are strong prognostic indicators for this cohort, although their application may not be appropriate (only two patients of the DNR group had a predicted 3-year mortality >50% on ADO index). This may reflect other factors (such as patient choice) that we have not evaluated. We feel that as many prognostic factors as available should be considered when making decisions on resuscitation as ultimately, this may also be the decision not to intubate.

Abstract P214 Table 1

	n	p Value (DNR/other)
Individual prognostic factors		
FEV ₁	44	0.016
Age	53	0.598
Comorbidity	53	0.347
BMI	39	0.897
Previous ITU	53	0.456
Home oxygen	53	0.002
Functional status	49	0.005
Prognostic indices		
ADO	37	0.006
GSF	38	0.002
NICE	37	0.001

P215 THE EFFECT OF OXYGEN PRESCRIPTION AT HOSPITAL DISCHARGE ON RE-ADMISSION RATES IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

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Introduction A previous survey highlighted a very high degree of physiologically unnecessary home oxygen use in COPD patients (Bhattacharya M, Potter A, Mukherjee R. Assessing for Long Term Oxygen Therapy (LTOT) in an English town. *Am J Resp Crit Care Med* 2008;**177**:A665), a common reason for which was noted to be many physicians' belief that issuing oxygen on discharge of breathless COPD patients prevents re-admissions.

Methods A retrospective review of 1942 COPD admissions (including re-admissions) of Birmingham East and North Primary Care Trust patients from April 2007 to November 2010 based on International Classification of Diseases (ICD) coding (J44) of which 295 received home oxygen on discharge; Welch's 2-sample t-test was applied to assess the significance of the difference in the admission rates of the two groups of COPD patients who receive and did not receive LTOT on discharge. A further analysis was performed in a cohort of 186 patients (93 discharged with and 93 without oxygen) with known values of Forced Expiratory Volume in 1 second (FEV₁) to examine if oxygen prescription had an effect on the re-admission rate, taking the best FEV₁ in the 5 years preceding the first admission. In the known FEV₁ group, the logarithm of the number of admissions was taken to account for non-linearity and to count the readmissions only (as log 1=0).

Results In the whole group (COPD diagnosis based on ICD coding: n=1942), the mean annual admission rate in the home oxygen group was 3.18 and 1.67 in the other (p<0.00000000001). In the group with known FEV₁ (n=186), the number of re-admissions depended significantly on the FEV₁ (p=0.000362); home oxygen prescription on discharge did not have any significant effect on re-admissions (p=0.897).

Conclusion LTOT prescription on discharge is actually associated with a crude increase in hospital admissions of COPD patients. FEV₁ remains the strongest predictor of re-admissions. Further prospective studies including detailed pre-discharge physiological assessment prior to issuing home oxygen are necessary.

Abstract P215 Figure 1 Logarithm of the number of admissions for COPD patients prescribed oxygen on discharge ("Yes"; n=93) vs COPD admissions not prescribed oxygen on discharge ("No"; n=93) adjusted for best FEV₁ in the preceding 5 years.

P216 RECRUITING COPD INPATIENTS TO CLINICAL RESEARCH: RECENT EXPERIENCE FROM INTERVENTIONAL AND OBSERVATIONAL STUDIES

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Background Despite currently available treatment, 13.9% of patients admitted to hospital for exacerbations of chronic obstructive pulmonary disease (COPD) die within 3 months, and fewer than half survive 5 years. Most of the cost of COPD to the UK health service, which approaches £1bn/year, is associated with the treatment of exacerbations. There is clearly a need to improve outcomes of patients admitted to hospital for exacerbations, and yet relatively few research studies attempt to recruit patients specifically during this phase of their illness.

Methods During 2010–2011, two studies were conducted within our institution recruiting patients hospitalised for COPD exacerbations. One was an observational study with relatively broad entry criteria; the other was a randomised, controlled, interventional trial with more stringent entry criteria (ISRCTN66148745). We analysed the screening logs to identify eligibility rates and potential barriers to recruitment, and to provide a guide for researchers on the feasibility of proposed studies in similar populations elsewhere.

Results In the 12-month period commencing March 2010, 172 patients were screened for entry to the observational study. In the period January to June 2011, a further 72 patients, not included in the first study, were screened for entry into the clinical trial. Significant exclusion criteria for each study protocol for were identified; for comparison, these are represented across organ systems (Abstract P216 table 1). 29% of those screened for the observational study were eligible for inclusion and 11% for the clinical trial. The clinical trial identified more renal and metabolic conditions, reflecting their particular relevance to experimental drug administration. The observational study identified more physical factors, such as frailty, which may limit patients' ability to engage with observational research tasks.