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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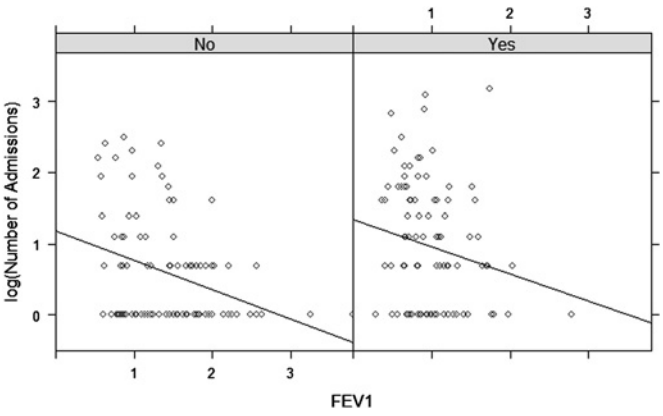
Introduction A previous survey highlighted a very high degree of physiologically unnecessary home oxygen use in COPD patients (Bhattacharya M, Potter A, Mukherjee R. Assessing for Long Term Oxygen Therapy (LTOT) in an English town. *Am J Resp Crit Care Med* 2008;**177**:A665), a common reason for which 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 (FEV_1) to examine if oxygen prescription had an effect on the re-admission rate, taking the best FEV_1 in the 5 years preceding the first admission. In the known FEV_1 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 FEV_1 (n=186), the number of re-admissions depended significantly on the FEV_1 ($p=0.000362$); 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. FEV_1 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 FEV_1 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.

Abstract P216 Table 1 Eligibility rates and reasons for exclusion identified in two COPD inpatient studies

	Frequency (%)	
	Clinical trial (n=71*)	Observational study (n=172)
Eligible for inclusion	8 (11)	48 (29)
Reasons for exclusion		
Cardiovascular	8 (11)	13 (8)
Respiratory	8 (11)	18 (10)
Neurological (incl. dementia, delirium)	7 (10)	28 (16)
Renal	8 (11)	0 (0)
Gastrointestinal and nutrition	6 (8)	0 (0)
Endocrine and metabolic (incl. diabetes)	10 (14)	NC
Malignancy	NC	23 (13)
Frailty	NC	19 (11)
Drug / alcohol misuse	1 (1)	13 (8)
Language / literacy	NC	10 (6)

*Some patients had more than one reason for exclusion.
NC, not collected.

Conclusion Patients hospitalised for COPD exacerbations are heterogeneous and have significant and diverse co-morbidities which may limit their eligibility for research studies. In view of this, broad entry criteria are necessary to ensure that studies in this population are feasible. With careful design, such studies will be pivotal in driving improved treatment and outcomes among these patients who, despite their poor prognosis, presently receive disproportionately little research attention.

P217 FACTORS AFFECTING PATIENT SATISFACTION IN A COPD RESEARCH COHORT

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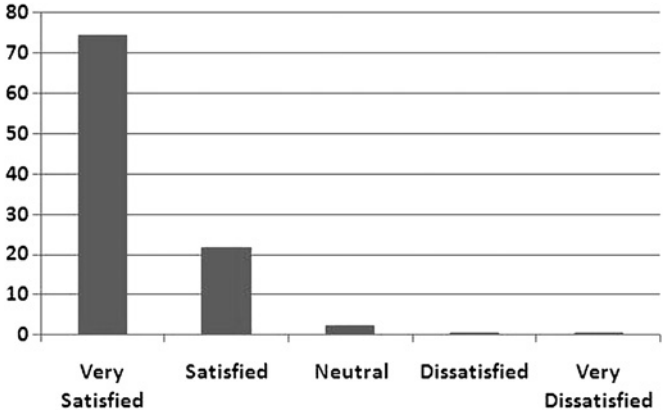
Background Measures of patient satisfaction have become increasingly important in modern healthcare and clinical research. We aimed to assess and quantify factors relating to patient satisfaction in the London COPD cohort.

Methods Questionnaires were posted to patients in the London COPD cohort (anonymised to clinic staff) including categorical items (Likert scale or Yes/No) and freetext boxes. Data were analysed from the last stable state visit before October 2010 including demographics, spirometry, MRC dyspnoea, and St George's Respiratory Questionnaire (SGRQ) scores. Data were analysed using Spearman's rank correlation, Mann–Whitney U and χ^2 tests.

Results 130 respondents (response rate 68%) had a mean (±SD) age of 73.4 (±8.8) years and mean FEV_1 50.6% (±19.3%) predicted. 55% were male, 26% were current smokers with median (IQR) pack year history of 47 (26–73). There were no significant differences between respondents and non-respondents. 96% of respondents reported that they were very satisfied (74%) or satisfied (22%) with the COPD research (Abstract P217 figure 1). Satisfaction correlated with providing prompt and appropriate treatment at exacerbation onset ($r=0.419$, $p<0.001$) and during routine visits ($r=0.577$, $p<0.001$). Satisfaction also correlated with several staff-related factors: courteousness ($r=0.545$, $p<0.001$), being easy to contact ($r=0.498$, $p<0.001$), providing advice on symptom diaries ($r=0.553$, $p<0.001$), explaining exacerbation recognition ($r=0.507$, $p<0.001$), explaining research investigations ($r=0.622$, $p<0.001$), feeding back individual results ($r=0.476$, $p<0.001$), and overall research findings ($r=0.409$, $p<0.001$). It also correlated with patients feeling more confident managing their COPD and exacerbations ($r=0.465$, $p<0.001$). Patients who were in the cohort for longer were more likely to be more satisfied ($r=0.289$, $p=0.001$). There was no correlation between satisfaction and age, gender, spirometry, smoking, BMI, SGRQ or MRC dyspnoea scores. 94% reported less anxiety knowing they could call the doctors at any time, 77% felt they attended A&E less since joining the cohort, 80% were less likely to visit their GP at exacerbation.



Abstract P217 Figure 1 Percentage of respondents satisfied with research in the London COPD Cohort.

Conclusions Patient satisfaction is very high in the London COPD cohort and was associated with positive staff interactions, prompt exacerbation treatment and detailed explanations. Involvement in the cohort also led most patients to feel less anxious, reportedly attending A&E and GP services less frequently.

P218 RECORDING OF COPD MORTALITY MUST IMPROVE IF IT IS TO BE A ROBUST OUTCOME MEASURE

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Statistics for chronic obstructive pulmonary disease (COPD) are dependant on local data collection and have an impact on understanding the morbidity and mortality. This can steer the resources and ought to be robust. Inaccuracies in coding can affect the hospital standardised mortality ratio. The Coalition government's "Outline Strategy for COPD and Asthma in England" published in 2011, emphasises the focus on outcomes. We examined in-patient mortality of COPD at Southend University Hospital to confirm the accuracy of the data. The coding department provided a list of patients coded with COPD who died in the hospital during the study period of 1 year (1 April 2009 and 31 March 2010). All death certificates for the same period were reviewed and those with cause of death recorded as COPD identified. The two lists were compared. Five consultant respiratory physicians reviewed the notes, independently recorded the cause of death and compared to death certificates. According to death certificates 77 patients died of COPD, whereas a total of 55 COPD related deaths were identified by the coding department. The later was compared with actual death certificates for corroboration: COPD as a disease directly leading to death (Ia) was recorded in 21, as a disease leading to 1a (Ib) in 11, as a disease leading to 1b (Ic) in none and as another significant condition contributing to death (II) in 8. Two were referred to the coroner, no data available for two and no COPD was recorded in the remaining 11. Of the available 41 notes (from the coding department's list) reviewed by respiratory consultants, COPD as a cause of death in their view was Ia in 13, Ib in 5, Ic in none and II in 10 cases and it was not the cause in the rest. Mortality data from coding, death certification and opinion of