are being used in further developments to care pathways within our Trust.

Abstract P118 Table 1 Percentage of patients with each indicator recorded as 'yes' in each group at 10 months

	Died	Survived
Severe disease	20% (40% unknown)	34% (6% unknown)
Recurrent admissions	47%	43%
Receiving/awaiting assessment for LTOT	40%	26%
MRC 4 or 5	87%	60%
Right heart failure	13%	11%
Previous ITU/NIV admission	40%	26%
Anorexia/significant weight loss over last 6 months	7%	11%
Current/past resistant respiratory organisms	13%	6%
Depression	7%	17%
Albumin <25 g/l	0%	0%
Dependence for most ADLs	53%	23%

REFERENCES

1. Gold Standards Framework. Prognostic indicator guidance. 2008. Available at: www.goldstandardsframework.nhs.uk/resources/GOLD%20standards%20framework/PIG_paper_final (accessed 19 Jul 2010).
2. **Celli BR,** Cote CG, Marin JM, *et al*. The body-mass index, airflow obstruction, dyspnoea and exercise capacity index in chronic obstructive pulmonary disease. *N Engl J Med* 2004;**350**:1005–12.

P119 COPD ASSESSMENT TEST SCORES: SHORT-TERM CHANGES DURING RECOVERY FROM COPD EXACERBATION

doi:10.1136/thx.2010.150987.20

S Chandramouli, S Huq, J Lagan, L Davies. *University Hospital Aintree, Liverpool, UK*

Introduction The COPD assessment test (CAT) is a brief questionnaire that seems to serve as a reliable measure of COPD health status. (1). Little is known about CAT scores in patients in the UK hospitalised with COPD exacerbations and the impact of factors such as age, COPD severity and co-morbidities on CAT scores during recovery.

Aims To record CAT scores in patients hospitalised with COPD exacerbations. To assess the impact of age, FEV_1 and co-morbidities on CAT score improvements.

Methods A random selection of patients presenting to our hospital between December 2009 and June 2010 with a clinical diagnosis of COPD exacerbation were approached. Those with radiological or clinical evidence of pneumonia, lung malignancy and bronchiectasis were excluded. All patients had evidence of fixed airflow obstruction on previous spirometry obtained from out-patient clinic visits and were current or ex smokers. Baseline demographics were recorded and patients were asked to complete CAT questionnaires on day 0 (day of hospital admission), day 2 and day 7.Questionnaires were completed at the bedside or, in those discharged, over the telephone. Charlson Comorbidity Indices (CCI) were calculated, using information from hospital case notes.

Results 83 patients (52 female) with a mean (SD) age of 67 (11) years and mean FEV_1 of 43% (18) predicted were recruited. The median (range) CCI score was 4 (1–11). Mean (SD) CAT scores on days 0, 2 and 7 were 30.6 (5.8), 28.3 (6.7) and 26.4 (7.2) units respectively. The difference in scores between days 0 and 2 was −2.4 units (paired t-test, $p<0.0001$) and between days 0 and 7 was −4.2 units ($p<0.0001$). See Abstract P119 Table 1 for correlation co-efficients.

Conclusions Mean CAT scores in this group of hospitalised patients were very high in keeping with our previous studies in similar patients who had high St George's Respiratory Questionnaire scores. (2). CAT scores improve significantly as early as 2 days after treatment for an exacerbation and improve further by day 7. In our cohort, there was no significant correlation between improvement in CAT scores and age, FEV_1 or CCI. Larger studies are needed to examine these relationships in more depth.

Abstract P119 Table 1

Variable (correlated to change between day 0 and 7 scores)	Spearman's co-efficient (rho)
Age (years)	r=−0.10 (p=0.34)
% predicted FEV_1	r=−0.20 (p=0.06)
Charlson comorbidity index	r=−0.06 (p=0.56)

REFERENCES

1. **Jones PW,** *et al*. Development and first validation of the COPD Assessment Test. *Eur Respir J* 2009;**34**:648–54.
2. **Davies L,** *et al*. *BMJ* 2000;**321**:1265–8.

P120 OBSERVATIONAL STUDY OF ACUTE ADMISSIONS WITH NON-INFECTIVE ASTHMA AND COPD TO PERTH ROYAL INFIRMARY FOLLOWING THE ERUPTION OF ICELANDIC VOLCANO EYJAFJALLAJOKULL AND SUBSEQUENT ASH CLOUD FORMATION

doi:10.1136/thx.2010.150987.21

M E M Wilkie, M Anderson, S Schembri. *Perth Royal Infirmary, Perth, UK*

Introduction and objectives Eyjafjallajokull, a volcano in Iceland erupted on the 20th March 2010 after a prolonged period of seismic activity starting late 2009. Subsequent ash cloud formation on 14th April caused considerable disruption to Scottish and European airspace. Studies performed in Japan and the British West Indies showed that noxious by-products including sulphur dioxide, have a significant impact on asthma and COPD admissions and severity.[1 2] The aim of this study was to record trends of hospitalisation for non-infective exacerbations of asthma and COPD from eruption until volcano quiescence.

Methods Data of all patients admitted to PRI over the period of 20 March 2010 to 31 May 2010 with shortness of breath was collected. Patients included were those with a diagnosis of non-infective asthma or COPD. Other admission diagnoses were excluded. We recorded diagnosis, age and sex.

Results 100 patients were admitted with shortness of breath during the study period. 12 patients were diagnosed with non-infective asthma (mean age 52, M:F=5:7) and 17 with non infective COPD (mean age 76, M:F=5:12). The preponderance of female admissions has been noted in previous studies.[2] Ash cloud formation occurred at day 26 with closure of Scottish airports at day 27, 45, 51 and 58. Ash production subsided day 63. We observed a cluster of admissions from day 22 to day 37.

Conclusions The cluster of admissions associated with ash cloud presence suggests the possibility of a causative effect. Our study is however limited by the duration of data collection and the absence of a comparative data from previous years.