table 1). Each predictor was assigned a score of 1 (present) or 0 (absent), except for eMRCD score which could be 0, 1 or 2, giving a maximum DECAF score of 6. The DECAF score showed good performance for the prediction of in-hospital mortality (area under ROC curve=0.858, 95% CI 0.82 to 0.89), and was a stronger predictor (p<0.0001) than either the APACHE (AUROC=0.727) or CAPS (AUROC=0.710) prognostic scores. In patients with coexistent consolidation (n=299), DECAF was a stronger predictor of mortality than CURB-65 (AUROC=0.77 vs 0.66, p=0.0064).

**Conclusion** The DECAF score is a strong predictor of in-hospital mortality and may improve the prognostication of patients hospitalised with AECOPD. External validation is required before recommending widespread application.

## REFERENCE

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## P213 LONGITUDINAL CHANGES IN THE RATE AND MEAN AGE OF INCIDENCE AND PREVALENCE OF COPD IN THE UK, 2000–2009

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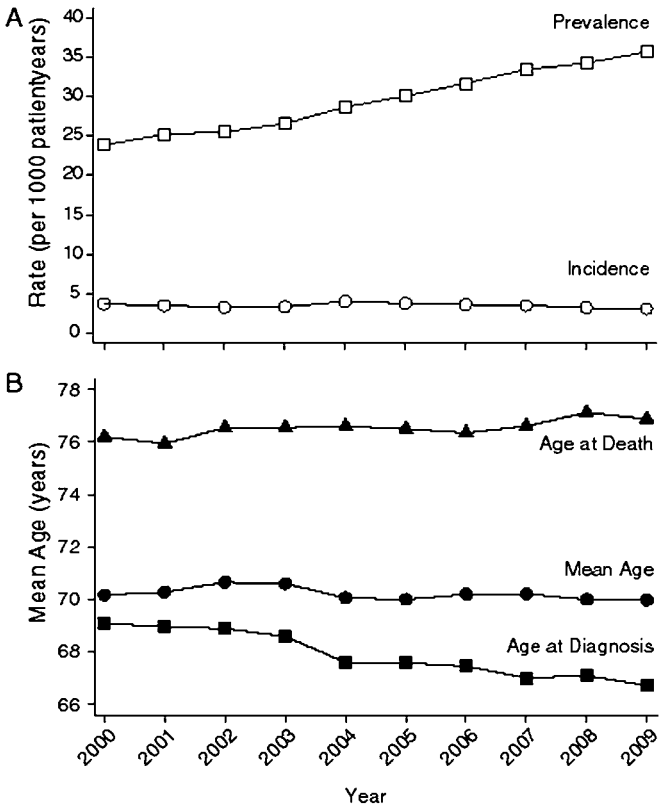
**Introduction** Since the NICE guidelines in 2004 and introduction of the Quality and Outcomes Framework (QOF) in 2004, the prevalence of COPD seen in general practice has increased (Smith 2008).[1] We have investigated whether this trend has continued until 2009, and explored whether this can be explained by change in mean age at diagnosis and death.

**Methods** We identified all patients aged between 35 and 89 years (n=2 173 494, mean age =56, 49% male) in The Health Improvement Network (THIN) primary care database. From this cohort of patients we identified patients with a diagnosis of COPD using the criteria for QOF. We calculated annual incidence and prevalence rates, and mean age of patients with COPD, first COPD diagnosis and death between 2000 and 2009.

**Results** In total, 53 379 (2.5%) of the patients were diagnosed with COPD. The prevalence of COPD increased by 50% over the 10-year period, from 24 cases per 1000 patient years in 2000 to 36 in 2009 (Abstract P213 figure 1A). However, the diagnosis of new COPD cases remained fairly constant (p=0.295), at 3.5 cases per 1000 patient years (Abstract P213 figure 1A). The mean age at first COPD diagnosis (incidence) decreased significantly (p<0.001) by 2 years and 5 months from 69 years and 1 months in 2000 to 66 years and 8 months in 2009 (Abstract P213 figure 1B). The mean age at death of COPD patients increased significantly (p=0.008) by 9 months from 76 years and 2 months in 2000 to 76 years and 11 months in 2009 (Abstract P213 figure 1B). Whereas the mean age of prevalent patients remained fairly constant (p=0.098) over the period, varying between 70 years and 70 years and 8 months (Abstract P213 figure 1B).

**Conclusion** We found that over the last decade, the average age of patients with COPD has remained relatively constant at around 70 years. COPD is increasingly being diagnosed at a younger age and patients are living longer, which may in part explain the 50% rise in COPD prevalence.




Abstract P213 Figure 1

## REFERENCE

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## P214 ACUTE EXACERBATIONS OF COPD: A REVIEW OF RESUSCITATION STATUS AND ASSOCIATIONS WITH PROGNOSTIC FACTORS IN HOSPITAL ADMISSIONS

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**Introduction** Acute exacerbations of COPD are among the most common reasons for hospital admission in the UK. Exacerbations can lead to respiratory failure requiring ventilatory support, and so decisions regarding "escalation" or "ceilings" of treatment are often made early in admission. Such decisions on intubation are inevitably linked to decisions regarding resuscitation status. Prognostic factors should be used when making these decisions and $FEV_1$ should not be used exclusively. We reviewed admissions with exacerbations of COPD, categorised by resuscitation status, to see if there were differences in prognostic features between groups.

**Methods** 53 acute admissions with exacerbations of COPD were reviewed between 1 December 2010 and 31 January. Groups were divided by resuscitation status: documented decision not to attempt resuscitation (DNR), no documented decision (NoD) and documented decision for resuscitation (ForR). Data were collected on individual prognostic factors; we then calculated prognostic indices against known criteria. P values were calculated using Mann–Whitney U test.

**Results** The significant findings were that patients in the DNR group had lower $FEV_1$, more likely to have home oxygen and had a poorer functional status. Age, comorbidity, BMI and previous ITU admission were not found to be significantly different between the groups. When the prognostic indices were calculated the patients in the DNR group were found to have higher scores, correlating with poorer prognosis.

**Conclusions** From the results we can infer which factors are being used for resuscitation decisions in patients with COPD. Functional status and home oxygen are most relied upon with $FEV_1$ somewhat less so. Age, comorbidity and BMI are not being taken into account,