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Authors' reply

We are grateful for the comments by Falaschetti *et al* on the usefulness and suitability of the Global Initiative for Chronic Obstructive Lung Disease (GOLD) standard for the diagnosis of COPD. We appreciate that there are other approaches to defining abnormal airflow—indeed, one co-author (JB) was involved as a consultant to the study cited in their letter[1]—but our objective was to assess the extent of under-diagnosis according to current conventional criteria. We agree (and have acknowledged in the paper) that the lack of post-bronchodilator values will lead to overestimation of the prevalence of COPD, but do not believe that this effect would be of sufficient magnitude to account for more than a small minority of the under-diagnosis apparent, especially when considering the inclusive definition of COPD diagnosis used in our study. We have reanalysed the data using the lower limit of normal (LLN) method based on reference values from Falaschetti *et al*[1] and find that estimates of COPD prevalence (11.2%; 95% CI 10.5% to 11.9%) and under-diagnosis (78.8%; 95% CI 76.1% to 81.5%) are very modestly reduced compared with GOLD standard figures for prevalence (13.3%, 95% CI 12.6% to 14.0%) and under-diagnosis (81.2%; 95% CI 78.9% to 83.6%). Equally, smoking prevalence figures are somewhat higher among LLN-defined cases of COPD (39.5%; 95% CI 36.3% to 42.7%) than among GOLD-defined cases (34.9%; 95% CI 32.1% to 37.8%). However, irrespective of the criterion used, under-diagnosis of COPD remains a major problem, particularly among smokers (figs 1 and 2).

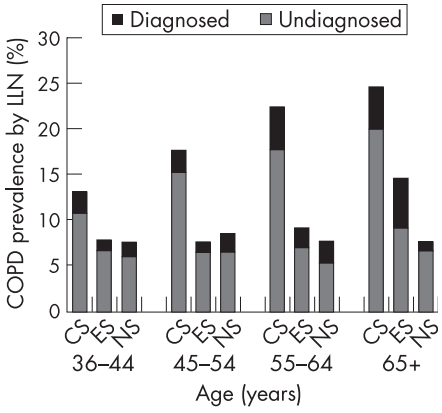

Figure 1 Prevalence and diagnosis of chronic obstructive pulmonary disease (COPD) stratified by age and smoking status using the lower limit of normal (LLN) method. CS, current smokers; ES, ex-smokers; NS, never smokers.

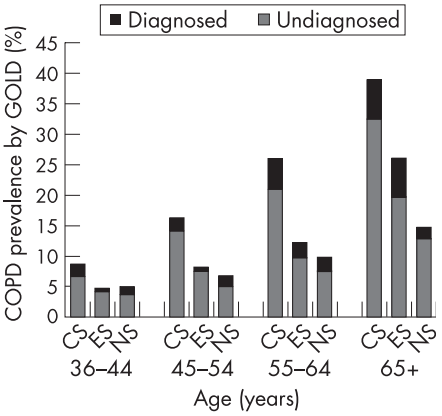

Figure 2 Prevalence and diagnosis of chronic obstructive pulmonary disease (COPD) stratified by age and smoking status using the Global Initiative for Chronic Obstructive Lung Disease (GOLD) method. CS, current smokers; ES, ex-smokers; NS, never smokers.

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Reducing door-to-antibiotic time in community acquired pneumonia

We were interested to read the study by Barlow *et al*.[1] We also audited door-to-antibiotic time in community acquired pneumonia. An initial audit in January 2005 (n = 83) showed a door-to-antibiotic time of 7 hours 37 minutes with a delay from seeing the doctor to receiving antibiotics of 5 hours 45 minutes. 36% of patients had a delay of >8 hours. The main reason identified was that, if patients arrived on the ward after a drug round, they would not receive any drugs until the next scheduled drug round. For patients admitted at night this could mean a delay of up to 8 hours. The data were shared with doctors in the Accident and Emergency department who were asked to prescribe the first dose of antibiotic as a "stat" once-only dose on the front of the drug chart, and then to give the chart to the nurse in charge of the patient. We re-audited in October 2006 (n = 34). The delay in doctor-to-antibiotic time had fallen to 3 hours 15 minutes, with the delay for intravenous antibiotics being 2 hours 11 minutes—a reduction of 2 hours 30 minutes. 3% of patients waited >8 hours for their antibiotic and 74% received their antibiotic within 4 hours.

This simple intervention, at no cost, greatly reduced the delay in patients receiving antibiotic therapy. It is likely that this is also an issue in other infections and we believe that there is no reason why this should not be standard practice in Accident and Emergency departments and on admission wards.

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Reference

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Is childhood immunisation associated with atopic disease from age 7 to 32 years?

We read with interest the study by Nakajima *et al*[1] which concluded that, in Tasmanian children, there are small age-dependent associations between childhood immunisation and asthma, eczema and food allergy, but that these effects should not deter parents from immunising their children. However, it could be that the small (but significant) effects that were found are due to residual confounding since the authors made no adjustment for socioeconomic status, a factor found to be associated with allergy.[2–4]

On the other hand, the effects may have been underestimated since the authors included diseases preventable by childhood vaccinations (diphtheria, pertussis, measles, mumps and rubella) in the model, but these (what they call) "confounders" are in fact intermediate variables which possibly "take away" the association between vaccinations and allergy.

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