Reviewer's report

Title: Usefulness of C-reactive protein testing in acute cough: an open cluster-randomised clinical trial with CRP testing in the intervention group

Version: 2 Date: 29 October 2013

Reviewer: Michael Moore

Reviewer's report:

Thank you for asking me to check the author responses.

Many points have been addressed (sample size, imbalance between groups, better description of follow up assessment).

However I am afraid I do not think the authors have entirely addressed some of my concerns.

I still have a problem with the title—Usefulness of C-reactive protein testing in acute cough

How can a study be described as in acute cough when 40% of those presenting did not include cough in their baseline symptoms (Table 1). It was allowable in the entry criteria however the title is misleading as it stands.

There must be a problem here with my understanding. The entry criteria listed:

Patients with LRTI/acute cough (including acute bronchitis, pneumonia, and infectious exacerbations of COPD or asthma) were included. Patients with LRTI could be included in the absence of cough

However the GP description of the illness the most frequent description was URTI 50% intervention and 41% control. There must be a difference in disease labelling to account for this since to my mind a patient with URTI did not meet the entry criteria.

The authors explain the high chest x-ray rate being explained by the local guidelines in which chest x-ray is mandated in cases of suspected pneumonia. Again there is a mismatch since pneumonia was present in 7% & 17% respectively of the intervention and control group yet chest radiography was performed in 55% & 76% respectively. So chest x-rays must have been requested in some patients with a clinical diagnosis of URTI. Can there be a misunderstanding about the labelling of URTI?

I do not think having excluded the participants recruited by two GPs that they can be included again in the results.

There are serious concerns about the assessment of recovery which was not blinded to treatment allocation. I do not think this result is reliable enough to include in the final line of the abstract. This was a small study and would not have been powered to detect rare complications and I think the conclusions about recovery need to be more circumspect.
The figures do not have labels or titles.
There are imbalances at baseline which are not taken account of with the simple
chi squared analysis. These may be in favour of the intervention group (higher
rates of pneumonia) but other imbalances go the other way (heart disease,
temperature) and an appropriate analysis should be done.

The manuscript is improved but more work needs to be done
There is a new systematic review published in this months BJGP which could
usefully be cited.

**Level of interest:** An article whose findings are important to those with closely
related research interests

**Quality of written English:** Needs some language corrections before being
published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the
statistics.

**Declaration of competing interests:**

'I declare that I have no competing interests'