Reviewer's report

Title: One size does not fit all: evaluating an intervention to reduce antibiotic prescribing for acute bronchitis

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Reviewer: Samuel Coenen

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Dear authors

Your paper is about a common and important issue in general practice that concerns a great proportion of people and their health care providers. Papers describing the evaluations of trials are an important contribution to interpret the results of the trial in the right context and to inform the development of new interventions. Yet, there are some areas in the paper that need further work or clarification.

Major Compulsary Revisions

1. Background p4 You may want to refer and describe some relevant recent trials that have been performed in Europe in the past few years on reducing antibiotic prescribing in primary care.

2. It would be useful to provide a short description of what has been done in those educational seminars. This is unclear now, but important (Hoffmann TC, Erueti C, Glasziou PP. Poor description of non-pharmacological interventions: analysis of consecutive sample of randomised trials. BMJ 2013:14;347).

3. p5 You state that two-thirds had no difference in prescribing. It might be useful to describe the characteristics of this group in terms of age, gender, and years of
practice, unless there is no difference to the group that has a reduction in prescribing.

4. Method p6 All practices received patient education brochures. How have these been distributed? Did they also receive some training on how to use them, or was it just mentioned that they could be handed out to their patients? What were the main components of the educational training sessions?

5. p7 You describe that you have used the constant comparative method for qualitative data analysis and integration of qualitative and quantitative results. It is not clear to me how you have done the analysis in this way and how you have done the triangulation of the qualitative and quantitative data, this needs more explanation in order to interpret the results correctly.

6. Results Overall remark for the result section. It would be useful if you show clearly how you did the triangulations from the data from both the qualitative and the quantitative results and describe them together.

7. Clinicians’ responses to the intervention. It is interesting to read about the categorization of the respondents into three groups: those who think they don’t need to change, those who can’t be changed, and those who appreciate being reminded of the need to change. Could you back these results up with some evidence of your data (quotes) and explain why you have these categories. This could be an important message to take into account when designing a new intervention.

8. Discussion P14 ‘If patient expectations were thought to remain unaltered by the use of a decision aid, then the intervention component was deemed less useful. I think here you can discuss this in relation to similar research that has shown that such tools alone are not effective, you also need to communicate with your patient about this. You can refer to a study by Cals :Impact study in Implementation science 2009: Experience talks: physicians prioritization of contrasting interventions to optimize prescribing.

Also indeed the literature shows us that handing out printed educational materials have little effect unless paired with verbal back up. I am not sure how this was explained to the physicians in this study, this was unclear from the introduction/method section. There is also some evidence published on this (STAR study by Chris Butler, and another study done by Nick Francis)

9. Conclusion. As for future interventions, it is also more and more evident from the literature that multifaceted interventions may be more appropriate to improve antibiotic prescribing. You can indeed find this in the systematic review from Arnold SR, Strauss S, Cochrane database (your reference 12) and also in a recent publication from Tonkin-Crine S, Yardley L, Coenen S, et al. GPs’ views in five European countries of interventions to promote prudent antibiotic use. BJGP 2011, 61(586): e252-e261.

**Level of interest:** An article of importance in its field
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests