Reviewer's report

Title: Community Assessment of COPD Health Care study: a clinical audit on primary care performance variability in COPD care

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Reviewer: Alan Itraja

Reviewer's report:
The paper „Community assessment of COPD Health Care study: a clinical audit on primary care performance variability in COPD care“ by Dr. María Abad-Arranz and co-authors has been dedicated to describe a clinical audit performed at the level of primary care to evaluate the clinical care delivered to the patients with COPD in a routine clinical practice. Claimingly, this is the first ever clinical audit-derived analysis carried out in primary care to evaluate the clinical performance on COPD. The manuscript is therefore timely to fill this gap. The diagnosis and management of exacerbations of COPD were, however, left out of the scope this time. The paper describes the full methodology and main results of this audit with regard to guideline adherence in 1) the diagnosis and 2) treatment of COPD in the primary care centers in Spain. Beyond its importance, the paper is well written and is interesting to read. Some concerns still remain.

Major remarks.
1) The Abstract could be re-written to more informative, especially in terms of methods. I.e. providing more exact data for the reader (as the abstract is often the only part that many people read) on the time frame, selection of the sites, variables to address, and principles how were the analyses made and interpreted. In the results' part of the abstract, it could be mentioned that that most of the evaluated parameters appeared in the range of inadequate performance. Alternatively, this is also a conclusion for this study, as is the large variability in clinical performance across the centers. On the other hand, identification of the determinants of this variability or even the need to do so is probably not the conclusion from this study, but is rather a limitation of it.
2) Interestingly, smoking-related issues were addressed and considerable numbers of active smokers were found, but not performance of the counseling to quit smoking by the health care providers. Why?

3) Statistics. The authors state that the significance of variability between the different centers was analyzed by chi-squared test or ANOVA. This is appropriate, if the chi-square test was chi-square test variance. This could be stated in the text. Bartlett's, Levene's or Box's tests would also have been appropriate alternatives for the statistics.

4) Another statistics-related issue is the lack of assessment of the confounding or explanatory variables for the great variability detected and described in this paper. It is understood that this is a matter of another analysis, however, without an appropriate analysis, the undersigned is not convinced in that the high variability in the audited parameters is not related e.g. to FEV1 and the severity of COPD as measured by this parameter.

5) Results. The text is full of vague formulations like "considerable" (everywhere, but e.g. in Results, page 11. Last paragraph), "moderate" (e.g. in Results, page 11. Last paragraph), "minority of" (Results, page 12, second paragraph) etc.

6) The study has been funded by a pharmaceutical company. This has been mentioned somewhere, but not in the main text. The role of the funding source could be outlined in e.g. the Discussion.

Minor comments.

1) Some references are missing (for example for the GINA consensus document (page 10), the mMRC (page 10) etc.

2) "Ethical considerations" (page 10). Is there a need to go through all the aspects provided? This seems to be rather a matter for an application to obtain ethics clearance. Probably, it is enough to state, that the study protocol was approved by an appropriate ethics review board.

3) The resolution of the Figure 3 is poor for assessment.

4) "Dual bronchodilator" could be used instead of "double b." (page 15, line 48).

5) Grammar check could be done, e.g. for comma use etc.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
No

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