Reviewer’s report

Title: Factors associated with junior doctors' decisions to apply for general practice training programmes in the UK: secondary analysis of data from the UKMED project

Version: 0 Date: 12 Oct 2017

Reviewer: Hugh Alberti

Reviewer's report:
This study is an excellent report on a highly contemporary and important issue and provides both novel and supporting evidence on factors associated with the likelihood of trainees to apply for GP training in the UK. The methods are sound and well written up and to a non-statistician, the statistics appear reasonable. The paper is very well written and the conclusions appropriate.

I would recommend acceptance based on a few minor additions/clarifications as follows:
The paper only really recognises one limitation (one year cohort only) but does need to acknowledge other limitations, namely:

- the study is only on trainees who made first-time training applications and thus not the whole group who eventually applied for GP training. Do we have data on what proportion apply first-time and whether those that don't are any different to your cohort?
- the study is on trainees who applied for rather than those who eventually become GP trainees. Additionally, career choice does not always signify career application as there are other reasons for trainees to apply for a career speciality other than choice.
- foundation school and medical school attendance have been identified as factors but they are very much interlinked (the majority of graduates from most medical schools work in their local foundation school) so can you state that both environments influence career choice? It may be one or both?

Other minor suggestions/clarifications:
- Bradford is listed but is not a medical school - I presume it is listed because of the pre-med foundation school there but as it is a clear outlier this needs to be mentioned and acknowledged at least as footnote in the table.

- the first line of the discussion claims that the study has identified the MAIN factors. Unless this has been proved statistically (and therefore needs to be made clearer in the text) I am not sure this can be claimed - it has certainly identified a number of factors of the tested 25, but what about unknown factors?

- the authors state on p20 that graduate entry participants were no more likely than non-graduate entrants to apply for GP training and yet in the results in the abstract it is stated that non-graduate entry decreased the odds of applying for GP training. Needs clarification.

- References - 12 is duplicated and 9 just needs to be checked that the website is still available

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable
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