Reviewer’s report

Title: Estimating Adult Mortality in Papua New Guinea

Version: 0 Date: 24 Oct 2018

Reviewer: Hebe Gouda

Reviewer’s report:

Thank you for the opportunity to review this manuscript. It is excellently written and provides extremely important developments to this area of work in Papua New Guinea. I have some mostly minor comments and suggestions.

1) In the Methods section the authors provide a comprehensive description of the possible data sources and their strengths/limitations. It would help the reader, I believe, if this information was tabulated.

2) In most of the text the authors refer to Simbu province but the maps use the spelling Chimbu. The maps are very difficult to read and the embedded text should be made clearer

3) The sentence about the 2006 census between 369 and 371 can be deleted as it seems redundant given the previous section.

4) I am most concerned about the Composite Index used in this analysis:

   4a) First please provide the years for which the education indicator is based (I note the publication is from 2010 but when was the data collected)

   4b) please provide more details on the economic indicator and how the World Bank assessed 'poverty levels'

   4c) the use of 'the proportion of people engaged in paid work' is the most problematic of all the indicators here. It explains why NCD achieves such a high score but brings up a number of issues. Essentially any urban area will score highly on this indicator while those living off of land will have a low score. The relationship of paid employment with health in the PNG context is likely to be reasonably complex. This needs to be unpacked here. It would also be good to see sensitivity analyses and/or a discussion of how the composite behaves in comparison to others' results.

5) The authors mention where their findings are in agreement with Bauze's analysis. A more engaged discussion of the comparison between these analyses would be welcomed.

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