Reviewer’s report

Title: New ways of estimating excess mortality of chronic diseases from aggregated data: Insights from the illness-death model

Version: 0 Date: 09 May 2019
Reviewer: Oscar Ngesa

Reviewer's report:

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The authors have shown that a previously developed PDE can be used to estimate the excess mortality from age-specific prevalence and incidence, based on aggregated data. This work shows originality.

Just a few comments:

On line 63, make the word ill to be in italics too.

How sensitive are the estimates on the choice of priors for R: where uniform distributions(R(50) ~U(2; 9) and R(90) ~U(1; 2); again) are currently used? Sensitivity analysis would help to check this.

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 am able to assess the statistics

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

Acceptable

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