Reviewer’s report

Title: An exploration of mortality risk factors in children with non-severe pneumonia using clinical data from Kenya

Version: 1 Date: 21 Sep 2017

Reviewer: Leo Celi

Reviewer's report:

We have reviewed the answers and revisions submitted by the authors. In general, we feel that the authors were able to address the questions and concerns we raised. However, we think that the authors misstated what they did. Specifically, we have issues with what they present as the number of candidate variables for the machine learning. We were skeptic about the 350 features, and indeed, the authors wrote the following statements in their reply:

"Although the database includes up to 350 variables for each patient, no patient would have data on all 350 as it depends on diagnoses and treatments" and

"Additionally, while the database included 350 variables, the vast majority represented features tied to skip logics so that many variables are not relevant to the majority of patients, and relate to care provided after initial clinical assessment such as treatment prescribed, investigations requested and nursing observations undertaken"

This is too important of a detail to have been left out in the manuscript. The correct number of variables that were employed during training should be stated, and not 350.

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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