Reviewer's report

Title: Adaptation of a probabilistic method (InterVA) of verbal autopsy to improve the interpretation of cause of stillbirth and neonatal death in Malawi, Nepal and Zimbabwe

Version: 3 Date: 5 April 2011

Reviewer: Abraham Flaxman

Reviewer's report:

- Major Compulsory Revisions

Based on the response to reviewers, it is clear that I misunderstood the conclusion of the paper in my previous review. I interpreted the assertion that the algorithm is “reliable” as an informal statement that the results could be relied upon for public health decision making. However, the response makes it clear that the authors intended this to be a precise technical statement. When they say that “InterVA provides reliable information”, they mean that it will always produce the same (possibly incorrect) prediction of underlying cause of death when presented with the same VA interview results. This language is likely to be misunderstood by others as well, and should be changed. But more importantly, I find this conclusion much less interesting than the one I mistakenly criticized for over-reaching. Indeed this conclusion was known before the study began, simply based on the nature of the algorithm. I think the true focus of the paper is about the accuracy of the method, and the conclusion should be about accuracy (in balanced terms). Accuracy, not reliability, is what is important when considering using this method to gather information on neonatal mortality patterns for decision making.

- Minor Essential Revisions

Bayes formula in first paragraph of methods section is incorrect (the denominator should be a sum of products).

- Discretionary Revisions

None.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I am currently employed by the Institute for Health Metrics and Evaluations at the University of Washington, where I am actively researching methods for computer-coded verbal autopsy and evaluating the performance of these algorithms compared to InterVA.