Reviewer's report

Title: Performance of Physician Certification of Verbal Autopsies: Multi-Site Validation Study using Clinical Diagnostic Gold Standards

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Reviewer: Peter Byass

Reviewer's report:

This is an important paper in that it fundamentally challenges the widespread de facto (but unsubstantiated) validity of PCVA.

Major compulsory revisions:
The major problem here, as with other papers in this supplement, is that the analyses and conclusions depend crucially on the validity of the PHMRC reference dataset and the newly proposed metrics for VA performance (references 34 and 38 in this paper). Since those references are not yet published or well-established, this creates an obvious difficulty for papers based on them - irrespective of their actual validity. Thus it is essential to at least indirectly mention possible factors which may compromise the validity of the so-called gold standard data and metrics, which of course should be more fully explored in refs 34 and 38 respectively.

On page 9, the statement "PCVA provides less accurate measurement than medical certification" seems somewhat misleading. In fact you have just established CSMF comparisons of 0.675 to 0.780 for adults, 0.682 to 0.683 for children and 0.733 to 0.756 for neonates - to me this feels much more like approximate equivalence. It does, however, raise the much more fundamental issue of the validity of medical certification - maybe this is discussed in ref 40, which I have not seen?

Minor essential revisions:
The sentence beginning "The reasons behind the decision..." on page 6 does not make sense.

page 7: "Figure 6 shows..." the odds ratio for what? Please make clear what an OR of 1 represents here.

Legend to fig 6: the odds ratios of what?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I have been funded by IHME to visit Seattle and to participate in the Bali VA Congress. I am a member of the PHM Editorial Board.