Reviewer's report

Title: Improved method for physician coded verbal autopsy reduces rate of discrepancy: Experience of Nouna Health and Demographic Surveillance System (NHDSS), Burkina Faso.

Version: 4  Date: 13 April 2011

Reviewer: Bruce Neal

Reviewer's report:

Abstract

It's unusual to report the main findings in the background section of the abstract. It's not always the case that physicians must be proficient in ICD10 codes as some VA systems use highly restricted cause lists.

The term 'longitudinal death data' is a little difficult to comprehend.

Exactly what is meant by 'discrepancy' is not clear.

Likewise, the 'discordance rate' is not explained sufficiently for a reader to know what is meant.

The conclusion that suggests this is a good method for resource poor countries seems a little at odds with what has been done because the panel method actually requires more resource than the standard method. And it is not clear what the real gain from this additional investment is.

Background

It might be helpful to specifically state the objectives of this research at the end of the background section. So that the reader knows exactly what it was you set out to do.

Methods

What is a 'sub-Saharan' climate? You might need to explain this if it is important.

One question that arises is why you didn't apply the same methods independently to the same set of deaths. That would have decreased the risk of bias consequent upon other factors that might have varied from one year to the next.

The statistics section is a bit short on detail. I was unable to understand from what is written here exactly what you did by way of quantitative comparisons. Or how your metrics were calculated.

Results

It's not clear what 'agreement' actually means. At what level of detail of diagnosis was there agreement? How did you calculate the 'concordance rate'? Indeed, how do you calculate concordance when you have a panel of many many...
members? What is the concordance between?
I was unable to locate table 2 (or table 1, althought I could see no reference to that either)
I wanted to see a direct side by side visual comparison of the cause specific mortality fractions by method. Perhaps a plot so that I could get an immediate impression of how the two methods compared.

Discussion
I was not convinced that I had seen results to support the first statement made in your Discussion.
I wanted to hear a bit about the strengths and weaknesses of the research apporach you had used. Are you likely to have precise and relaible results? If so why? If there are some weakenesses to the design what are they and what might the impact be?

Conclusions
I was not convinced by the data that you presented that this was actually a method that was going ot be a good choice for widespread adoption in resource poor settings. I guess I could be perceived to be biased in my percetion by my own work with Joshi that has suggested two reviewers do little better than one. Which seems ot me to suggest that a panel is likely to offer rather little real advantage over two. And in the absence of convincing stats in this report of yours I see little reason to change this percetion of mine. I think you need to try and express your reasons for this conclusion much more clearly because I don’t think you make an especially convincing arguement at the moment.

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

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

Declaration of competing interests:
I have worked in this field and reported a paper with directly conflicting findings.