Reviewer’s report

Title: Assessing quality of medical death certification: concordance between gold standard diagnosis and underlying cause of death in selected Mexican hospitals

Version: 2 Date: 24 May 2011

Reviewer: Chalapati Rao

Reviewer’s report:

This manuscript presents a detailed comparative analysis between causes of death listed on death certificates with causes derived from medical records for a sample of deaths in Mexican hospitals. The methods and results are presented adequately.

Minor essential revisions

1. The abbreviation 'FD' should be presented with its expanded form when it is first used in the Background.
2. On page 4; first line; the term 'concordance between' could probably be replaced by 'reliability of'.
3. The methods go into extensive detail regarding different levels of evidence for gold standard diagnoses. However, all the analyses are based on data pooled across the different levels. Hence, this section of the methods should be kept brief, to avoid distracting the readers.
4. Page 5; 2nd paragraph of section titled 'Procedure': The first word should probably be 'Review' instead of 'Revision'.
5. On page 9, fourth para; the sentence ".....'diabetes can be reduced by 10% in the USA and 24% in Mexico' is somewhat confusing. The authors probably mean '...mortality from diabetes would be reduced by ......". Please clarify.

Discretionary revisions

1. The authors recommend assessment of validity of death certification should be based on agreement according to multiple causes. However, statistical tabulations are usually based on underlying causes, and hence assessment of validity of underlying causes is an important basis for interpretation of mortality data. The distinction between validity of death certification and validity of mortality statistics could be commented upon in the discussion.
2. The single conclusion from the manuscript is that there is a need to strengthen death certification for neonatal and child deaths. This seems a bit thin, given the considerable amount of data, figures, graphs, and annex tables presented in the text. The authors could add some summary comments about implications of the study findings in interpreting cause-specific mortality from VR data.
3. Overall, the manuscript could be made more concise, particularly the
discussion.

**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.