Reviewer's report

Title: Calculating Expected Years of Life Lost for Assessing Local Ethnic Disparities in Causes of Premature Death

Version: 1 Date: 17 November 2007

Reviewer: Frank Sorvillo

Reviewer's report:

This is a well-written and valuable submission that underscores the utility of using mortality data in assessing the burden of disease in a community. As the authors contend, the use of premature death (YLLs) as a measure is an important and underused gauge of health status that can be vital to the targeting of intervention efforts. The paper also illustrates the persistent health disparities for African Americans. The information is thoughtfully presented and limitations honestly detailed. Some suggestions are as follows:

1. It should be explicitly stated in the Methods that underlying cause of death was used.

2. The number of tables and figures (14 total) can be reduced.

3. It would be useful to add to the limitations that the use of underlying cause of death alone may substantially underestimate the importance of several leading causes of death (e.g. diabetes, sepsis, etc). See Redelings, Epidemiology, 2006;17:100-3.

4. Comment should be made that alternative methods for calculating YLLs, that are not life table-based, are also used and may be more straightforward to calculate. (For example, selecting a single age cutoff such as 75 or 65 years with deaths below this cutoff contributing to YLLs.) Such an approach may be more practical for smaller health jurisdictions.

5. While average YLLs can be a valuable measure it must be cautiously interpreted. For example, it is possible for a cause of death (e.g. among infants) to have a very high average YLL but be relatively uncommon. Comment on this would be of value.

6. Given that uncertainties may also exist in available population estimates calculation of rates must also be interpreted with caution.

What next?: Accept after minor essential revisions

Level of interest: An article of outstanding merit and interest in its field
Quality of written English: Acceptable

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

Declaration of competing interests:

'I declare that I have no competing interests'