Reviewer's report

**Title:** Hypertension: Comparison of self reported data on hypertension and measured blood pressure in a tri-ethnic community

**Version:** 4  **Date:** 29 March 2012

**Reviewer:** Luisa Borrell

Reviewer's report:

MS: 1220331110590054 Hypertension: Comparison of self reported data on hypertension and measured blood pressure in a tri-ethnic community

The revised version of the manuscript (MS) shows some improvement but there are some residual issues from the previous and some new issues as a result of the revisions.

Specific comments

1) Introduction. This section while improved does not present a coherent argument for the underestimation of self-reported measures of hypertension and foremost the importance of development a prediction model.

2) The introduction needs some editing, i.e., there are several words that could be replaced for a more appropriate one. For example, second sentence of first paragraph: Standard symptom….. are used to develop population based estimates of hypertension.

3) The aims are still a bit disconnected from the statistical analyses. For instance, Aim 2 as stated gave the impression that the authors were going to show how far the self-reported measure was from the clinical measure based on particular characteristics included in the prediction model. However, this aim is addressed by showing specificity, sensitivity, accuracy and Kappa.

The same issue applies to Aim 3 as again the reviewer was under the impression that the authors were going to use the prediction model calculated using NHANES data to assess or compare the quality of the estimates generated from the HEP data.

4) It is unclear whether the clinical measures of hypertension were collected the same way in HEP and NHANES. This needs to be stated.

5) The authors used the term Latino instead of Hispanic (which was used in the previous version). However, these terms are used interchangeable and the issue here is whether the sample truly represents Hispanics/Latinos or just Mexican Americans. Given the sample size in NHANES and the Hispanic population in Detroit, it is likely that the sample is comprised of Mexican Americans and it should be called just that.

6) It is unclear why the authors used non-Hispanic black as the reference as most studies used non-Hispanic white. Please remove the coding used during
analyses from the independent variables description (page 5).

7) Sensitivity and specificity are not measures of agreement per se and perhaps the authors want to note that.

8) The discussion shows improvement but still does not compare the study findings with previous studies. There are several studies addressing this issue for diabetes and perhaps they can be used as comparison for this study’s findings.

9) Please consider changing the title to reflect the content of the paper.

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

Quality of written English: Needs some language corrections before being published

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