Reviewer’s report

Title: Differences in Risk Factors for Children With Special Health Care Needs (CSHCN) Receiving Needed Specialty Care by Socioeconomic Status

Version: 2 Date: 2 December 2008

Reviewer: Michael Ganz

Reviewer’s report:

Review of Differences in Risk Factors for Children with Special Health Care Needs Receiving Needed Specialty Care by Socioeconomic Status

Abstract: Reword Objective and Conclusions to reflect that the authors are investigating associations. The word “affecting” implies causality. Study design is incorrectly described. It is more like a “retrospective cohort analysis”. Principal findings section unclearly communicates the findings.

Page 4, first paragraph of Background section: I would recommend moving the last 2 sentences higher in the paragraph. Also, the first 2 sentences don’t seem to make sense together. The first sentence highlights how healthy children require only primary and preventive visits but then the second sentence talks about limitations. Perhaps for a better transition into the rest of the paragraph, this second sentence should start with a discussion of how CSHCN need additional visits (care coordination, specialty care, etc).

Page 5, first full paragraph: Consider shortening.

Page 5, next paragraph: Rates for Hispanics, blacks, and Native Americans need a comparison (to whites).

Page 6, first line: Unclear if authors meant <199 or <100. Unclear why the range of <100-199 is given.

Page 6, next paragraph: Please confirm that citation 13 is reporting “4 times as much” as opposed to an odds ratio of 4, which is not that same as 4 times as much.

Page 8, last sentence of first full paragraph: Replace “weighting an sample design” with “survey design.”

Page 9, first half of page: Some of the sentences in this paragraph need to be tightened.

Page 9, Results paragraph, third line: Replace “among” with “between.” Last line: Please be clear to the reader that the raw numbers reported are unweighted sample counts and the %s in parentheses are weighted population proportions.

Page 10, first line: Use of the phrasing “increased as SES increased…” implies
temporal causality, which this dataset does not support.

Page 10, 4th line from the bottom: Consider rephrasing “significance was identified”.

Page 12, middle 2 sentences: Consider rephrasing “…the least fit model” with “the model with the worst fit.”

Discussion section: This section is confusing, mainly because so many results are presented here. Please confine, as much as possible, results and data to the Results section and use the Discussion section for discussion, commentary, and interpretation. Perhaps you can qualitatively report the results.

Page 17, Conclusion section: Seems long---you need to boil down the results and implications to a short paragraph (is this a required section of the manuscript?).

Tables: I found the Tables dense. Please clarify in Titles and Notes, how Tables 1 and 2 differ. Also, I recommend presenting predicated probabilities resulting from the logistic regression models rather than a slew of coefficients and odds ratios (these can be presented in an appendix).

In general, I found the text in the Results section, especially the descriptions of the coefficients on the interaction terms, confusing and difficult to follow. I also was struck by the last of a theoretical foundation to help us tell if results were surprising or not.

Major Compulsory Revisions:
1. State, up-front, a theoretical foundation for this study.
2. Rewrite text to clearly present the findings and their meaning.

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

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

**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