Reviewer's report

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

Version: 2 Date: 23 September 2008

Reviewer: Ashley Skinner

Reviewer's report:

All major compulsory revisions:

Objective: You need to make a much stronger case for what your study can add. I do believe there is benefit to examining differences by income, but you don’t explain why uninsured children may fare worse in certain income groups.

Methods: What is the purpose for including the interaction terms? As presented, they are difficult to read and it seems that the authors base inclusion in the model on whether or not they are significant. What is the theoretical basis for these interaction terms? For example, I don’t understand why the effect of geographical region would differ by severity.

Please explain the -2 log likelihood and why the model fits are important.

Results: Very, very hard to read. You do not need the coefficients in the tables. The ORs should be sufficient and will make the table much easier to read. This should also help in the results section, avoiding the confusing use of phrases like “interestingly, the coefficient was positive/negative”. Even though you list p, also star or otherwise indicate significant values.

In the text, try writing it without the word “coefficient(s)”. I think if you focus on the relationship and not the sign of the coefficient, this will flow much better.

Discussion: Please don’t use “predictor” given the cross-sectional analysis.

Please don’t use “effect” without reiterating if the relationship is positive or negative. For example, the second paragraph of the discussion makes very little sense without knowing the direction of the effect.

Why would the effect of age differ by socioeconomic status? You state “Stratifying by SES reveals the true effect of age” but there needs to be some thoughts on why this effect is there. The final sentence is not clear. I’m not sure how the age and severity interaction is related to qualifying for public programs.

Much of the discussion seems to be based on a comparison to Mayer et al, but there is little explanation of why your stratified analyses show differences. I mentioned the lack of argument to support the purpose of the analysis in the introduction, but without that reasoning the discussion becomes even more difficult to follow. A lack of statistical significance is not itself particularly
interesting when you’ve divided into smaller strata. You may just not be able to pick up the differences. Perhaps most importantly, how do you provide more useful information for policy? Would you come to different conclusions about the policies that should be developed?

Be a little more forceful in your comments on policy. You mention future research, but this particular issue seems to be well-researched. If you are performing an analysis that can build on what’s already out there, then you should be able to discuss more thoughtfully how it can be used to benefit CSHCN.

General: Avoid using passive voice. Use “affect” and “effect” correctly. Please proofread!

**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.

**Declaration of competing interests:**

I declare that I have no competing interests.