Reviewer's report

Title: Effects of Spatial and Material affluence on health insurance subscription among women in Ghana

Version: 1 Date: 31 January 2013

Reviewer: Pia Schneider

Reviewer's report:

Dear Authors,

thanks a lot for having prepared this paper. I am afraid I do have some major comments, which I hope you will be able to address. Most important, it would be good to have this paper edited by an English editor before you resubmit it again. Also, recently there was an excellent paper on health insurance in Ghana published in Health Economics, and I recommend you read this paper.

Major Compulsory Revisions:

Rewrite Introduction:
1) The introduction has many sentences that simply do not make sense, such as "..... health financing systems are scrappy and weak". Instead of these sweeping statements, the authors should rewrite the introduction and describe the problems in health financing, such as for example public underfunding of the sector, high user fees and informal payments causing the poor to be excluded from care, insufficient funding leading to low quality care etc.

2) The introduction cites many articles but they are not discussed in a way that it would make sense. Also, I am sorry, but some of these sentences are so unclearly written, that I have a hard time to understand what the message should be. An English editor could help here. For example, the first paragraph of the introduction on page 2 and the first two sentences on page 3 do not make any sense to me.

3) I don't think that rational choice is the correct framework within which insurance enrollment decisions should be discussed. Rather, economists use expected utility theory to explain insurance decisions. However, there are also other theories that can be applied, and are important in poor contexts. I wrote a paper about these theories in 2004 and it's published in Health Policy and Planning 19(6): 349–355. You might want to read this paper.

4) You use terms such as "spatial environment" and "household affluence" but never explain what you mean by these. What do these terms mean in the insurance enrollment context? How did you measure affluence?

5) In the last paragraph, you say: "It must be stressed..." and then you refer to one study using national data whereas the other studies used micro-data. It is not clear what the message is here. Are you trying to say that one or the other data is better? If so, please explain the reasons why. Later in text (p. 4) you say that
your data is from a national dataset.

6) the section on "Setting, data and methods" needs to be rewritten. It is not clear now.

7) at the end of the first paragraph in this section you describe membership numbers. Can you put this information in a table?

8) the section "analytical model" includes sentences that are not needed. I suggest you look at the "analytical model" section of a published article and rewrite this section accordingly. For example, there is no need to say that you code Yes=1 and No=0 because we all do that.

9) What do you mean by "regional development and poverty are not symmetrical"?

10) I am not sure how you define "social health insurance", but it is generally not targeted to the poor. Rather, it covers workers in the formal sector who pay a payroll tax to enroll. You might want to correct your statement on page 5.

11) The last sentence on proxy means and geographic targeting is also not clear.

12) The "findings" section needs to be rewritten. Don't repeat in the text what you already say in the table. Just summarize your findings. Also, the tables are much too large and not clear. Please revise them.

13) Table 1: How did you calculate the wealth index using DHS data? What is the difference between "respondents earnings" and "affluence" and wealth index?

14) Table 2: In the text you refer several times to the "odds" but in table 2 it seems to me you are reporting coefficients. This is not the same. If you want to show odds ratios in Table 2 then you need to compute them.

15) Table 2 is too large and not clear.

16) On page 11 following Figure 1 please explain what you mean by normative assumptions in an insurance context.

17) the Discussion section is not clear and needs to be rewritten. Again, you make many sweeping statements such as in the first paragraph on neoclassical rational economic theory. Suggest you delete these stenences. Instead, discuss your findings in the context of other studies who researched a similar topic in Ghana and elsewhere.

18) the Conclusion needs to be rewritten too. Currently it is not clear what it is trying to say.

**Level of interest:** An article of limited interest

**Quality of written English:** Not suitable for publication unless extensively edited
**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests