Reviewer's report

Title: Viewing Health Expenditures, Payment and Coping Mechanisms with an Equity Lens in Nigeria

Version: 2 Date: 14 November 2012

Reviewer: Charlotte Muheki Zikusooka

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Essential Revisions

1. The term “use of own money” needs to be defined upfront as it not conventional terminology.

2. Clear distinction needs to be made of the difference between “OOPS”, “OOPS with reimbursement” and “OOPS without reimbursement” and “use of own money” – which are used throughout the paper.

1. “While OOPS accounts for about 15% of the health financing used in high income countries, it takes up over 70% of the health financing in low-income countries ....” It is not true that all low-income countries have as high as 70% of health spending financed through OOP. I suggest that the authors look at some recent work by EQUINET for 16 countries in East and Southern Africa.

2. In explaining the results around ‘payments and coping mechanisms’ it seems most variables were not statistically significant. While the authors do note that the variables were not statistically significant, they do not offer possible explanations as to why this is the case. And also, explanations on how to interpret the results in light of this.

3. Results explaining “Payment and payment coping mechanisms used to pay for health services by geographic location” are not well articulated, are brief, and it is not easy to understand the take-away message from these results.

4. “This indicates that urbanites were about 67% less likely to use their own money compared to the rural dwellers after controlling for the potential confounders listed above.” In such a sentence, what does ‘own money’ mean? Whose money would they be using?

5. “The study did not show any statistically significant difference across the SES quintiles in the use of the payment and payment coping mechanisms though the equity ratios were high indicating some inequity.” A statement like this one (found in the discussion section of the paper) needs to be unpacked more to bring out the full interpretation of the findings.

6. Also, as a general comment for the whole DISCUSSION section, the language used is ‘not very accessible’ for people who are not fully conversant with modelling technical language. I strongly suggest that this section is revised and
written in a language that is more accessible by an average person. For instance, frequent reference to “odds ratios” is not the best way to bring out the meaning of the findings in the discussion section.

7. “The finding that drug cost took up about 70% of the mean treatment expenditure for most of the households means that even if user fees are waived for services like registration and consultation, most of the poor people would still have to bear a huge chunk of the direct cost by buying drugs themselves which could affect drug compliance…” I have some concerns about this sentence. Firstly: the interpretation of the 70% can be misleading (in the way it has been presented). It is true that drugs expenditure constituting 70% of expenditure on treatment is a relatively high proportion. But it may be 70% of a very small amount of OOP, in which case spending on drugs would not be a huge problem. Also, as already indicated by authors as being the finding in other countries, by their nature drugs will always take up a significant proportion of treatment cost. My second concern is: linking this finding with drug compliance and drug resistance. Basing on the information provided alone (and no further information on other behaviour around drug use), I find it difficult to see the link between “high expenditure on drugs and drug compliance/resistance”. The authors may be bringing into the discussion other knowledge they have of the context, but such conclusions cannot be adduced from the results of the study presented in this paper. I suggest that such arguments/conclusions either be fully supported with relevant information, or be removed from the discussion.

1. Is the question posed by the authors well defined? YES, but use of unconventional terminology could be removed from the title

2. Are the methods appropriate and well described? YES

3. Are the data sound? YES

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? YES

5. Are the discussion and conclusions well balanced and adequately supported by the data? YES, but issues raised in the comments attached need to be addressed

6. Are limitations of the work clearly stated? NO

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? YES. But there is more literature they could refer to which they have not.

8. Do the title and abstract accurately convey what has been found? YES.

9. Is the writing acceptable? YES, subject to changing the way the DISCUSSION has been written

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.