Reviewer's report

Title: Why some physicians in Portuguese-speaking African countries work exclusively for the private sector? Findings from a mixed-methods study

Version: 1 Date: 28 April 2014

Reviewer: Ann Levin

Reviewer's report:

The paper poses an interesting original question. It is an important question since not enough information currently exists on the role of private sector physicians in health provision in low- and middle-income countries, particularly in Portuguese-speaking African countries.

The study question could be better defined since currently it states that the objective is to strengthen the evidence base for policies regulating the profession in the abstract. In the text of the paper, it states that the objective is to understand the motivations, choices and practice of PSP. It would be helpful to state the hypothesis that is being tested in the study.

The data for the study are taken from surveys and appear to be sound and well-controlled. However, the interpretation of results is sometimes confusing due to the use of numerous statistical tests. The authors discuss the findings of several statistical tests but these are not now shown in Table 1. For example, they state that the proportion z-tests with Bonferroni p-values did not find differences between statistical groups but do not show the values. They then show the results of different tests such as chi-squared within the same paragraphs which is confusing.

Some parts of the methods seem appropriate – e.g. sampling and statistical tests. However, the calculation of earnings for private sector physicians is not adequate. While they attempt to estimate revenues, they do not try to estimate costs that would affect the calculation (profits equal revenues minus costs). The authors should mention this and if they are unable to estimate costs, they should mention this as an important limitation of the study.

The writing can be improved. Specific comments are shown below. Also the tables should show the results of the statistical tests.

Specific comments:

Section 3.1, 1st paragraph: The authors should have the number of physicians for dual practice and public practice only since it is included for private only physicians.

Section 3.3, 1st paragraph: The first sentence is confusing since it is not clear that the 92.6% refers to an average between private practice only and dual practice and should be clarified. The last sentence should indicate that modalities of work are being compared.
Section 3.4, 1st paragraph, second sentence: Private should be followed by sector.

Discussion section, 1st paragraph: It should be explained why earnings opportunities are not considered as important since most doctors state that is a reason to practice in the private sector in Table S2.

Discussion section, 2nd and 5th paragraph: It is important to mention that costs of drugs, supplies, and equipment are not taken into account in the analysis.

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

Develop a more specific objective that is being tested through the analyses in the paper.

Add to the methods a discussion of how estimation of earnings of private physicians can be improved. It is particularly important to discuss whether clinic costs can be estimated.

Add the statistical test results to the tables.

Improve the write up of the results so that it is clear that the tests are being used to analyses different relationships among the variables.

- Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Respond to specific comments

**Level of interest:** An article of importance in its field

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

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

No conflict of interest