Author's response to reviews

Title: The Role of Institutions in the Effectiveness of Treatment in the Ghanaian Health Sector

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Author's response to reviews:

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The Editor  
BioMed Central

Dear Editor,

Please find below the response to the comments made by reviewers of our paper: The Role of Institutions on the Effectiveness of Treatment in the Ghanaian Health Sector.

Reviewer 1:
Introduction: describe Ghanaian context: i.e., population, key health concerns, most prevalent diseases etc. What diseases are prioritized? A sentence on malaria burden
Response: Done. Please see first paragraph of paper.

References needed in first paragraph- cite all previous work
Response: Done.

End of introduction- focus is suddenly on malaria but is not discussed anywhere up to this point. It is confusing the reader. The focus on malaria needs to be introduced earlier in the introduction- particularly when describing Ghana context. Malaria prevalence and burden should be described then.
Response: Done. Please see first paragraph.
Methods: Start with description of facilities and Ghana health context
Response: Done. Please see first paragraph of ‘Data Description’

Empirical Specification- not sure this is needed if the focus of the paper is not on the modelling aspect. Can describe sample, facilities, provide rationale for variable selection and define outcome. Analyses can describe the ordinal logistic regression highlighting the outcome and primary predictors/variables of interest.
Response. Done. The equation was however not deleted for ease of reference.

Description of y=the variable has whole integers...please describe as a categorical variable
Response: Done

Describe malaria outpatients in separate section entitled sample
Response: Done; please see pg. 6

Include references in rationale for variable selection-i.e., older age, education...
Response: Done; please see page 7

Where did the data come from? This needs to be explicitly stated and described. Otherwise it is not clear why some variables are not available, e.g., income. The source of data needs to be described in its own section.
Response: Done; The exclusion of income was due to an error in the preparation of the questionnaire.

Coefficients- why not convert to Odds Ratios- these are generally easier to Interpret
Response: Converted. Please see Table 3

Minor Revisions
Abstract: The important question is to “what extent” not ‘extend’ in Background. Also should be question mark at end of sentence.
Response: Done.

Move the quality indicator used into the methodology section.
Response: Done.

Response: it has been revised. Please see last sentence of first paragraph of
introduction.

Second paragraph of introduction: So structural quality of care refers to resources needed for QUALITY care? Or simply to be able to provide any level of services? Please clarify.

Response: the paragraph has been removed.

Add discussion around institutional relationship prior to the objective. Place rationale and objective at very end of background.

Response: Done.

Methods: Move definition of decentralization up- define around first use (rather than in second paragraph)

Response: Done

Analyses: what software was used? What was considered significant? Were ORs and 95%CI reported?

Ethics/Any approvals needed

Response: Information added.

Data Description- this should be moved to the methods.

Were sample size and power calculations conducted? Currently, it is not clear where the sample size is currently coming from.

Response: Done.

Report proportion women in text and proportion in each type of facility.

Response: Done.

Only report findings as part results and discussion. All descriptions of where data come from and how it was organized and analysed should be in the methods. Remove Regression Results heading- findings from modelling should be integrated throughout the results and discussion section although a clear indication of what was significantly associated should be explicitly stated in results.

Response: Done

A limitation section is needed- this could include the fact that number of health workers represents health facilities and not just outpatients. Unmeasured confounders, limitations of analyses, generalizability etc should all be described.
Response: A limitation section has been added.

Table 1: provide absolute values in addition to percentages
Suggest describing patients as they vary across facilities (e.g., number included from each facility)
Response: Done

Table 2: title should include what 1 and 7 means. And again provide absolute values in addition to percentages.
Response: Done.

Table 3: provide Odds Ratios and provide 95% CI, don’t need to provide constant.
Suggest categorize variables based on how they are defined in the model: e.g., demographics, facility factors, institutional factors etc...
Response: Done.

Abstract: in Conclusions, talk about study versus paper
Response: ‘paper’ replaced with study

If authors have room, could differentiate between different decentralization approaches: ie. why was a social capital approach or public administration approach not be relevant or appropriate for answering the study question.
Response: Not enough room but noted for future work.

‘moot solutions’- unclear (pg 4, first paragraph)
Response: the word has been changed to know

Remove heading: previous studies. This should be highlighted in brief in introduction and described in relation to results in discussion section (it is not meant to be a literature review)
Response: Done.

What is table on page 9- it s not coming out clearly (remove)
Response: Did not see the referred Table.

What are thresholds? Don’t have value here and remove.
Response: Done.

Reviewer 2
But the analysis results of institutional variables
of flow of information from administrator to health worker and internal
decentralization are overlapping and redundant (in tables 1 and 3).

Response: Please, the last paragraph of the results and discussions section
explains why the two variables are not redundant.

The methodology was inadequately described. It was not clear why the sample
size was 2284.
Response: Further explanation has been given the sample and a limitation
section has also been added on the sampling method used.

The distribution of samples by health centre and district hospital
(in table 1) already made up to almost 100%.
Response: Further explanation for such a result has been added. Please see
page 9.

The definitions of the variables were inconsistent e.g. number of doctors at the
facility did not reflect the number of doctors worked at outpatient clinic.
Response: Good point. This has been further addressed in the limitation section.
In table 3, there were items of threshold 1 to 6, it was not clear what do they
mean.
Response: They have been removed.