Reviewer’s report

Title: Equity and efficiency of medical service systems at the provincial level of China's mainland: A comparative study from 2009 to 2014

Version: 1 Date: 26 Sep 2017

Reviewer: Hubert Amu

Reviewer's report:

Title

1. I suggest the authors go with this title: Equity and efficiency of regional medical service systems at the provincial level of China's mainland: A comparative study from 2009 to 2014.

Abstract

1. Page 2, line 26: decision makers should be changed to decision-making

2. Line 29, the authors should specify the type of regression analysis used

3. Line 34, the figures should be added to "produced more inpatient services."

4. Line 38, the new sentence should read; whereas several others including Hainam (0.457±0.012) performed poorly.

5. GDP should be changed to Gross Domestic Product.

Introduction

1. Page 3, line 50, the authors should provide a little literature on what the open policy is and what is does. This will help readers to put the work into proper perspective.

2. Line 50-51, first sentence, citation needed.
3. Line 61, What are your contextual definitions for equity and efficiency? The authors should define these, so that readers can put the context into proper perspective.

4. Citations needed for the first sentence on line 61 and also the sentence following that and ends on line 63.

5. Okay. Line 64-67 defines equity. My earlier comment (3) which pertains to equity should therefore be disregarded. However, lines 64-67 should precede the sentence which starts with "the direct….." on line 61.

6. Line 71 also addresses the definition for efficiency. This sentence should also therefore be sent forward; after my comment (5). This would make the arguments coherent.

7. Line 83-84. .....but few have focused on..... The few studies the authors are referring to should be provided

8. Line 87, "and a few studies" should be changed to "and others".

9. Line 88. It would be important to specify the health outcomes

10. Lines 105-109. Citation needed

11. Line 110. "We wondered whether.........". The word "wondered" sounds more journalistic rather than academic. The authors should, therefore, consider replacing it.

12. Line 116. The authors should indicate what they mean by mainland so that readers can put the paper in the right geographical perspective. Even if possible, small literature could be reviewed on this at the methods section and entitled "setting".

Materials and methods

1. Well-written
Results

Okay. But Table 1 should be changed to "Regression analysis on the determinants of efficiency"

Discussion

1. This section largely lacks citations for emphatic and categorical statements made.

Conclusion

Too much of the results is repeated in the conclusion. The conclusion section should be about the consequences/implications of the study. It should not be a recapitulation of research findings. This should, therefore, be looked at

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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Please indicate the quality of language in the manuscript:

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