Author's response to reviews

Title: A cross-sectional study assessing the association between online ratings and structural and quality of care measures: results from two German physician-rating websites

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Responses to Reviewer Comments

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***Editor***

We recommend that you copyedit the paper to improve the style of written English. If this is not possible, you may need to use a professional language editing service. For authors who wish to have the language in their manuscript edited by a native-English speaker with scientific expertise, BioMed Central recommends Edanz (www.edanzediting.com/bmc1). BioMed Central has negotiated a 10% discount to the fee charged to BioMed Central authors by Edanz. Use of an editing service is neither a requirement nor a guarantee of acceptance for publication. For more information, see our FAQ on language editing services at http://www.biomedcentral.com/authors/authorfaq/editing.

We would be grateful if you could address the comments in a revised manuscript and provide a cover letter giving a point-by-point response to the concerns.

Please also ensure that your revised manuscript conforms to the journal style (http://www.biomedcentral.com/info/ifora/medicine_journals ). It is important that your files are correctly formatted.

Dear Editor,

Thank you very much for your comments regarding our paper. We appreciate your comments and the work of the reviewers and are happy to address them in our revised work. As you will see we have reworked several parts of the paper in
order to improve it. Among others, we have made the following changes:
- An academic native speaker proofread the entire paper again.
- We discussed more in detail the representativeness of our studied sample.
- We added further results giving a more detailed impression of the data by showing a scatterplot (bivariate) for each single correlation analysis as an appendix.
- We implemented the suggested paper(s) into the discussion of our findings.
- We highlighted the new contribution of our paper even more clear.

We would like to thank all of the reviewers and the editor for their helpful comments. We believe we have addressed each concern that the reviewers mentioned and think that this will increase the impact of the study.

We are looking forward to reading your response.

***Reviewer 1***

Minor Essential Revisions
(1) Use the term “patient satisfaction” instead of “patient satisfactory” optionally.
(2) Use the term “with” instead of “for” at page 7, number 5 optionally.
(3) Use “p” (lower case) instead of “P” at page 9, number 8.
(4) There is a missing word at page 11, number 1. (“some diabetes and asthma…”)

Thank you very much for your helpful comments. As you will see, we have made the proposed changes.

***Reviewer 2***

Review: A cross-sectional study assessing the association between online ratings and structural and quality of care measures: results from two German physician-rating website

This paper takes on an important question: whether patients should rely on the online ratings to make physician choice. Using a sample of 65 physician practice, the authors examine the correlation between online ratings from two German websites and the clinical quality measures. Overall, the authors are working on a worthy research agenda. I agree with the authors that there exists a great need for empirical evidence on the value of online ratings in enlightening doctor choice. This paper has the potential to make a valuable contribution to our understanding of the value of online doctor ratings.

Major Compulsory Revisions
My major concern is the relatively small sample size, which casts doubt on the generality of the findings. The study is based on 65*1.77 = 115 doctors, all from one provider network. It is not clear how applicable of the findings here to the
greater physician population. In addition, some quality measures such as Asthma has only 26 observations. I wonder whether the authors have enough statistical power to draw conclusions. This issue should be addressed.

Thank you very much for this comment. Indeed, you refer to two important issues. We have reworked the relevant parts to follow your suggestions.

1. The representativeness of our studied sample: We have added further data and discussion to the limitations (“Third…”) section to provide more information regarding this issue. We hope you find this helpful.

2. You are totally right to question the statistical power of our results which might be limited for certain measures. Due to the limited number of observations we applied the Shapiro-Wilk test to test for normality. Unfortunately, we are not able to increase the number of observations since such data is not available for German physician practices on a regular basis. But, as you will see, we have added further results giving a more detailed impression of the data. We added figures showing scatterplots (bivariate) for each single correlation analysis as an appendix. If you think that further explanation would be helpful or necessary, we would be happy to add such.

Minor Essential Revisions

Qualitatively speaking, the findings are not that different from Greaves et al (2012), which is based on a much bigger sample of physicians. So the authors need to provide more convincing evidence on their new contributions.

Yes you are totally right, that our results do confirm some of the findings of Greaves and his colleagues, such as the association between online and conventional patient satisfaction survey results for both German PRWs. However, we also found some contradictory results; e.g., for preventative services. In addition, in contrast to the UK results, we found strong associations for two diabetes measures and one asthma measure. Also possibly of interest, we showed that the correlation between clinical care measures and online satisfaction results for diseases which are likely to occur in higher ages (e.g., CHD) are relatively low compared with diseases likely to occur in earlier stages (e.g., asthma). This might be due to the fact that older patients do not rate their physicians online what might be addressed in future studies. Regarding cost-targeting measures, we also found some additional results. For example, we showed a strong association between the online ratings and the medication cost per case for three of four measures indicating that higher costs were related to better ratings. Further analysis revealed that this was especially the case for specialists. Patients here might have a greater desire for getting medication prescribed when seeing a specialist what might lead to higher costs. The results of this study also could show that the patient per doctor ratio was strongly associated with all of our included measures. This means that the more patients physicians treat in a practice, the lower the ratings. Finally, we could not detect any significant correlations with clinical care measures for the elderly (e.g., medication therapy). This might demonstrate the limited usefulness of online ratings for older patients. As you will see, we have reworked some parts of the discussion to highlight the new contribution of our study even more clear. Do you
think we should make this even more clear?

The authors might want to reflect the current body of knowledge on the study of how online ratings are associated with doctor quality. For example, Gao et al (2012) examines whether the online ratings are associated with individual doctor quality like board certification, education background, and years of experience, as well as malpractice law suits.

Thank you for this helpful comment. As you will see, we modified the discussion section and compare our findings with those from the mentioned study as far as possible.


Thank you very much for mentioning this literature. As you will see, we included the results of this interesting study in our discussion as well.

The paper could provide more details on how the quality measures are constructed. There are some valuable information in Table 1, but they are not reflected in the content.

We added some more information for some of the measures. For some measures (e.g., PRISCUS medication) we did not explain those in detail within our study but refer to the existing literature (due to limited space constraint).

The language can be further polished.

As you will notice, an academic native speaker proofread the entire paper again.

Discretionary Revisions

The authors could provide more discussions by comparing their findings with those using UK and USA data.

Indeed, we would be happy to include more studies for comparison purposes but were not able to identify more similar studies (besides the one you mentioned above). As you can see in the discussion we compare our findings to all studies we are aware of. The emphasis here lies on the discussion with the UK study which also addresses physician ratings but also now look at the US evidence you suggested. Due to space constraints we did not conduct a very thorough discussion with the studies regarding the hospital sector since it is likely to be of limited comparability. Do you think this would add further value to the paper if we discussed those findings more in detail?