Reviewer's report

Title: Patient consultation rate and clinical and NHS outcomes: a cross-sectional analysis of English primary care data from 2.7 million patients in 238 practices

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Reviewer: Madden Caoimhe

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Full title: Patient consultation rate and clinical and NHS outcomes: a cross-sectional analysis of English primary care data from 2.7 million patients in 238 practices

I appreciate being provided with the opportunity to review this paper. I have been involved in a number of studies focusing on the area of patient safety in primary care, and feel that this is a valuable and interesting paper. I have provided a number of suggestions that I feel would help to further improve its' quality, and aid reader understanding.

*please note the line numbers pertain to those provided in the authors' pdf document.

Abstract

Page 2, lines 7-8: The phrasing "relationships between general practitioner (GP) and nurse consultation rates and outcomes were investigated" implies that general practitioner consultation rates and nurse consultation rates were compared against each other.

Page 2, lines 10-13: I do not feel there is a need to provide the IRR and confidence interval values for non-significant results.
Background

Page 3, lines 3-5: consider rephrasing "The extent to which greater demand on, or improved access to, primary care is associated with secondary care use and other outcomes" to "the extent of the relationship between greater demand on, or improved access to primary care, and secondary care use…"

Page 3, line 8: this sentence: "patients in practices which provide more consultations might be less likely to use hospital services as a result of difficulties in accessing primary care" appears to be contradictory, especially considering the sentence that follows it. Should this read "less consultations"?

Page 3, lines 19-20, 21-23: "finally, studies of practice factors associated with patient satisfaction have been based on patient surveys rather than objective data"..."We therefore explore the association between clinical and service outcomes (mortality, hospital admission rates, quality of care, and patient satisfaction) and consultation rates in primary care, at the general practice level"

- is this contradictory, considering the methods section states that the General Practice Patient Survey was the tool used in this study? The above sentences explicitly implies that you only use objective data at a practice level, although the GPPS is a patient experience survey.

Page 4, lines 10-11: A very brief explanation (one sentence max) of the Quality and Outcomes Framework (QOF) performance would be useful.

Page 5, lines 16-24, page 6, lines 1-3: Considering this entire section describes the way in which the data was coded, which I feel belongs either under a separate independent sub-heading, or as a paragraph under the 'statistical analysis' subheading.
Results

Page 6, line 8: Consider providing percentage for practice data used out of data collected.

Consider providing p values for all significant findings, and indicate which findings were significant (e.g., using an asterisk) in table 1 and table 2.

Page 8, line 6: would it be feasible to include the consultation rate and patient satisfaction data within table 2 or 3, rather than isolating it within the additional file?

Discussion

Page 9, line 10: Consider rephrasing "in particular with respect to" to "particularly with respect to".

Page 9, line 11: Consider rephrasing "treated with caution" to "interpreted with caution".

Page 10, line 22: "and hospital admission rates".

Page 11, line 6: consider rephrasing "and any outcome, but we did observe a strong relationship between nurse consultation rate" to "and any of the outcomes examined, with the exception of the relationship between...."

Page 11, line 18: consider rephrasing "could be seen as reassuring" to "could be considered reassuring".
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.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
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Yes

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Quality of written English
Please indicate the quality of language in the manuscript:

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