Reviewer’s report

Title: Cross-sectional study in an out-of-hours primary care centre in northwestern Germany - patient characteristics and the urgency of their treatment

Version: 2 Date: 21 Jan 2019

Reviewer: Linda Huibers

Reviewer's report:

Dear authors,

Thank you for taking my suggestions into account. Overall, I agree with your point-by-point discussion.

Yet, I have a few questions, for clarification, which may be partly due to my misunderstanding and partly due to the wording used. Also, I have a few minor suggestions.

Best regards

Introduction

Row 54: I am not sure if I understand "… are only occupied by the hour".

Is it correct that the description "statutory health insurance data cannot answer all research questions" refers to the sentence on previous studies in Germany that have only used administrative data. Or in other words, "statutory health insurance data is the same as administrative data?"

The extra information on the German system was very helpful. Just to check my understanding on who will see the patients between 10pm and 8am (so during the nights) - that is the physician on duty, as is written in row 89?

Methods

In the "design and setting" you describe that ophthalmologists see patients at the ophthalmological OOH service. Do pediatricians see patients at the OOH pediatric service? One could consider adding this too.

If possible, I would like to ask for some additional information on the development of the questionnaires, as this is the basis of your article.

- "previous clinical experience?": what does this mean? Experience from doctors who were part of the research group? Or experiences from researchers?
- "all participants?": who are these?
- Is it correct to assume that you aimed to have face and content validity?
Page 5, sentence 123 mentions a pretest, whereas page 6 sentence 126 mentions a pilot. Is there a difference? And reading about a pretest/pilot, I am curious to hear what was tested and how? Clarity of questions for patients and doctors? How many joined the test? And were the questionnaires adjusted?

With regard to your explanation on stratifying analyses for sex and age, I agree with findings from previous studies. Perhaps the authors could consider to explain this choice in the text? In general, I feel that this is also related to the choice of presenting the results (i.e. descriptive figures). The addition of confidence intervals to table 1 is relevant.

Discussion
The discussion is overall much better, but still quite long. Some places have room for further shortning.

I am not sure whether I understand sentence 223-224 on page 9: ‘it was noticable…’. Please consider rewriting.

Furthermore, the part about equipment in OOH primary care can be deleted I would say - not closely related to the findings.

The authors refer to POC tests, incl troponine, that were used in OOH primary care - I am not sure if they refer to the previous sentence (and thus other studies) or to Oldenburg? Troponine is not common in OOH primary care I would say. If in Oldenburg, these tests are not mentioned in the methods.

In general, it could be relevant to add access to diagnostics in the setting paragraph.

Strenghts and limitations
The authors mentioned the fact of seasonal variation, and added that the study was conducted during the summer holidays. As this has a potential large effect on the results found and thus on the representability and generalisablity, more explicit statements on the external validity seem relevant.

Page 12, row 294: “isn’t” should be “is not”. Furthermore, this sentence „this evaluation…” is not clear to me. Does „This” refer to the present study, with doctor assessment of urgency. Please rewrite.

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

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

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license
I agree to the open peer review policy of the journal