Author's response to reviews

Title: Daytime use of general practice and use of the Out-of-Hours Primary Care Service for patients with chronic disease: a cohort study

Authors:

Lone LF Flarup (l.flarup@alm.au.dk)
Grete GM Moth (g.moth@alm.au.dk)
Morten MBC Christensen (mbc@alm.au.dk)
Mogens MV Vestergaard (mogens.vestergaard@alm.au.dk)
Frede FO Olesen (fo@alm.au.dk)
Peter PV Vedsted (p.vedsted@alm.au.dk)

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Author's response to reviews:

Dear editor, Aarhus d. 18 July 2014

Concerning the manuscript MS: 4784551651316707, ‘Daytime use of general practice and use of the Out-of-Hours Primary Care Service for patients with chronic disease: a cohort study’.

We thank you and the reviewers for the constructive critique of our manuscript.

We have revised the manuscript carefully according to the reviewers’ suggestions and comments. Below please find our detailed point-by-point response showing how we have acted upon each of the comments.

Yours sincerely,

Lone Flarup

Reviewer 1: Avinash Patwardhan

Comment 1:

Please remove the word ‘predictor’ from the title of the paper. Neither data nor results go that far as to allow suggesting ‘predictive utility’ or ‘modeling ability’ – at least yet.

Reply: The title has now been changed in accordance with the reviewer’s comment. We agree that our results are able to suggest correlations rather than to predict at present time. The revised title is ‘Daytime use of general practice and use of the Out-of-Hours Primary Care Service for patients with chronic disease: a cohort study’.

Comment 2:
In the ‘Abstract’ under ‘Methods’ sub-section, the phrase ‘face-to-face contact’ is used that is the same as the use of daytime GP’. This creates confusion until the equivalence becomes vivid in the ‘Data’ section of the paper. Generally, either the concepts need up-front explanation (that may not be possible due to the limitation on the word count) or the language should be consistent all across the paper.

Reply: We definitely agree with the reviewer; the former phrasing was confusing. The paragraph in the abstract is now rephrased in accordance with the comment.

Comment 3:
‘Results’ sub-section in the abstract is a precious small space to be consumed liberally for descriptive statistics. The same word count would be better used to quantify e.g. ‘More Patients with heart disease, lung disease, and psychiatric disease had contact than other patients due to exacerbation.’ Or Patients with lung disease, psychiatric disease, or #2 diseases with annual follow-up had lower exacerbation OR at index contact than patients without annual follow-up.’

Reply: The reviewer is right. The text is now quantifying the results to be more precise. Consequently, the first commented sentence is deleted.

Comment 4:
Methods: In the ‘Methods’ ‘Data’ sub-section’ We obtained registry data for the period of 1 January 2005 until 30 days before inclusion in the LV-KOS study (index date) to ensure that the categorisation was based on prevalent cases of chronic disease.’ might need clarification.

Reply: We agree. The formulation was confusing. The sentence is now shorter and more precise.

Comment 5:
In the ‘Discussion’ section, ‘OOH services due to an exacerbation of a chronic disease; a little less for patients with diabetes or cancer.’ versus ‘These OOH contacts were less likely caused by exacerbation of heart disease and diabetes’, there seems a contradiction/error, or maybe not clarity enough that I do not understand it correctly. If latter, it needs elaboration & explanation of the logic behind the phenomenon.

Reply: We definitely agree; there was a contradiction in the formulation which gave both incorrect and confusing information. The paragraph is now reformulated.

Comment 6: Overall references are not very current. Maybe some updating would be welcome.

Reply: The literature describing the Danish general practice and the literature describing the used Danish registries are deliberately chosen due to these specific references high degree of relevance despite of their age; these articles are usually used as references when describing these particular fields. All
references used for covering the topic are all recent. The reference regarding multimorbidity (ref. 8) is replaced by a highly relevant and recent reference.

Comment 7: Is paper willing to assert the conclusion ‘Preventive annual follow-up seemed to lower the risk of contacting OOH due to exacerbation’ – given that the findings are not statistically significant? This is an interesting finding. Furthermore, it is a very desirable outcome and more still a pointer to clues for intervention(s) or improvement(s). However, a cautious but optimistic language should serve better.

Reply: The reviewer is right; the conclusion was a bit too optimistic given that the results did not reach statistical significance. The formulation is now reformulated to ‘The provision of an annual follow-up daytime GP consultation may indicate a lower risk of contacting OOH due to exacerbation.’

Comment 8: It would be good to read the paper explain or expand on the divergence from the findings of Adam et al. In ‘In our study, patients with cancer who recently consulted the GP also more often contacted the OOH services due to a new health problem than patients with other chronic diseases; this finding may indicate a reasonably good overall pain control’.

Reply: The paragraph is reformulated to increase the preciseness of the comparison.

Comment 9: Last but not the least: The underpinning of this study is a tacit heuristic that a regular (preventative annual follow-up or a more therapeutic episodic visit) contact with a GP, particularly in chronic diseases, can potentially avert or subdue ‘exacerbation’ and or ‘emergencies’, leading to health, quality and cost savings. This premise, sits atop the baseline of the natural progression of a disease, acute or chronic – which once set in, cannot be much controlled or manipulated beyond appoint in the context of current science & technologies. The introductory or the discussion section of the paper should be or at least that is what a reader would expect, more lucid on this foundation. As it is, the paper seems sub-optimal on that count. Authors may want to revisit the text in that direction.

Reply: The reviewer presents an important and highly relevant point when discussing chronic disease. The intention of our study is however to describe the correlation between daytime care at general practice and the need for care by the OOH service in a clinical perspective. Future research based on the present data may include economical perspectives.

Reviewer 2: David Margolius

Comment 1: I might be misunderstanding the intent of the paper, but at the moment I cannot reach the same conclusion as the authors without any information on hospitalisations for the patients studied.
Recommendation: Provide data regarding the number of hospitalisations for these patients, or if not possible, I may just need to understand better how GP contacts out-of-hours is a suitable substitute for severity of illness. For example, are patients that seek care out-of-hours really sicker? Or are they just the patients that more appropriate use their GP compared to others who may directly go to the hospital?

Reply: The reviewer raises an important theme. The Danish healthcare system is organized with general practice as gatekeeper for the rest of the healthcare system. All patients therefore have to consult a general practitioner before they attend hospital treatment and care. At daytime the patient’s own family GP are responsible for the care, and outside office hours the GP-organisation takes over this responsibility. At daytime the family GP is expected to have a close contact with their listed patients with chronic disease. The OOH-organization is run by trained GPs in the front with the same high level of clinical knowledge as the daytime GPs. General practiced therefore possess an important and central role in Danish chronic care.

We agree that the present study gives no description or explanation of the severity of the patients’ illness despite of the OOH-GPs assessments of whether the patients contacted the OOH Primary Care Service due to an exacerbation or not. With reference to the high educational level for the GPs working OOH we do however regard the OOH-GPs assessments of ‘exacerbation’ or ‘new health problem’ as a important information regarding the severity.

Comment 2: I’m also uncomfortable with the conclusion that annual visits reduce the number of exacerbations. This is an association, not necessarily a causation. Is it possible that patients who have better control of their illness are more likely to schedule and attend annual routine visits?

Recommendation: I may have missed the evidence to the contrary, but this data is association, and not statistically significant. I think the authors need to re-frame how they describe this finding.

Reply: We agree with the reviewer; we cannot conclude causation between a provided annual follow-up and exacerbation at the index contact. The phrase is therefore reformulated with reference to the fact that the results do not reach statistical significance.

The study do not describe the patients’ motivation for attending the annual follow-up consultation or if the initiative to this consultation is taken by the patient or by the family GP. Future studies should explore this extremely important perspective in relation to quality improvement of the provided chronic care.

Comment 3:

On page 9, line 209, ‘It is remarkable that, for most of the disease groups…’, in the results section not the place to editorialize the results.

Recommendation: Delete ‘it is remarkable that’.

Reply: The reviewer is absolutely right. The sentence is deleted together with the
Reviewer 3: Paul Giesen

Comment: In the discussion I miss the consequences for daily practice: for example the relevance of continuity of care by access to patient file of patients own GP in OOH care.

Also the general question: How can we prevent OOH emergency care and exacerbations. You found tendencies for patients who had preventive annual follow-up care. Please make more concrete which research should be done. For example:

I hypothesise there will be a big difference between consumption between GPs and GP practices per 1000 patients/Year in OOH care. Research on OOH consumption and organizational GP features (knowledge, attitudes etc.) perhaps give more tools to prevent OOH care and improve daily care…

Reply: The reviewer presents a very import point regarding the correlation between the organization of general practice including the OOH and the need for OOH emergency care. A formulation of an improved chronic care established through shared files is now included in the conclusion in relation to important future topics to research. To meet the second part of the comment, we have furthermore inserted a paragraph in the conclusion and perspectives that specifies the need for future research in the specific efforts taken by the GPs at daytime and of the patient involvement.