Reviewer's report

Title: Daytime use of general practice as a predictor for contacts to Out-of-Hours services in primary healthcare for patients with chronic disease: a cohort study

Version: 3
Date: 7 July 2014

Reviewer: Avinash Patwardhan

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General comment:

This paper is very timely and deals with the opportunity space with a potential to point to some good, practical and, feasible innovative solution(s).

Major Compulsory Revisions:

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.

Minor Essential Revisions:

2. In the "Abstract" section 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.

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 contacts 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."

4. 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.

5. In the "Discussions" 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.
Discretionary Revisions:

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

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.

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.”

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.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
'I declare that I have no competing interests'