Reviewer’s report

Title: End-of-life hospital referrals by out-of-hours general practitioners: a retrospective chart study

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Reviewer: Mieke L van Driel

Reviewer’s report:

This is a report of a retrospective study collecting data on hospital referrals by out of hours GPs related to palliative care patients. The authors identify some predictors of referral and of non-referral. The data refer to a period in 2005 and 2006.

1. Is the question posed by the authors well defined?
Clear questions and the questions are answered by the results of the study.

2. Are the methods appropriate and well described?
Yes, clear description of methods used and they seem appropriate to answer the research questions.
The text words used to query the database seem appropriate but I wonder how patients with end stage cardiovascular (such as heart failure) or respiratory (COPD) were captured?
Can you please expand a bit on the definition of palliative care? This is referenced but there are several definitions and in order to be able to interpret the study the reader will need a few more words on what is meant.

3. Are the data sound?
The data seem sound.
However, some questions about the data will need to be addressed in the text (compulsory revision):
- there are no data reported on the GPs. Were the GPs involved only local GPs? In many places the out of hours services are subcontracted to young and less experienced GPs who move from one place to the next. Do younger GPs refer more often?
- The definition of EMN is not very clear nor intuitive. E.g. dehydration acn be the result of a digestive problem (N/V or diarrhoea) yet it is classified here only as EMN; what about symptoms of pneumonia (can also present with N/V or diarrhoea)?
- Any indicators of severity?
- How often were symptoms related to chemotherapy? This would be a very different story than someone who is vomiting without any apparent cause?
4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
A flowchart with the eligible records and the included ones would be helpful. How did the authors account for multiple contacts for the same patient?

5. Are the discussion and conclusions well balanced and adequately supported by the data?
Good discussion but for the clinician something very essential is missing. Although the paper is interesting and the findings potentially relevant, it leaves a "so what?" feeling. Can the authors perhaps reflect a bit better on what this study means for practicing GPs and also for policy makers? What have we learned and how can we improve care for people in the last stage of their lives? (Compulsory)

6. Are limitations of the work clearly stated?
Limitations are discussed.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Yes.

8. Do the title and abstract accurately convey what has been found?
Yes.

9. Is the writing acceptable?
Yes, but need to check some typo's and missing or superfluous words.

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

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

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