Reviewer’s report

Title: Costs and Effects of Interventions targeting Frequent Presenters to the Emergency Department: a Systematic and Narrative Review

Version: 1 Date: 29 Jul 2019

Reviewer: Patrick Bodenmann

Reviewer's report:

Please include all comments for the authors in this box rather than uploading your report as an attachment. Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included in a text format.

Please overwrite this text when adding your comments to the authors.

Reviews Prof P. Bodenmann and Dr Kevin Morisod

Article "Costs and Effects of Interventions targeting Frequent Presenters to the Emergency Department: a Global Systematic and Narrative Review" by Dr Viola Korczak and all

Submitted BMC Emergency Medicine

Deadline: 29th July 2019

We had the opportunity to review the manuscript filled in title by Dr Viola Korczak and colleagues from the University of Sydney, Australia. The study undertook a systematic review of the literature about the effects of interventions targeting frequent presenters to the Emergency Department (ED) and their costs related. Due to the heterogeneity of the results, a narrative approach was adopted. The majority of interventions for frequent presenters to the ED was found to decrease ED use and costs; those interventions were generally oriented to case management intervention.

1. Abstract

The abstract is clearly identifying the two major objectives: effects of interventions targeting frequent presenters of the ED and costs of the interventions. The methodology is well organized and explicit in terms of the design, the inclusion and exclusion criteria and the analysis done. The abstract identifies the major results. It contents essential information.

2. Title

Minor comments:
The main results are not included in the title, but it is still attractive; the design is underlined. I do not understand why it is a "global" systematic and narrative review; what does the term global mean?

3. Introduction:

It is direct to the point, short, clear and informative. There is a strong and logical case for the work and it prepares us to understand the rest of the paper. The number of references in this part seems correct.

Through the introduction, we understand the big picture, the study question and what kind of approach will be used.

Major comment:

A major comment is about the fact there is no clear definition about frequent users of the ED. From our experience, it seems that one potential consensual definition comes from the article of Locker T.E. et al., defining frequent use of an urban emergency department (Emergency Medicine Journal 2007). Althaus et al. precise the importance of the Locker article in his systematic review of the literature in 2011 published on the Annals of Emergency Medicine. With our team we used this definition to our studies since then.

Minor comment:

Precise one of few references concerning line 76.

4. Methodology

The methodology is detailed in 6 paragraphs with 1 appropriate reference. The population, the intervention (focused on frequent presenters of the ED) and the 2 main outcomes are specified. The study design is a systematic review of the literature. The eligibility criteria based on the two main aims are specified, concerning all the countries in different languages and studies with more than 10 subjects. Because of the heterogeneity of the studies, the question and the two aims are addressed through a narrative review using the PRISMA guidelines.

Major comments:

- Is there a link to the research protocol?

- The authors did not specify the dates for the data collection (since when, until when).

- It seems that the equation of research is quite simple but not exhaustive.
- It could be extremely useful to have more information about the quality of each one of the 16 studies; this information could appear on table 1.

Minor comments:

- Could the authors specify the ethics committee approval?
- Line 92: it could be useful to have a reference for the PRISMA guidelines
- Line 104: the authors reviewed the grey literature; could they specify the articles from this grey literature review?
- Lines 114 and 169: we do not say healthcare perspective but maybe more clearly healthcare system perspective
- Concerning the risk of bias, could the authors explain the method used to evaluate this risk?

5. Results

For the results part, there are no subheadings to organize the content but content is organized through the 4 good tables presented.

Major comments:

- It is essential for the comprehension of the articles selected to have a flowchart with the reasons of exclusion of the articles excluded (see the PRISMA criteria).
- Concerning the interventions, it could be interesting to have more about the content of the case management interventions. They are summarized extremely quickly in few lines between the line 157 to line 160.
- In terms of costs, it seems difficult to clearly understand the different methods used to document the decrease of the costs. Did the authors have done or have tried to compare these different ways or methods to report the costs? If it was not possible, it could be important to address this point into the discussion.
- Concerning the costs of intervention, there is a lack for the different costs included (staff cost, implementation cost, etc.); it could be useful to standardize the costs for each study to have a more clear comparison between the studies.
- Is there any confusion between the costs of intervention (which mean how much does cost the intervention) and the cost implications of interventions (which mean what further the consequences in terms of cost due to the intervention)? It could be useful to have this extension.
6. Discussion:

This discussion is long enough to state, support and explain the answers and discuss the different points.

Major comments:

- In the first paragraph, there is no clear answer to the two main aims of the study (the interventions, the cost); it is completely focused just on the costs.

- Respect the order of the aims: begin first with the interventions and secondly with the costs or do the opposite but in all the text (title, aims at the final part of the introduction, presentation of the results, first paragraph of the discussion).

- Lines 212 to 230: it is curious to have a long text just focused on 2 studies; thank you to comment that.

- Based on the 16 studies, the authors consider that there is a consensus about the decrease of the cost based generally on interventions case management oriented. It seems interesting because before 2011 there was no consensus (Althaus et al 2011). Could the authors clearly describe what happened since then and the fact that the new evidence generated clear consensus about the decrease of the consultations and the decrease of the costs?

- Finally comment for the discussion: I think that the more positive aspect of this review is the fact that there has been no previous systematic review of the literature summarizing the cost implications of and the interventions for frequent presenters.

Minor comment:

- If I refer to the results part but also the discussion I think that for the table 3, the 2 last lines are more outcomes and no just interventions; you have to mention on the title of the table that you have also the consequences of those interventions.

- Table 3: for a better comprehension, thanks to add a space between transportation and Change in ED use (in fact the two last lines are not Interventions but the consequences of the interventions on Change in ED use and Change in cost, the two aims of the study).

7. Summary:

We think this paper could be relevant to international audience but the authors have to focus on the major comments mentioned before; in general the writing is appropriated (well written, grammatically correct, no typographic errors) and does not need any English language editing; the figure
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 (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal