Reviewer’s report

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Title: Overcoming barriers to evidence-based patient blood management: a restricted review

Version: 0 Date: 17 Nov 2019

Reviewer: Leah Bührmann

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Dear Authors,

Thank you very much for this well-written and clear manuscript. Please find below my review.

With warm regards,

Leah Bührmann

REVIEW

Methods

1. In line 127, the methodology of this review is described. The author mentioned that this is a relatively new methodology. As a reader, I wonder why the author chose this methodology in the first place. What are the benefits, and what the drawbacks?

2. When was the literature search conducted? I cannot find the indication of the date, which is important to time stamp the literature review.

3. Grey literature was not consulted. Please report the reasoning behind this decision. Grey literature might be a valuable source for this study.
4. Barrier to implementation and interventions to overcome those barriers where extracted from the data guided by the CFIR framework and the ERIC recommendations. It might benefit this review to also make an indication whether these frames (CFIR and ERIC) were sufficient to cover the barriers and interventions experiences/used in the field of PBM. This could be done by extracting all barriers to PBM implementation and map them onto CHIR and ERIC. If CHIR and ERIC cover barriers and interventions in the field, a strong recommendation could be made in the conclusion to use these framework during the implementation of PBM.

Results

1. In line 195, the term 'units per patient' is used. It is not entirely clear to the reader to what 'unit' refers.

2. In line 199, it is mentioned that studies with low quality have not been excluded. Could you explain the reason for this decision?

3. This review reports on barriers to implementation and intervention how to overcome them in a descriptive manner. However, it would be beneficial for this study to report on the effectiveness of the reported implementation interventions. An indication for the effectiveness is included in Table 3 (right column). Including a description of these results would add to the relationship between utilised interventions and recommended interventions by indicating their actual effectiveness (= impact in practice).

Discussion

1. In line 239, the authors make the statement that the ERIC tool can be used to provide guidance but requires further work to ascertain strong consensus for recommended interventions across barriers. For the reader, it is not clear how this conclusion could have been drawn. If the ERIC tool is an applicable tool for recommending implementation interventions for PBM, the facilitation of the use of the ERIC would be important to subsequently reach greater consensus between utilised implementation interventions and ERIC.

2. In line 269, 'tailored implementation' is mentioned. This could be discussed in more depth (see for example Wensing (2007) or Baker et al. (2015). It might also be interesting for the reader to describe what the implication of this result ("half of the included…", line 269) for PBM is.

Baker R, Camosso-Stefinovic J, Gillies C, Shaw EJ, Cheater F, Flottorp S, et al. Tailored interventions to address determinants of practice [Internet]. Vol. 2015, Cochrane Database of

3. In different parts of the discussion it is described that certain ERIC interventions have not been utilised. Might there be a field specific explanation why certain interventions has not been used? That might give insight in the context specific field of PBM, and the importance of tailoring implementation strategies.

4. The authors mention the tailoring of implementation interventions to specific settings. For this review, it might be interesting to elaborate this on the example of PBM. What are the context specific factors and consequences of such in the field of PBM?

Conclusion

1. In line 349, it is mentioned that this article will provide further guidance in directing other facilities to identify tailored solutions to address local barriers. For the reader it is not clear how this study is doing this. The article would benefit from a description of hands-on recommendations for facilities who want to implement PBM guidelines and improve their practices. One example would be to explicitly recommend frameworks for use in practice. In other words, it would be great to include some concrete implications this review will/can have.

Tables

1. In Table 1 in the right column, it says 'outcome measure'. As you actually indicating an outcome, I suggest to change the column heading to 'outcome'.

2. Table 1 misses the explanation on what 'NiL' and 'QI' stands for.

Readability

1. In line 145, please check this sentence for readability and grammar.
2. Line 250 to 253 are difficult to understand. Please consider to rephrase.

Typos
1. line 119: the 'but' is abundant.
2. line 145: the 'patient' is abundant.
3. line 158: the ')' is missing.

Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field

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

Acceptable

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