Reviewer's report

Title: Prevalence rates of foot complications in subacute inpatient rehabilitation facilities. A cross-sectional prevalence study

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Reviewer: Byron Perrin

Reviewer's report:

Thank you for the opportunity to review this manuscript. It is reasonable to investigate the foot-health of people admitted to Australian subacute wards.

At this stage I think the manuscript is at a significant risk of overemphasising the importance of its results. There is potential for overreaching for the data analysis undertaken and the conclusions being reached from that data.

1. The primary aim as stated in the abstract is to "determine the foot complication prevalence in a subacute inpatient rehabilitation population". This is not the same as that stated and the end of the Background section, where the aim has enhanced its scope to include prevalence of complications generally in subacute "facilities". This expansion pervades the text generally where the tone is that the data generated from one facility in Queensland can be generalized to all subacute facilities. With the small sample size, this is questionable.

2. The secondary aim of the study involves the investigation of "medical comorbidities" associated with "foot risk categories", however the data analysis does not seem to reflect this aim. Table 4 examines explanatory effects of various variables on a different dependent variable - that of "any foot complications" or "multiple foot complications". Also, Table 1 describes complications as present or absent, again different. Table 3 mentions foot risk categories, but doesn't evaluate these according to medical comorbidities.

3. The design used to investigate the primary aim (and secondary aims) is not explicitly stated. Is this essentially a cross-sectional study or something else? The design should direct the data analysis and any conclusions to be drawn.

4. The data analysis is quite confusing. There is not a great justification provided for including Table 3 at all in its current form (except perhaps for the first three columns - which may help to answer the research question as I understand it). Whilst I understand the multivariate analysis approach as described in the text, Table 4 is quite confusing to look at - the ** P<0.05 is only next to p values well over 0.05. It is not clear why CI’s are reported for prevalence rates. Presumably the authors are attempting to make predictions on the proportion of foot complications across the total possible subacute population (as opposed to being restricted to the prevalence of complications in the single setting) - can this be explained better for the non-research based readership?

5. The discussion contains lots of information that is difficult to reconcile with the setting and the aims of the project. It is clear that a high proportion of people
admitted to this particular setting have foot complications (even though the explanatory data doesn’t shed a lot of light on why- apart from a history of foot complications, which you would expect) but it isn’t really clearly stated much what the implications of this actually are- are these people at a high risk of worsening foot morbidity? If so, will it happen during their subacute stay? If so, can this be prevented? What does this mean for the subacute service? Answers to these questions are offered here and there, but it is hard to find them through all the words. The discussion could be much shorter, clearer and focused on the aim/methods/results and setting of interest.

In summary, this paper was quite hard to read and seems long for the information it can provide. The manuscript may benefit from a re-draft that does not deviate from the research question and limitations of the design.

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

**Quality of written English:** Not suitable for publication unless extensively edited

**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