Reviewer’s report

Title: Method for Assigning Priority Levels in Acute Care (MAPLe-AC) predicts outcomes of acute hospital care of older persons - a cross-national validation

Version: 2 Date: 17 April 2011

Reviewer: Marianne E Weiss

Reviewer’s report:

Thank you to the authors for attending in detail to my earlier comments. I have just a few comments on this revision - mostly editorial.

Major Compulsory Revisions - none

Minor Compulsory Revisions:

1. In the abstract, you refer to admission to acute internal medicine services in the Nordic sample and to acute care hospitals in the Canadian sample. Were Canadians admitted only to acute internal medicine services as well or to both medical and surgical care units. This issue should also be clarified in the text on p.9

2. In the results section of the abstract, after high priority levels, the word predicted should be inserted before adverse outcomes.

3. p. 6 3rd paragraph, delete 'already'; capitalize 'InterRAI-AC' at the beginning of a sentence, add 'to' between comprehensive and assessment.

4. p.7 2nd paragraph, the statement should read… and to test whether the new MAPLe-AC algorithm would predict...

5. p. 7 3rd paragraph, line 1 ‘algorithms’

6. p 7. last line. wording used earlier in the paper for the 2nd data collection time was more clear. Reword to 'on the day of discharge or the 7th day of hospitalization, whichever came first.'

7. p. 8 1st paragraph. For sources of data, was the patient the primary source with other sources used secondarily if the patient was decisionally incapacitated or were a combination of sources used to conduct a comprehensive assessment. Clarify how these sources were used to generate the data.

8. p.8 2nd paragraph. What does CPS mean - it is not in the abbreviation list

9. p.8, 2nd paragraph. It is not clear how the risk of nursing home assessment is calculated based on the 8 categories listed and how this assessment relates to the assessment parameters included in Figure 1. Also what does ‘need to be calculated in interRAI-AC’ mean after ADL decline. On the second to last line,
you indicate that 3 or more risks are needed to be classified as nursing home risk. Is any risk above low priority included? How are assignments to the 5 MAPLe-AC priorities done- is it highest single risk factor identified using the chart in Figure 1?

Overall it is difficult to determine the content and scoring of the MAPLe-AC.

10. p9 line 2. The term discharge status is new -is this discharge outcome?

11. p. 9 - Participants. The same issue of internal medicine service vs. acute medical care is present here. See comment in abstract. On page 10, the type of patients (internal medicine and/or surgical) are not included for the Canadian sample.

12. p. 10 Paragraph 2. It would add clarity to indicate that the 'very high' priority category of MAPLe-AC was used as the reference category in regressions of discharge outcome on MAPLe-AC priority level.

13. p. 12. 3rd paragraph, you state that on day 7 or at discharge there was an increase in Nordic hospitals in the proportion of low and mild priority levels. It would be helpful to add... compared to the Canadian sample. The last sentence could be reworded to state 'However, a slightly higher proportion of persons were in high and very high priority levels than in the lower priority levels during the premorbid period in both the Nordic and Canadian samples.'

14. p. 13 1st paragraph. Reword the last sentence- perhaps 'When we compared Nordic and Canadian hospitals at each assessment time, the clients with moderate and high priority levels consistently had higher probability of being discharged home both Canadian and Nordic hospitals.

15. p.13. 3rd paragraph. Do the c-statistics refer to prediction of discharge home. The last sentence says discharge outcome. Please clarify.

16. p. 14 1st paragraph. Negative outcome is included twice - elsewhere the term adverse outcome has been used. Also you use the term poorer outcomes or worse outcomes. My understanding was the outcome variable was categorical. These terms sound like continuous variables. In lines 4 and 5, there are words missing. In the premorbid period, .... high priority levels in the premorbid period...

17. p. 17. 2nd paragraph, 2nd line....indicate a better chance of discharge home... ; and line 6 ...or end up in long-term...; last line, delete 'already'

18. p. 18. 3rd paragraph, 2nd line. 'There may be differences in both...'

19. p. 18 4th paragraph, 3rd line - reword 'planning discharge and should be taken into consideration....'

20. Table 2 heading is missing a word: Living home at one year.
**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare I have no competing interests.