Reviewer's report

Title: Screening for frailty in primary care: a systematic review of the psychometric properties of the frailty index in community-dwelling older people

Version: 6 Date: 8 December 2013

Reviewer: Olga Theou

Reviewer's report:

The authors have addressed most of my major concerns. To improve clarity I have some additional suggestions:

1) Since the authors deleted the “responsiveness, utility, and interpretability” section from the methods and focus only on the criterion and construct validity and responsiveness I suggest the following changes:

   a. Delete lines 137-140 “In addition, we examined two intrinsic concepts that are not strictly psychometric properties: interpretability, which is defined as the degree to which the FI score can be assigned clinical meaning [17] and utility, which denotes how practical the scale is to use in daily clinical practice [18]”

   b. Keep lines 299-300 “No studies reported on the responsiveness or the utility of the FI in daily clinical practice.” You have a whole section in your discussion about responsiveness and you also refer to this in your methods so you may want to keep it also in your results (You can delete the word utility from the sentence).

   c. Lines 321-328 “There is no evidence supporting responsiveness or utility. However, some studies reflected upon the potential utility of the FI and noted two major advantages........so these potential advantages need to be further explored.”. If you decide to not keep utility as a focus of this paper move this section lower in the discussion as it is not a main finding of your systematic review. I agree that these are important points to mention and should be included but more as discussion points and less as findings of this review.

2) In your abstract, discussion, and conclusion you emphasized how the psychometric properties of the primary care data study is different than the other studies. I may have missed it but it seems to me that the only difference is the mean score. In your results section you mentioned this difference under your “description of study characteristics” and it does not seem to be a “psychometric property”. If there are differences in the three psychometric properties that you examined (criterion, construct, and responsiveness) please highlight in results. If the only difference is in the mean score I suggest to revise the following statements and wherever else you may think is appropriate:

   a. Line 41-44 “When compared with studies that....using routine primary care data”. Replace “distribution” with “mean score”

   b. In lines 408-414 “These studies consistently showed a higher maximum FI...to
support conclusions about any differences in psychometric properties” either emphasize how the three properties that you examined are different or mention that the only difference found is in the mean score.

c. In lines 435-436 “FIIs based on research data show different characteristics than those based on routine primary care data” replace “different characteristics” with “lower FI score”

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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