**Reviewer’s report**

**Title:** Danish Translation of a Physical Function Item Bank from the Patient-Reported Outcome Measurement Information System (PROMIS)

**Version:** 0  **Date:** 02 Nov 2016

**Reviewer:** Caroline Terwee

**Reviewer’s report:**

This is a well-performed and well-described paper on the Danish translation of the PROMIS Physical Function (PF) item bank. I have read the paper with great interest and I only have some, mainly minor, comments and suggestions for further improvement of the paper.

* I wonder if you can really say that the paper documents the 'translation and adaptation' (as stated in the abstract). Apart from adapting some wording (which is part of the translation) I don't think the item bank is really adapted to the Danish situation. For example, a real adaptation could include adding extra items, e.g. on cycling, which is a relevant activity in Copenhagen, or removing irrelevant items. Maybe just stating 'translation' is enough.

* The references in the introduction are often not well chosen. Reference [5] (page 4) describes only a statistical analysis plan. I would prefer a reference to a real calibration study of the PF item bank, e.g. include ref [8] here. Reference [6] (page 4) is a translation paper and does not say anything about CAT. This reference could be replaced with a reference to a paper on CAT. Reference [9] can be removed since this is not a linking study and reference [10] includes both HAQ and SF-36. Reference [11] (page 4) is not a translation study. I would prefer to refer to translation studies, e.g. the Spanish, Dutch-Flemish, or German translations of the PF item bank.

* It might be helpful for readers to add some information about what short forms are and what targeted short forms are, e.g. explaining that these consists of a selected number of fixed items from an item bank.

* Maybe also add a sentence that CAT can decrease response burden for patients.

* When describing the translation methods, please state who was the language coordinator and who was the translation project manager.

* Was the final Danish translation approved by the PROMIS statistical center? Please add this information.

* I wonder whether you can really speak of ‘validation’ (page 6). The study only included cognitive debriefing, which is part of content validity, but only one aspect of content validity (comprehensibility) was addressed. Other aspects of content validity (relevance,
comprehensiveness) or other forms of validity were not addressed, so I suggest to remove the word 'validation'.

* If there was no conceptual difference between the phrases 'Can you...' and 'Do you have the abilities to...' why didn't you chose the same solution as was done in the Dutch-Flemish translation (can you...) to be consistent across languages?

* Reference [8] (page 14) is not about CAT, I suggest to use another reference here.

* In line 16, page 14, a word seems missing "the cognitive (interviews) suggested…"

* I miss a section on study limitations in the discussion. A limitation of the study could be the relative average old age of the participants in the cognitive debriefing study and the fact that this was not a sample from a general population.

* I recommend to add a few sentences about the next steps that need to be done before this PROMIS item bank can be used in Denmark. For example, stating that short forms can be used right away, but that DIF testing (and perhaps calibration) is needed before the item bank can be used as CAT.

* Finally, I think that the last author should mention that he works for a commercial company (Qualitymetric), which might introduce some conflict of interest with implementing PROMIS.

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I am the coordinator of the Dutch-Flemish PROMIS National Center and first author of the Dutch-Flemish translation of PROMIS

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