

## **Reviewer's report**

**Title:** Developing a questionnaire to identify perceived barriers for implementing the Dutch physical therapy COPD clinical practice guideline

**Version:** 1 **Date:** 22 February 2013

**Reviewer:** Nadine Dougall

### **Reviewer's report:**

Major compulsory revisions

None.

Minor essential revisions

1. Abstract: results – 4-factor solution appears to be presented with 5 underlying domains (see comments later)

Background:

2. It is not obvious what the compelling rationale was to have one questionnaire stemming from what appear to be two seemingly good but separate questionnaires

Methods

Construction of the questionnaire:

3. The description reads that all items (n=17) were used from Peters questionnaire; however, the study design section refers to Peters being a 24 item questionnaire; brief clarity is needed if any of the original items were omitted and why. Related to this and in the same paragraph, reference is made further on to 'Four items from the original questionnaire of Peters were added...', so that it appears as though n=21 items were used from Peters with the addition of 3 other questions giving a total of 24 items. A bit more context explained here would greatly clarify this section.

Data collection:

4. Were the questionnaires distributed by the network coordinators or by the researchers; were the questionnaires also returned via email and were there concerns about anonymity being preserved (i.e. were the individual responses known only to the researchers?).

5. What mechanisms were used for data entry?

Results

6. Response to the questionnaire was 57%; was it possible to assess whether there any systematic bias in the respondents other than geographical region?

7. Factor analysis – the whole questionnaire was used for factor analysis; since the questionnaire contains 46 variables and the total number of respondents was

139 the factor analysis was an ambitious undertaking, the sample size being relatively poor for such a large questionnaire, and the conclusions stemming from this analysis must be conservative in any claims. (NB I have now come back to this section, having read the limitations of the study, and note that it is rightly discussed as a limitation. Indeed although the subject to item ratio of 5:1 is quoted, this is even viewed as a minimum and 10:1 is even used as a going minimum elsewhere.)

## Discussion

8. The 4 or 5 factor solution is unequivocal. The 4-factor loadings were selected as the best solution, however the domains quoted read as 5; the patient category either requires to be subsumed with required investment of time and money – however, with some justification why - or the 5-factor loading is indeed the better explanatory analysis (even if only two variables were available for the patient domain), it is not possible to know if the decomposition of factors is completely credible given the small sample size.

9. In general terms, further clarity could be afforded with respect to what the intention was to be gained by having one questionnaire, when almost all of the two separate questionnaires appear to have been used together, with the addition or subtraction of 3 questions?

10. Appendix: Part 2 of the questionnaire has one of the columns labelled incorrectly; there are two columns headed 'strongly agree'

Discretionary revisions – MINOR ISSUES not for publication

Suggested edits follow for improvements to the English

Abstract:

Methods – replace 'calculated' to 'assessed' using descriptive statistics

Background:

Throughout 'behaviour' is American English 'behavior'

paragraph 1, last sentence: Insert 'An' before 'Important component....';

paragraph 2 Insert 'The' before 'Focus of many....'

Paragraph 3 suggest subsume the last two sentences, 'Barriers are typically...' and '...the most effective ways...'

Methods:

Study design – first line change 'among' to 'amongst'; change 'divided in four domains' to 'divided into four domains'

Construction of the questionnaire – shift 'related' so as to read 'two related items were added to reflect...'

Participants:

"...with a total of 246 physical therapists were...."; should this read "with a total of 246 physical therapists, who were all approached..."

Data collection:

Change 'of' to 'with' in 'after consultation of network coordinators'.

Results:

Barriers and facilitators: A sentence is required here to stipulate what responses on the likert scale were used in summarising the data. For example, where it reads '...require a higher fee for service (41%)'; this should state that this was an aggregation of both those that agreed and those that strongly agreed. (Either that or clarify e.g. 'Agree or Strongly Agree' in table 4 headings)

Discussion:

Under methodological considerations, change 'consequent' to read 'consequently assess the....'. Then insert 'The' before 'main rationale was....'

Where is reads in para 2, '...with parallel analysis for the number of actors to retain,..." insert factors for actors.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests