Reviewer's report

Title: Development of a questionnaire weighted scoring system to target diagnostic examinations for asthma in adults: a modelling study

Version: 1 Date: 24 September 2004

Reviewer: Maritta Kilpelainen

Reviewer's report:

General
The development of weighted scoring system of the widely used ECRHQ asthma questions for use in general practice is important and interesting. To define asthmatics, the authors analysed stratified sampling of asthmatics and non-asthmatics by using the well known statistical method by Pickles and Dunn. The methodology is accurately described, but the statistical approach may be difficult to understand for the average reader. Showing the statistical analysis in the Appendix is appropriate. Selecting only PPV of all validity measures is reasonable in the scope of the study: to find subjects without diagnosed asthma. In the discussion, the findings could be more specifically compared to articles published earlier.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
none

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

In the results section, the age ranges and mean ages of the respondents in the clinical review could be shown.
What was the percentage of mixed disease of all cases at different score levels?
In the results section, you could possibly show the results of non-weighted scores and weighted scores (now shown shortly in Discussion).

Tables: The age ranges could also be shown in Table 3. In Table 4, the last three columns may not open to the reader.

In discussion section, page 10, last line, you could clarify the possible reasons for wheezing other than asthma in older people. Similarly, what could be conditions other than asthma in smokers causing symptoms? COPD, what else?-----------------------------

In the discussion section, I would like to to see comparisons with studies using only number of 'yes' answers, and other reasons for different PPVs, such as population studied etc. How does your study relate to other studies validating the ECRHS -questionnaire? Are there actually many such studies? The importance of your study could be highlighted.

Discretionary Revisions (which the author can choose to ignore)
Although the use of PPV as a measure in this context is understandable, could the authors still evaluate the value of weighted scoring system of ECRHQ in defining specificity, or false positive, important in risk factor analyses.
What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
None.