Reviewer’s report

Title: Development of explicit criteria for cataract extraction by phacoemulsification

Version: 2 Date: 16 September 2005

Reviewer: Lehana Thabane

Reviewer’s report:

General

There are some concerns with some of the descriptions methods of analysis:
• Assessments of reliability and validity are crucial for the development of any measurement tool. Based on the description of the methods of analysis as provide under the section “Statistical Analysis”, it is not clear how validity and reliability of the tool were assessed. In particular, it is not clear how validity was evaluated! This reviewer recommends a re-write of this section and perhaps a re-analysis of the data, with clear description of the appropriate methods for evaluating reliability and validity of the tool for measuring the “appropriateness of indication for cataract extraction”. For instance, kappa statistics can be used to measure agreement between panelists, as way to assess the reliability of the tool, instead of percentages as given in Tables 1 and 2.
• The analysis is based on the assessment of 765 indications. What is not clear is whether the potential relationships among these indications were explored to determine if the list could be shortened.
• How were the panelists selected?
• Weighted kappa was used to assess agreement between the CART model results and those of the panelists. However, it is not clear which of the two approaches (panelists versus CART modeling) was considered the gold standard for the purposes of this comparison.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes