#### Item 17: STUDY SELECTION.

Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.

**Examples.** In text:

“A total of 10 studies involving 13 trials were identified for inclusion in the review. The search of Medline, PsycInfo and Cinahl databases provided a total of 584 citations. After adjusting for duplicates 509 remained. Of these, 479 studies were discarded because after reviewing the abstracts it appeared that these papers clearly did not meet the criteria. Three additional studies…were discarded because full text of the study was not available or the paper could not be feasibly translated into English. The full text of the remaining 27 citations was examined in more detail. It appeared that 22 studies did not meet the inclusion criteria as described. Five studies…met the inclusion criteria and were included in the systematic review. An additional five studies…that met the criteria for inclusion were identified by checking the references of located, relevant papers and searching for studies that have cited these papers. No unpublished relevant studies were obtained.”

#### Explanation.

Authors should report, ideally with a flow diagram, the total number of records identified from electronic bibliographic sources (including specialized database or registry searches), hand searches of various sources, reference lists, citation indices, and experts. It is useful if authors delineate for readers the number of selected articles that were identified from the different sources so that they can see, for example, whether most articles were identified through electronic bibliographic sources or from references or experts. Literature identified primarily from references or experts may be prone to citation or publication bias.

The flow diagram and text should describe clearly the process of report selection throughout the review. Authors should report: unique records identified in searches; records excluded after preliminary screening (e.g., screening of titles and abstracts); reports retrieved for detailed evaluation; potentially eligible reports that were not retrievable; retrieved reports that did not meet inclusion criteria and the primary reasons for exclusion; and the studies included in the review. Indeed, the most appropriate layout may vary for different reviews.

Authors should also note the presence of duplicate or supplementary reports so that readers understand the number of individual studies compared to the number of reports that were included in the review. Authors should be consistent in their use of terms, such as whether they are reporting on counts of citations, records, publications, or studies. We believe that reporting the number of studies is the most important.

A flow diagram can be very useful; it should depict all the studies included based upon fulfilling the eligibility criteria, whether or not data have been combined for statistical analysis. A recent review of 87 systematic reviews found that about half included a QUOROM flow diagram. The authors of this research recommended some important ways that reviewers can improve the use of a flow diagram when describing the flow of information throughout the review process, including a separate flow diagram for each important outcome reported