

ISSG structured abstract for:

Shojania KG, Bero LA. Taking advantage of the explosion of systematic reviews: an efficient MEDLINE search strategy. *Effective Clinical Practice* 2001;4(4):157-62.

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Objective:

To develop and evaluate a search strategy for identifying systematic reviews using the PubMed interface of MEDLINE.

Methods:

The authors identified two gold standards (GS) of 100 and 103 records by selecting the first 100 records in DARE indexed in MEDLINE (GS1) and by handsearching the ACP Journal Club between its first issue in 1999 and October 2000 (GS2). It is unclear how the search terms of the filter were derived. The filter's sensitivity was then tested on its ability to retrieve the GS records from the MEDLINE database and its positive predictive value (precision) by its ability to retrieve systematic reviews when used in combination with terms for three clinical topics.

Results:

The sensitivity of the search strategy in retrieving target articles from GS1 was 93% (95% CI 86% to 97%) and in retrieving target articles from GS2 was 97% (95% CI 91% to 99%). The positive predictive value of the strategy was 50%.

Discussion:

The authors note that the modest positive predictive value of the strategy is probably an underestimate as true-positive results had to be identifiable as systematic reviews solely on the basis of MEDLINE record and in some cases once the full text articles were retrieved they proved to be systematic reviews.

ISSG commentary:

The limited size and nature of the gold standards could be a limitation as could the definition of systematic review used, which focuses in particular on the importance of a systematic strategy for locating evidence. There is inconsistency in the way precision was measured outside of the gold standards, whereas sensitivity was measured against gold standards. A filter based on this strategy is available as part of the Clinical Queries feature of PubMed.