

Assessing the performance of methodological search filters to improve the efficiency of evidence information retrieval: five literature reviews and a qualitative study

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Note to reader: it is acknowledged that there has been a regrettable delay between carrying out the project, including the searches, and the publication of this report, because of serious illness of the principal investigator. The searches were carried out in 2010/11.

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Plain English summary

Performance of methodological search filters

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Effective identification of research studies is essential for developing clinical guidance and health policy, conducting health research and supporting health-care decision-making. Methodological search filters (combinations of search terms to identify studies of a specific design) can help to find relevant studies when searching literature databases. This project investigated issues around the creation and performance of methodological search filters and how best to assist searchers in choosing search filters. We conducted five literature reviews in 2010/11, interviewed searchers about their use of search filters and circulated a questionnaire to a larger group of searchers. The findings were used to suggest how best to collect and report data on search filter performance.

We found that studies that created search filters reported sensitivity (the proportion of relevant articles retrieved), precision (the proportion of articles retrieved that are relevant) and specificity (the proportion of non-relevant articles not retrieved) most often. However, it was sometimes difficult to judge the quality of the study design because the authors did not provide an adequate description of how they had conducted their study. In addition, several studies did not use the best methods available; for example, they tested the filter on database records that had been used to create the filter. More detailed reporting and a clearer presentation of the results with graphs would make it easier to judge the reliability of the results.

The majority of searchers who were interviewed and who responded to the questionnaire mentioned using filters most often to identify randomised controlled trials and systematic reviews. The Information Specialists' Sub-Group (ISSG) Search Filters Resource was the most used source to find a filter, and over half of respondents relied on the filters available in databases they were searching. Searchers mentioned that having critical assessments of studies and user-friendly presentations of performance data available would help in choosing filters. Having filters available in a central location was also considered valuable.

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