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[Methodology Protocol]

Supplementary search methods versus bibliographic database searching to identify studies and study reports

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ABSTRACT

Objectives

This is a protocol for a Cochrane Review (methodology). The objectives are as follows:

To assess the effectiveness and resource requirements of supplementary search methods compared with bibliographic database searching for identifying studies and study reports. The supplementary search methods we will consider are:

- citation searching;
- contacting study authors;
- handsearching;
- regulatory agency sources and clinical study reports;
- clinical trials registries;
- web searching.

BACKGROUND

To reliably estimate the effects of an intervention, researchers require a comprehensive search for studies [1, 2]. Bibliographic databases are the primary search method in a comprehensive search, but there is evidence that supplementary (non-database) search methods may identify additional studies or study reports which might be missed by bibliographic database searching alone [1, 3, 4, 5, 6, 7, 8, 9].

Description of the problem or issue

It is not clear how the use of a supplementary search method (or methods) influences study identification, or what the resource implications of using these methods might be.

Description of the methods being investigated

To address this problem, we will summarise the evidence of effect, and of resource use, for the following six supplementary search methods. This list is taken from the technical supplement to Chapter 4 of the *Cochrane Handbook for Systematic Reviews of Interventions* ('Searching for and selecting studies') [10].

Citation searching (also known as citation chaining): used to identify studies, and clusters or networks of studies, that cite or are cited by a source study. The method is commonly divided into:

- backwards citation searching (also known as 'review of reference lists'), which is conducted by manual (visual) review of the bibliography or references of a study report (or list of included/excluded studies), or via databases which offer 'references cited' functionality. Backwards citation searching can be undertaken to one generation (i.e. review of the bibliography of one study report) or multi-generationally, where references are tracked backwards through study reports until no new, potentially eligible, study reports are identified; and
- forwards citation searching, which seeks to identify any subsequent citation of a primary study. This method is undertaken in web-hosted resources such as Google Scholar (Google), or citation databases such as Scopus (Elsevier) or the Science Citation Index Expanded (Clarivate). Tools such as Citationchaser are also available [11].

Contacting study authors: used to identify unpublished reports or linked publications (for instance, posters of conference abstracts, or fuller reports of published studies), or to clarify detail in study reports. The researcher contacts a study author and requests help.

Handsearching: used to identify studies or study reports through a manual (i.e. 'by hand') review. This method is commonly associated with the identification of studies or study reports in non-indexed journals, or at conferences, although handsearching can be used to review reports or library shelves.

Regulatory agency sources and clinical study reports: used to identify agency reports or guidance (for instance, via a web portal) or clinical study reports from trial sponsors or reports on the implementation of an intervention.

Trial registry resources: used to identify records of trials, where they are reported by trialists or researchers. This method can aid the identification of studies which are recruiting, ongoing (but which might have interim data), which have recently been completed, and which have been stopped or are completed and which might have unpublished data.

Web searching (including search engines or searching site-specific websites or social media): used for identifying published or unpublished studies not indexed or included in bibliographic databases, or studies missed by database (or other) search methods; in particular, identifying and retrieving grey literature and identifying study protocols, ongoing studies, or reports. The Centre for Reviews and Dissemination (CRD) Handbook distinguishes between a search on the internet through a 'search engine' and searching specific and relevant websites [12]. It considers the latter to be more practical than a general search of the World Wide Web in systematic reviews.

How these methods might work

Supplementary search methods have different mechanisms of action compared to bibliographic databases, and, thus, 'search' for studies in different ways [3, 13, 14]. Where the mechanism of action in a bibliographic database relies on searching controlled indexing and free-text fields, supplementary methods might locate studies or study reports in different ways.

For instance, in contacting study authors, the 'search' constitutes dialogue and discussion with authors rather than query formulation in bibliographic databases. For complex reviews, explaining to a topic expert the type of study that you are searching for and why (the dialogue), might be more effective and efficient than formulating search strategies for multiple bibliographic databases and processing the search results [3]. Moreover, it might yield studies or data in different formats, not accessible in bibliographic databases.

In citation searching or reference checking, the 'search' is for links between publications (or authors) rather than a search based on free-text keywords or controlled indexing (as is used to search bibliographic databases) [9, 14, 15]. A citation search can identify studies or reports which have yet to be indexed in bibliographic databases, may have been missed in bibliographic searching due to mis-indexing, lack of indexing, or missed keywords, and it may locate unpublished or more complete versions of study reports.

In short, supplementary search methods may complement the primary search of a bibliographic database, but questions about the overall effectiveness and resource use of the different methods remain.

Why it is important to do this review

This will be the first Cochrane review to identify and assess up-to-date evidence for *all* the supplementary search methods described in the *Cochrane Handbook for Systematic Reviews of Interventions* (hereafter referred to as the *Cochrane Handbook*). Although two previous Cochrane reviews evaluated two specific supplementary search methods (handsearching and checking references) [5, 16], these reviews are dated and have not been maintained. In addition, the search methods we will assess have evolved over time, underlining the need for a rigorous, comprehensive, and current review.

The review is intended to support researchers in selecting supplementary search methods for use alongside bibliographic database searching [17]. Where possible, we will summarise the

evidence on resource use by method, to guide planning of the study identification phase in a systematic review.

OBJECTIVES

To assess the effectiveness and resource requirements of supplementary search methods compared with bibliographic database searching for identifying studies and study reports. The supplementary search methods we will consider are:

- citation searching;
- contacting study authors;
- handsearching;
- regulatory agency sources and clinical study reports;
- clinical trials registries;
- web searching.

METHODS

Criteria for considering studies for this review

Types of studies

Studies will be eligible if they compare bibliographic database searching to any of the eligible supplementary search methods, regardless of their study design. We anticipate these will mostly be non-randomised, comparative case studies. We will include full-text studies, conference abstracts published in the last two years, and unpublished data identified by our searches or provided by authors we contact. Studies in any language are eligible.

Types of data

Quantitative data will be considered eligible if reported as:

- the number of studies (or types of study report(s)) identified by supplementary search methods when compared to the number of studies (or types of study report(s)) identified by searching bibliographic databases; and,
- resource use, which is defined in this review as **time** taken to formulate search approaches or perform search methods (likely presented as minutes/hours/days), and/or **costs** involved.
  - Data on costs will be eligible if presented as time taken associated with monies paid, or cost of any resources used, such as cost of bibliographic database access compared to cost of any resources associated with the supplementary search method. Where reported, we will extract price year and the original currency used in the study, to allow for alignment across studies in analysis. We will likewise extract the resources used (in natural units), and the unit costs, where reported.

Table 1. Illustrative example of resource use – time taken to search

	Supplementary search method: web searching	Bibliographic database searching
No. of studies identified	6	5
No. of study reports identified	12	10
Time taken to search	6 days	2 days
Day rate	£50	£50

Types of methods

The methods we plan to compare in this review are supplementary search methods versus bibliographic database searching. Informed by the *Cochrane Handbook* [10], we have identified six key supplementary search methods, as follows:

- citation searching (including review of reference lists);
- contacting study authors;
- handsearching;
- regulatory agency sources and clinical study reports;
- clinical trials registries;
- web searching (including search engines, or searching site-specific websites or social media).

We define bibliographic database searching as searching for studies or study reports via bibliographic databases such as MEDLINE or Embase, using a pre-defined search strategy.

Google Scholar is difficult to classify for the purposes of this review, as it is sometimes considered a supplementary search method (e.g. when used for citation searching) [18], and at other times treated as a bibliographic database to be searched alongside MEDLINE (e.g. when used for keyword-based study identification) [19]. We will include studies that evaluate Google Scholar in comparison with either a supplementary search (as listed above) *or* a bibliographic database search. We will categorise these studies by the study investigators' intention when using Google Scholar, to ensure that studies are appropriately grouped for comparison and estimate of effect or cost/resource use.

Types of outcome measures

Primary outcomes

- Number of unique studies that meet the eligibility criteria.
- Number of unique study reports that meet the eligibility criteria.

We distinguish between a study (the unit of interest in Cochrane reviews) and study reports (a study might be reported more than once and types of study reports may include journal articles, unpublished reports, conference abstracts, and trial records, among others).

Secondary outcomes

Resource use outcomes

- Time taken to undertake the search methods being compared; for instance, reported in days/hours/minutes. We will also consider the role or experience of study participants, where this is a part of the study.
- Cost. This may refer to access to the resources being compared, the cost of the time taken to undertake the search methods being compared, or both. We define two cost outcomes:
  - total cost per study;
  - cost-effectiveness, defined as a 'per study' incremental cost-effectiveness ratio (sICER), calculated by the incremental cost per searching strategy divided by the incremental number of "includes" per searching strategy. In principle, this could have two parts, in which the number of "includes" is:
    - number of unique studies that meet a review's eligibility criteria; or
    - number of unique study reports that meet a review's eligibility criteria.

We propose to convert published costs to a common currency, adjusted for inflation (e.g. 2025 EUR), adjusting for purchasing power parity, where possible. This would then allow us more directly to compare costs for the two methods (though we may not be able to conduct an evidence synthesis or do meta-analysis, as it is unlikely precision will be quantifiable).

Previous costs will be inflated to the common currency price year, with cost indices relevant to specific individual unit costs used where available.

Data format

- Type of report identified by search method (e.g. journal articles, unpublished reports, conference abstracts, trial records).

Unintended consequences or equity-related outcomes

We do not foresee any unintended consequences or equity-related outcomes associated with this review.

Search methods for identification of studies

We will search bibliographic databases and use supplementary search methods to identify studies. The search approach reported below was developed by the authors with reference to a test set of studies [4, 6, 7, 8, 9, 14, 15, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47].

Electronic searches

We will search the following bibliographic databases from inception until the date of search to identify studies:

- MEDLINE (MEDALL) via Ovid;
- Embase via Ovid;
- Web of Science Core Collection (Clarivate);
- Scopus (Elsevier);
- Library, Information Science & Technology Abstracts (LISTA) via EBSCOhost; and
- Library and Information Science Abstracts (LISA) via ProQuest.

The search strategy will use the names of (or terms used to define) the supplementary search methods under review and any relevant synonyms. The structure of the search strategy was conceived by CC and developed into its current form by an experienced information specialist (RC). This was reviewed by ZP and AB (AB undertook the Peer Review of Electronic Search Strategies (PRESS) check) [48].

We report our MEDLINE search strategy in Supplementary material 1, with a search narrative to explain the conceptual and contextual details of the approach to searching the bibliographic databases [49]. We also report our translated search strategies for the databases listed above in Supplementary material 1. To make translations, the MEDLINE strategy was discussed and reviewed by RC, ZP, AB, and CC to ensure a uniform view and understanding of the aims of the syntax. RC and ZP wrote initial translations for each database. AB and CC then reviewed these for comparison to the MEDLINE strategy and to the abilities of the intended database. Changes were marked and discussed before the final strategy for each database was agreed.

Searching other resources

We will use the following supplementary search methods.

At the start of the review, we will:

- post a request for potentially eligible studies (setting out our research question, inclusion criteria, and a link to our published protocol) on the following mailing lists: Cochrane's Information Retrieval Methods Group (IRMG), Campbell Collaboration Information Retrieval Methods Group, InterTASC Information Specialists Sub-Group, and the Expert Searching group lists;
- handsearch relevant conference proceedings for the last two years: Cochrane Colloquia, Medical Library Association (MLA), CHLA (Canadian Health Libraries Association conference), EAHIL (European Association of Health Information and Libraries), ICML (International Congress of Medical Librarianship), WWGS (What Works Global Summit), GES (Global Evidence Summit), and ESMARconf (Evidence Synthesis and Meta-Analysis in R conference).

We chose a two-year date limit as we anticipate the publication of conference abstracts within two years of the conference presentation [50, 51]. Moreover, we seek to ensure that we are able to contact presenters in the event of missing or incomplete data [52], to make best use of this form of report [53, 54].

For studies included after full-text screening, we will:

- conduct backwards citation chase (one generation) by manual review of the bibliography and forwards citation chase using Citationchaser [11], followed by SSCI-expanded (Clarivate) if required;
- contact study authors to clarify any missing data, or where we identify an eligible study protocol or conference abstract, we will contact authors to see if their work has progressed to publication, or if they would be willing to share data;
- verify whether any included studies or reports have post-publication amendments by examining their electronic records on the respective journal websites for expressions of concern, errata, corrigenda, or retractions.

For published systematic reviews or other forms of published evidence synthesis that address the research question, we will not include the review itself, but we will compare the studies included in that review to our own searches, including any studies overlooked by our own searches. We define a 'systematic review' as a review that has an accessible protocol, a clear research question or objective, has searched more than one bibliographic database, and provides a list of included studies.

Data collection and analysis

Selection of studies

We will download all titles and abstracts retrieved from our searches to a reference management database and remove duplicates using Covidence [55]. Two review authors (from CC, DGB, ET, ZP, CLM, RJ, AQ, AB, RC, SH, NF, KN, JOS) will independently screen all titles and abstracts for inclusion.

We will retrieve the full-text study reports. Two review authors (from CC, DGB, ET, ZP, CLM, RJ, AQ, AB, RC, SH, NF, KN, JOS) will independently screen the full-text reports and identify studies for inclusion, and identify and record reasons for exclusion of the ineligible studies. We will resolve any disagreement through discussion or, if required, we will consult a third review author (CR/US).

We will list studies that initially appeared to meet the inclusion criteria at the full-text screening stage but that we later excluded in a 'Characteristics of excluded studies' table.

We will collate multiple reports of the same study so that each study rather than each report is the unit of interest in the review. We will also provide any information we can obtain about ongoing studies. We will record the selection process in sufficient detail to complete a PRISMA flow diagram [38].

Data extraction and management

Two review authors (from CC, DGB, ET, ZP, CLM, RJ, AQ, AB, RC, SH, NF, KN, JOS) will independently extract the following study characteristics and outcome data from the included studies.

- Study methods: study design, setting and location, dates
- Study aims/objectives
- Supplementary search method used, and how it was applied
- Details of comparator: name and type of bibliographic database, hosting platform
- Outcome measures: main/primary outcomes and any other outcomes pre-specified, measured and reported; measurement time points
- Other notes: funding sources, notable conflicts of interest of study authors, ethical approval

We will complete a single pre-standardised data extraction form for each study. If multiple reports are available for the same study, we will use them to supplement or verify the information extracted from the primary report.

We will note in the 'Characteristics of included studies' table if outcome data were reported in an unusable way. We will resolve disagreements by consensus or by involving a third review author (from CC, DGB, ET, ZP, CLM, RJ, AQ, AB, RC, SH, NF, KN, JOS).

Assessment of risk of bias in included studies

Risk-of-bias assessment tools that are considered standard tools for conducting Cochrane reviews of interventions (e.g. RoB 2 or ROBINS-I) are unlikely to be suitable for the types of study we anticipate [56]. In the absence of any existing tool to evaluate information retrieval studies (e.g. non-interventional studies), we have developed a tool to ensure that studies are appraised. The tool is reported in Supplementary material 2.

Two review authors (from CC, DGB, ET, ZP, CLM, RJ, AQ, AB, RC, SH, NF, KN, JOS) will independently assess risk of bias in included studies. We will resolve any disagreements through discussion with a third review author not involved in the primary decision (CR/US).

Measures of the effect of the methods

We assume it will not be possible to estimate the effects of the interventions using risk ratios or odds ratios because, while numbers of identified studies or study reports (i.e. numerators) will be extracted, numbers of studies or study reports that could have been identified (i.e. denominators) are unlikely to be known. The denominators for a study that applies competing search methods to a common body of literature will be identical but unknown. This facilitates computing a point estimate of the risk ratio because the unknown denominator cancels the ratio. However, a standard error or other measure of precision cannot be computed for a risk ratio without making additional assumptions, which would preclude meta-analysis.

Instead, to facilitate meta-analysis, we plan to estimate the treatment effect as the percentage of all studies or study reports *not* identified by bibliographic database searching *alone*. For example, if a bibliographic database search identified five studies and a supplementary search identified one additional study (as exemplified in Table 1 (see Types of data)), for a total of six studies, we will estimate the effect as (1/6)×100% = 17% (95% CI 0% to 64%). In other words, in this example, the supplementary search yielded 17% more studies than the bibliographic database search alone. We will compute exact (Clopper-Pearson) 95% confidence intervals on the percentages.

For the cost or resource outcomes (secondary outcomes), where data are amenable, we will undertake a cost comparison, focusing on the cost to identify studies or reports. We will make the following calculation: cost per study or report = (Total Cost)/(Number of reports). We anticipate 'costs' to be salary, or costs of resources. We will source up-to-date costs for any cost reported in a study (e.g. research assistant hourly rate, aligning to 2025 costs) and convert published costs to a common currency, adjusted for inflation (e.g. 2025 EUR). We will not adjust data for double-counting (where the same studies or reports are identified across methods) since the effort to identify the reports is quantifiably proportioned and of interest. We will focus on incremental costs and incremental cost-effectiveness as opposed to averages.

Unit of analysis issues

We do not anticipate encountering unit of analysis issues, as we expect that the number of observations analysed will match the number of units randomised.

If studies evaluate the effects of multiple supplementary search methods versus bibliographic database searching, where it is

possible to isolate data for each supplementary search method evaluated, we will assess each method separately. Where data are combined, we will contact study authors to request separate data.

Dealing with missing data

We will contact study authors in order to verify key study characteristics and obtain missing outcome data where possible (e.g. when a study is identified as an abstract only). We will try to compute missing summary data from other reported statistics. Whenever it is not possible to obtain data, we will report the level of missing data and consider how that might impact the certainty of the evidence.

Assessment of heterogeneity

We will report heterogeneity narratively, and, if we perform meta-analysis, we will report I^2 statistics [57], Tau^2, and use χ^2 tests of null hypotheses of homogeneity, applying the conventional significance criterion of a P value of less than 0.10 [56]. For clearer insights on the extent of between-study variation, we will present prediction intervals when the number of studies in a meta-analysis is reasonable, following the guidance in the *Cochrane Handbook* [56]. We will write a textual summary of any observed heterogeneity in the estimates of effect, which may include a suggestion of what might explain it (e.g. methodological differences between the included studies).

Assessment of reporting biases

We do not plan to assess reporting bias because we do not expect to have a sufficiently large or comparable group of studies for any given outcome to permit assessment using traditional methods (e.g. funnel plots).

Data synthesis

We will perform meta-analysis, if we judge this to be possible (i.e. if the comparisons and outcomes are similar enough for pooling to be feasible). We will perform meta-analysis using an inverse-variance weighted random-effects model to account for anticipated heterogeneity between studies [58]. We will use the restricted maximum likelihood (REML) method to estimate between-study variance for all analyses. Meta-analyses will be performed on appropriate metrics following common meta-analysis methodology (e.g. proportions will be meta-analysed via the Freeman-Tukey transform) and results will be back-transformed to the original metric as necessary. We will transparently report and justify analysis choices. Meta-analysis will be performed using Stata 18 (StataCorp LLC, College Station, Texas, USA) or later.

If we are unable to perform meta-analysis, we will narratively summarise findings, listing the effectiveness, resource use, and data type outcomes for each supplementary search method (as listed in the Objectives), following guidance from the *Cochrane Handbook* and the Synthesis Without Meta-analysis (SWiM) guideline [56, 59].

Analysis of cost data

For the secondary outcome of resource use, we will extract and report costs as presented in the included studies, being clear about the date of study data as data are prepared for comparison (see table below). We will convert costs for currency and date at the time of synthesis, as set out above in Measures of the effect of the methods.

We will compare results narratively, interpreting a higher cost per study/report as meaning that greater effort and cost have been involved in identifying studies/reports comparatively by a particular method.

The corollary here is that whilst costs might be higher for one method compared to another, the fact that one method was more effective in identifying studies or reports remains of primary interest. Systematic reviews of intervention effects – particularly those relying on clinical trials – aim to identify all eligible studies and all reports to ensure a reliable estimate of effect can be produced. If a search method uniquely identifies a study, or finds a report not identified by another method (no matter the cost), this is still the primary outcome of this review, but we can contextualise this finding by illustrating the resources required to find this additional study or report. Determining 'the value' of the additional study or report (i.e. the effect on the synthesis; namely, whether the extra effort was worthwhile) goes beyond the scope of this review, but a tabular and narrative comparison of resources (as illustrated in Table 2) aims to report the resources needed to guide authors in the future.

Table 2. Proposed reporting of comparative cost data from included studies

	Included study 1		Included study 2	
	Supplementary search method: web searching	**Bibliographic database searching**	**Supplementary search method: contacting study investigators**	**Bibliographic database searching**
No. of studies identified	6	5	2	2
No. of study reports identified	12	10	4	3
Time taken to search (days)	6	2	2	1
Daily rate (GBP)	£150	£150	$100	$100

*1 day = 7.5 hours

Total cost of searching	£900	£300	$200	$100
Cost per study report	£75	£30	$50	$33.3
Data adjusted for currency and date (completed at time of review)				

Subgroup analysis and investigation of heterogeneity

We plan three subgroups, as follows.

- Publication date: we will group studies into 10-year groups by date of publication (e.g. year 1990 to 2000, year 2000 to 2010). This will help us assess the effect of our comparisons over time and identify any confounding/changes.
- Types of study design or evidence synthesis: we will group studies that aim to identify randomised studies, observational studies, qualitative studies, diagnostic or prognostic studies, and economic evaluations. This list reflects the types of reviews currently within Cochrane's scope. We will also include studies that search for forms of evidence synthesis as their unit of analysis, such as systematic reviews and overviews of reviews.
- Topic areas: we will group studies by the topic focus where reported. For instance, we will group studies that focus on the identification of clinical evidence separately from studies that focus on environmental evidence. Since the searches set out for this review are not limited by topic, this grouping will be iterative, based on the studies identified/included.

We will present findings of a formal significance test to investigate differences between subgroups via Stata.

Sensitivity analysis

We will perform sensitivity analyses to assess the robustness of our conclusions and explore the impact of decisions made during the course of the review on effect sizes. These analyses will involve restricting the analysis to:

- published studies;
- studies with a low risk of bias.

SUPPLEMENTARY MATERIALS

Supplementary materials are available with the online version of this article: 10.1002/14651858.CD015679.

Supplementary material 1 Search strategies

Supplementary material 2 Bespoke tool for assessing risk of bias in comparative studies of information retrieval

ADDITIONAL INFORMATION

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Editorial and peer-reviewer contributions

The following people conducted the editorial process for this protocol:

- Sign-off Editors (final editorial decisions): Julie Glanville, Glanville.info; Toby Lasserson, Cochrane Acting Editor in Chief;
- Managing Editor (selected peer reviewers, provided editorial guidance to authors, edited the article): Joey Kwong, Cochrane Central Editorial Service;
- Editorial Assistant (conducted editorial policy checks, collated peer-reviewer comments and supported the editorial team): Lisa Wydrzynski, Cochrane Central Editorial Service;
- Copy Editor (copy editing and production): Faith Armitage, Cochrane Central Production Service;
- Peer-reviewers (provided comments and recommended an editorial decision): Federico Capriles (content review); Ali Tafazoli Moghadam, Queen's University (content review); Luke Vale, London School of Hygiene and Tropical Medicine (methods); Emma Axon, Cochrane Methods Support Unit (methods); Sofia Tsokani, Cochrane Methods Support Unit (statistics); Jo Platt, Cochrane Evidence Production and Methods Directorate (search); Steve McDonald, Cochrane Australia (search); Elizabeth Stovold (search reviews).

Contributions of authors

Chris Cooper conceived the plan for this review and wrote the title proposal in partnership with Daniela Gonçalves-Bradley and Chris Rose.

Chris Cooper wrote the first draft of the protocol, with input from Daniela Gonçalves-Bradley and Chris Rose. Rachel Court revised the search syntax into its current form, with input from Zahra Premji and Anna Brown.

All authors reviewed, commented on, and approved the final version of the protocol to be published.

Declarations of interest

Anna Brown: none known.

Christopher Cooper: no relevant interests; involved with https://doi.org/10.1002/jrsm.1485 (no funding); https://link.springer.com/article/10.1186/s12874-019-0685-0 (article processing charge was paid from an NIHR grant, but no funding for the study); https://onlinelibrary.wiley.com/doi/abs/10.1002/jrsm.1286 (funded by an NIHR HTA grant, PI Chris Hyde).

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Samuel Haftel: none known.

Christopher Rose: none known.

Rachel James: no relevant interests; University of Bristol (employment).

Catalina Lopez Manzano: none known.

Kerstin Nothnagel: none known.

Jane O'Sullivan: no relevant interest; works as a health professional at HSE – University Hospital Limerick.

Zahra Premji: none known.

Annika Queder: none known.

Ute Schauberger: none known.

Eve Tomlinson: none known.

Joe Carroll: none known.

Satchi Gonzalez: none known.

Authors who have been involved in the conduct, analysis, and publication of a study that could be included in the full review will not make study eligibility decisions about, extract data from, or carry out the risk of bias assessment for that study.

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