

Chapter 4: Searching for and selecting studies - guidance on selecting studies

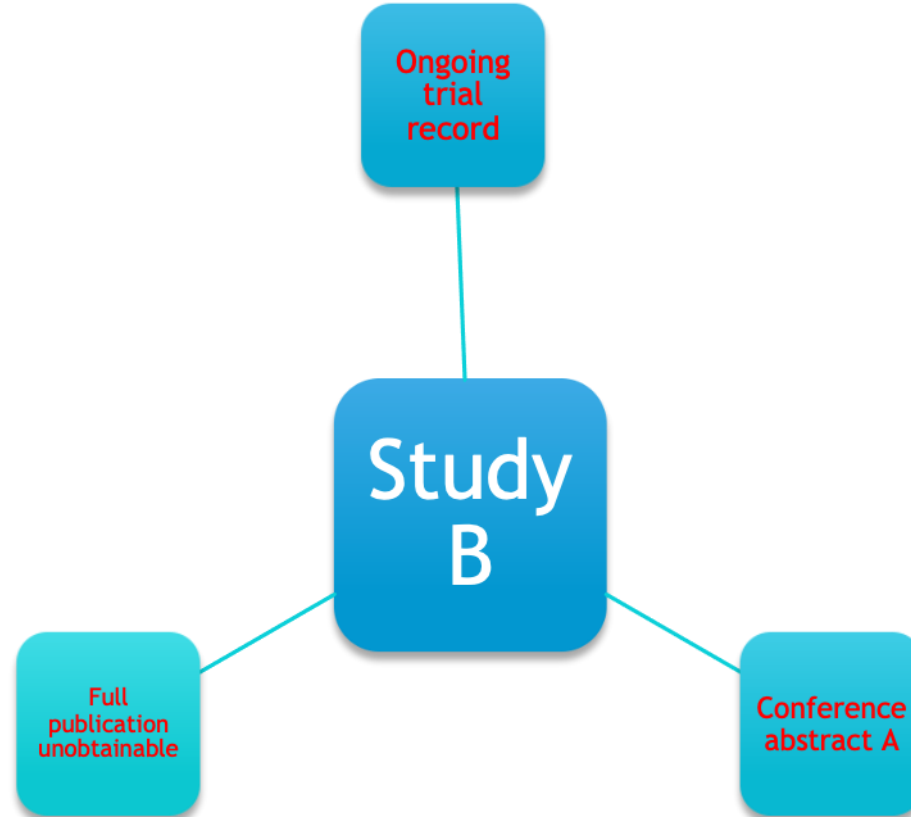
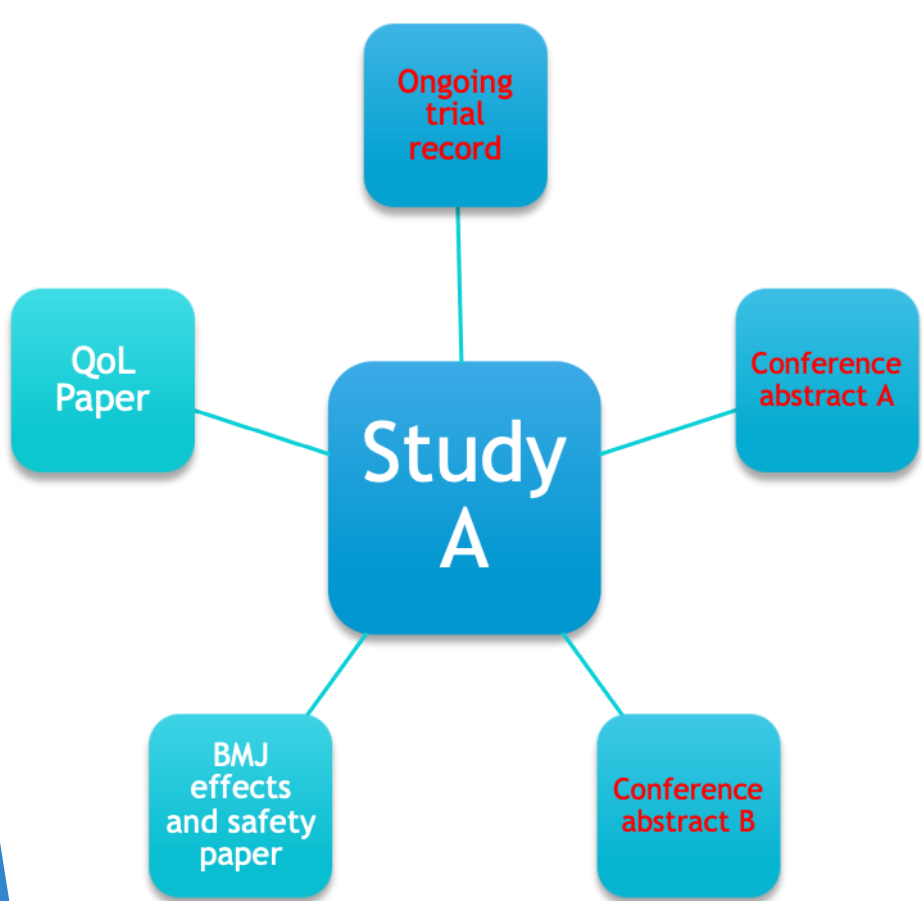
Julie Glanville, independent consultant

IRMG Co-convenor and co-author of the Searching for and selecting studies chapter of the Cochrane Handbook

Selecting studies

- ▶ This was part of Chapter 7 in the previous edition and has now moved to Chapter 4
- ▶ New authors: Chris Marshall, James Thomas, Julie Glanville
- ▶ Input from the Handbook editorial team

Studies NOT articles - expanded



Important to identify duplicates - expanded



IDENTIFIERS

Trial ids

Author names

Location/setting

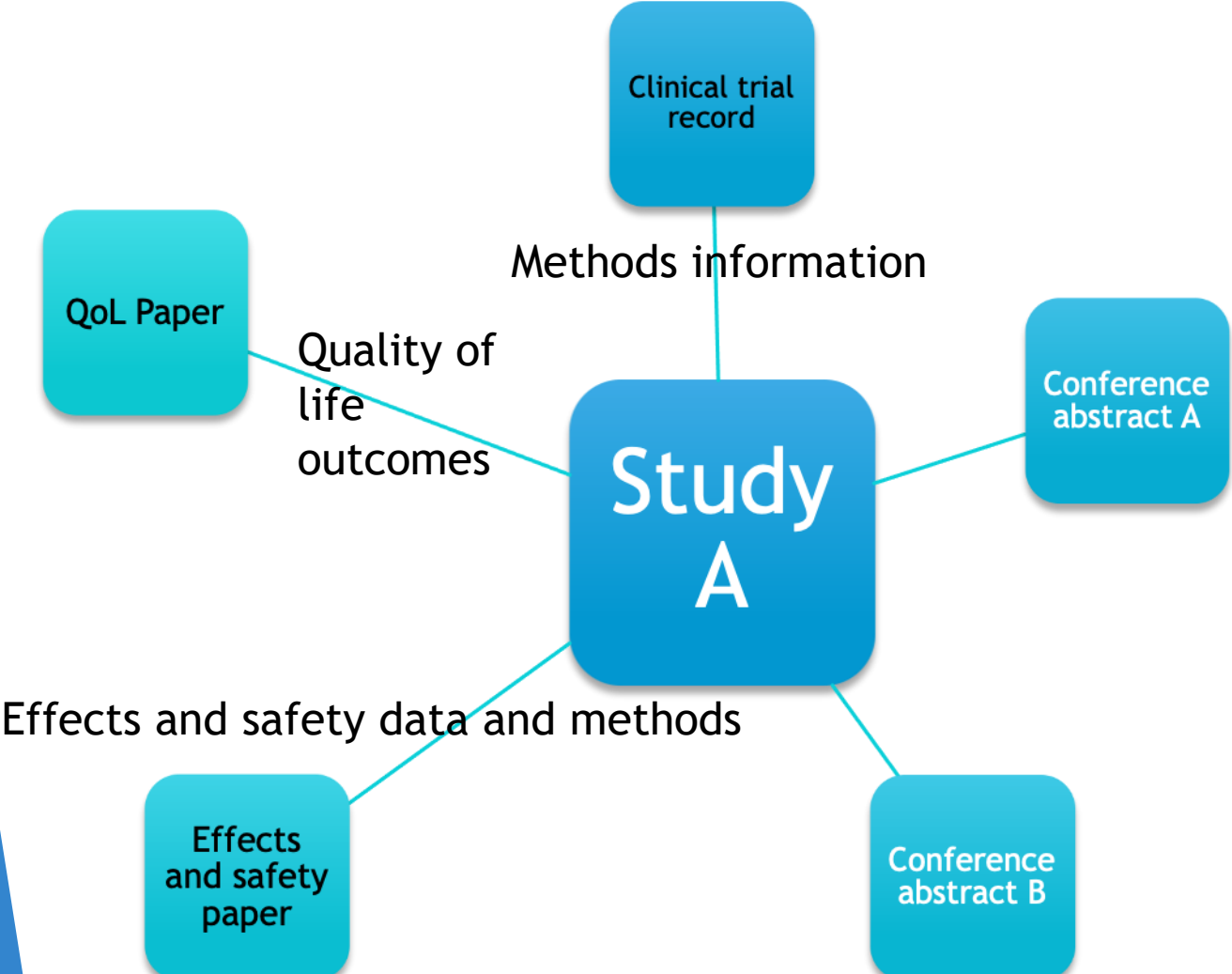
Number of participants

Date

Documents that belong to that study

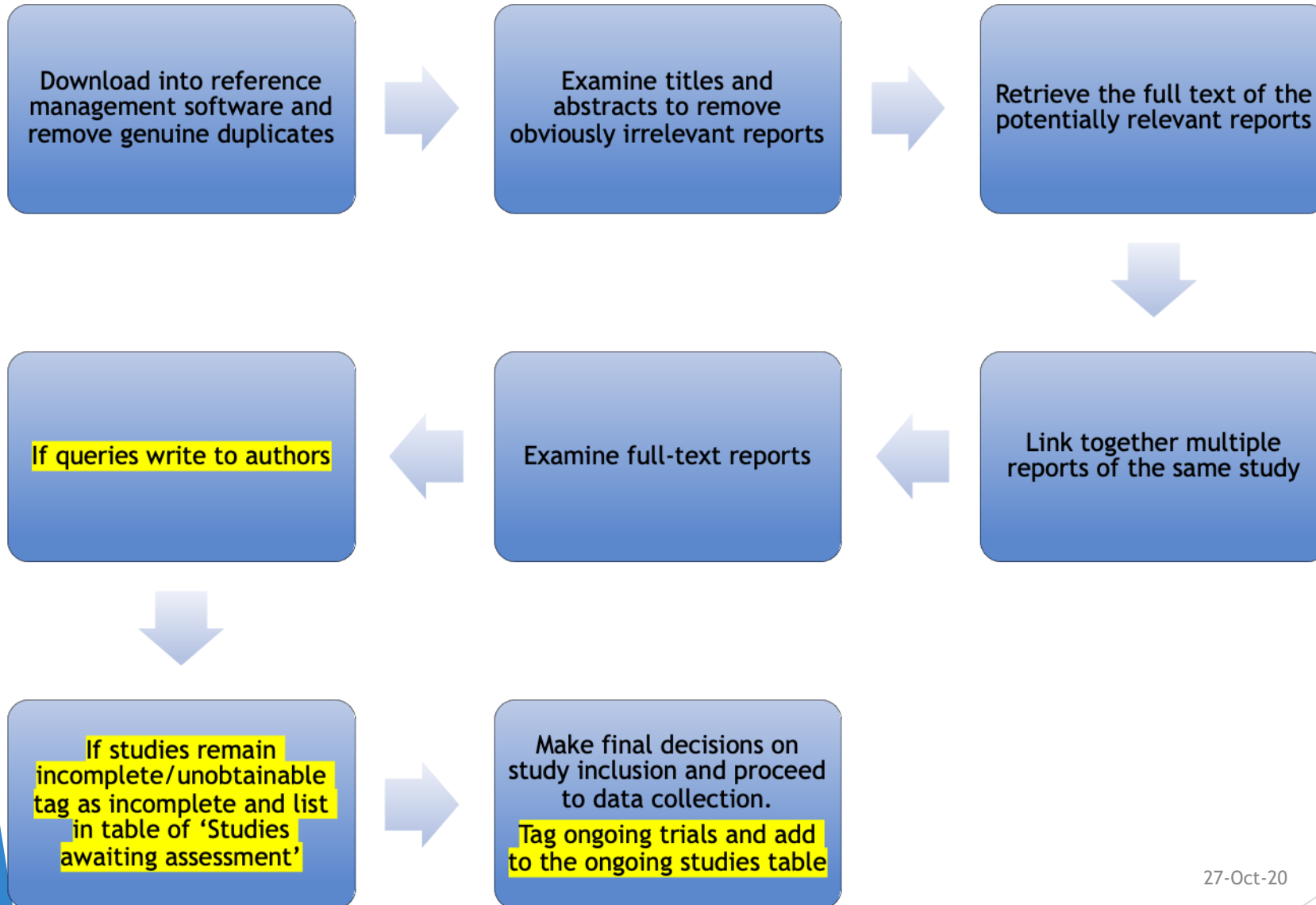
4.6.2
Identifying multiple reports from the same study

Documents may each provide information about the study - new emphasis



4.6.2 Identifying multiple reports from the same study

Study selection process - reordered



27-Oct-20

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4.6.3 A typical process for selecting studies

Selection process - new clarifications

- Studies should not be omitted from a review solely because measured outcome data are not reported
 - Include studies in the review irrespective of whether measured outcome data are reported in a ‘usable’ way
 - Do not exclude studies solely for reporting of the outcome data, to avoid bias due to selective outcome reporting
 - While such studies cannot be included in meta-analyses, the implications of their omission should be considered

How to select studies - clearer direction

Title and abstract screening

Ideally two people in duplicate working independently
Also **acceptable** that initial screening is undertaken by only one person



Full text screening

Two people working independently is **essential**
Third person may be required to resolve disagreements

Applying the eligibility criteria - minor change

A single failed eligibility criterion is sufficient to exclude a study

- Assess eligibility in order of importance - order will vary from review to review

Consider pilot testing the eligibility criteria on **6-8 reports**

- Include ones that are thought to be eligible, definitely not eligible and doubtful
- May be able to refine and clarify the eligibility criteria - maximise consistent application

Document the selection process so that the study selection flow diagram can be completed as well as a table of 'Characteristics of excluded studies'

- The decision and reasons for exclusion can be tracked using reference software, a simple document or spreadsheet or using specialist systematic review software

4.6.4 Implementation of the selection process
4.6.5 Selecting 'excluded studies'

Excluded studies - clarification

- Table of ‘Characteristics of excluded studies’
 - Provide the specific reason for exclusion for any studies that a reader might plausibly expect to see among the included studies.
 - Should be as brief as possible
 - Should not list studies that obviously do not fulfil the eligibility criteria for the review, such as ‘Types of studies’, ‘Types of participants’, and ‘Types of interventions’.
 - Should not list studies that are obviously not randomized if the review includes only randomized trials.
 - **Cochrane reviews: Average number of studies listed in the ‘excluded studies’ table is 30.**

Software support - new information

Abstrackr

- free web-based screening tool that can prioritize the screening of records using machine learning techniques

Covidence

- web-based software platform for conducting systematic reviews, which includes support for collaborative title and abstract screening, full-text review etc. Free for authors of Cochrane Reviews.

DistillerSR

- web-based software application for undertaking bibliographic record screening etc. Features to track progress, assess interrater reliability and export data for further analysis. Reduced pricing for Cochrane and Campbell reviews.

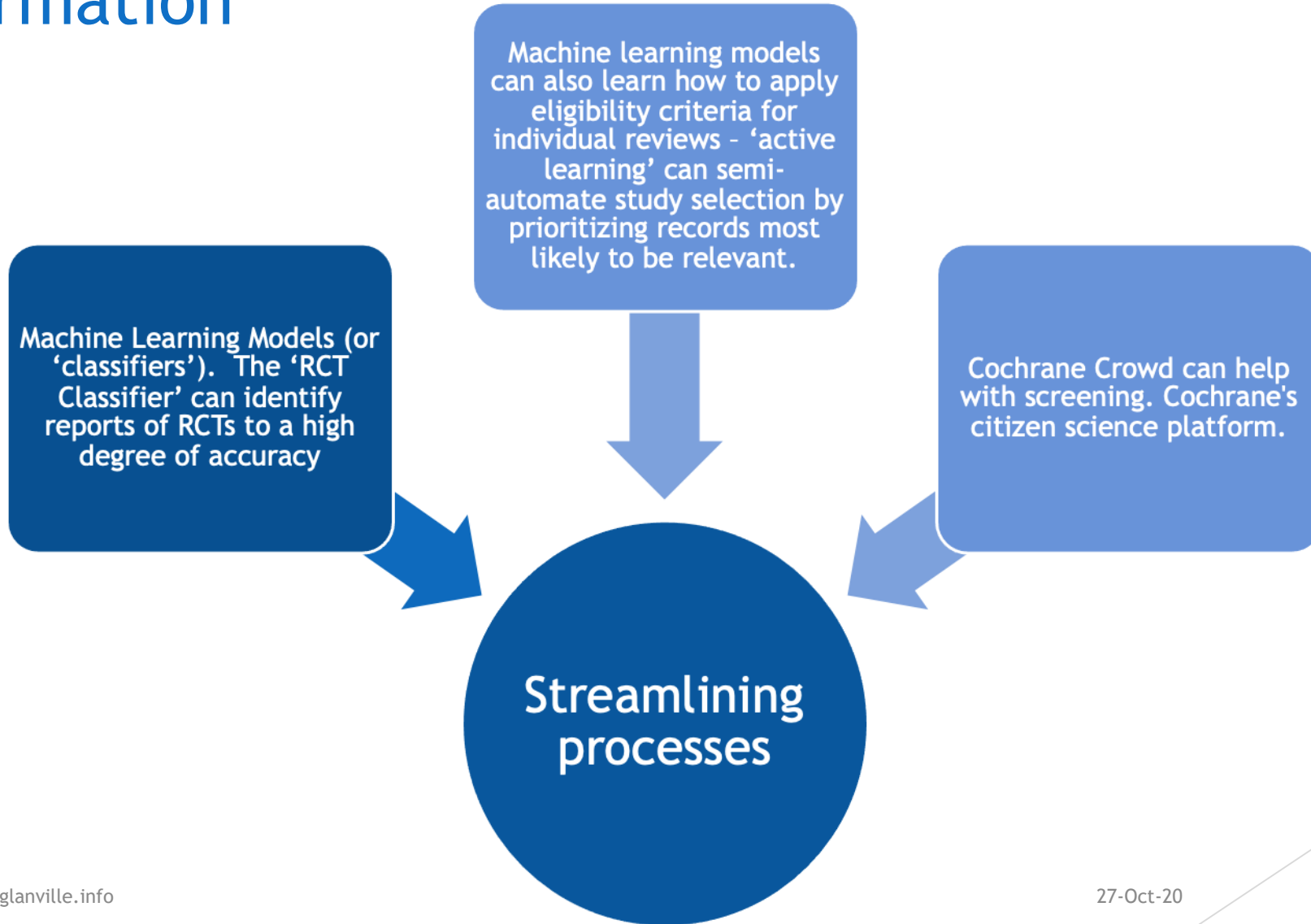
EPPI-Reviewer

- web-based software designed to support all stages of the systematic review process, including reference management, and screening. Free for Cochrane and Campbell reviews, otherwise paid subscription.

Rayyan

- web-based application for collaborative citation screening and full-text selection. Free of charge.

Automating the selection process - new information



Automating the selection process - new information

- Natural language processing tools can **highlight** sentences and key phrases automatically (e.g. PICO elements, trial characteristics, details of randomization)
- To help screen more easily

Measuring agreement - removed



This section has been removed



There is no requirement to measure agreement among screeners statistically



Reviewers should review and discuss disagreements

New resources

- Technical appendix 4 Managing references
 - Information on bibliographic management packages to help with managing and deduplicating search results
 - Information on methods of deduplication

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