

Time to Complete a Meta-analysis: Factors to Consider

Strategies to Increase Efficiency

Conduct a Scoping Review

Provides estimates of the number of studies eligible for review. This process includes:

1. Identification of preliminary search terms
2. Search of selected traditional database
3. Abstract screening of certain percentage of identified studies

Plan for Appropriate Staffing

Time to complete a meta-analysis is heavily reliant on staffing:

1. Number of staff available for screening and coding tasks
2. Number of hours staff can dedicate each week
3. Staff's level of prior experience with syntheses

Utilize Existing Tools

- [litsearchr](#): Search term refinement/identification
- [Large Language Models](#): AI to improve and refine search terms
- [Abstrackr](#): Collaborative, machine learning citation screening tool
- [MetaReviewer](#): Full-text screening, database creation, and coding tool
- SR Toolbox: Searchable source with guidance and software

Questions to Consider for Each Phase of the Meta-analysis

Protocol & Management (5%)

- Are there clearly developed research questions and **inclusion/exclusion criteria**? Who will work on this project?

- **Inclusion/exclusion criteria:** Inclusion/exclusion criteria define which studies will be eligible for review. It is helpful to define the criteria using the MUTOS framework, which stands for Methods, Units, Treatment, Outcome, and Setting. You can learn more about the framework [here](#).

Literature Search (5%)

- How many databases will be searched? Will supplemental search strategies be used (e.g., **reference harvesting**, review of websites)?
 - **Reference harvesting:** Reference harvesting (also called “snowballing”) includes searching for eligible studies by hand-searching citations from previous meta-analyses on the same topic and from eligible studies.

Abstract Screening (15%)

- How many studies are identified during the literature search? Conduct [single or double abstract screening](#)?

Full-Text Screening (20%)

- How many studies will be eligible from abstract screening? Conduct [single or double full-text screening](#)?

Coding (25%)

- How many studies will be eligible from full-text screening? How complex/detailed is the **codebook**?
 - **Codebook:** A codebook guides the coding process and is developed iteratively in the early stages of coding. It includes all the variables to be extracted from each eligible study, including definitions and expected values.

Cleaning & Meta-analysis (15%)

- Is the full analytic plan prespecified in the protocol? How many models will be conducted? **Plan for more time than you think!**

Dissemination (15%)

- How many journal articles, conference presentations, or other products will be created to disseminate findings?

Note: X% reflects estimated percentage of total weeks.

Stay tuned! MOSAIC is developing an interactive application to provide time estimates based on these key factors and many more!
