# SWAR 01: Citation screening in systematic reviews: Two approaches, two authors and time taken

# **Objective of this SWAR**

To evaluate the effects of two different methods of screening citations for inclusion of papers in a systematic review: sequential screening of titles followed by abstracts of potentially eligible articles and simultaneous screening of titles and abstracts.

Study area: Study identification Sample type: Reviewers Estimated funding level needed: Very Low

# Background

Conducting a high-quality systematic review can be time-consuming and costly, with conservative estimates of more than 1000 person-hours for an average review. One important, but time-consuming, step is the selection of studies for inclusion in the review. This is done by firstly applying the study eligibility criteria to citations retrieved from the searches. However, there is little evidence to guide review teams in choosing the most effective method for screening citations and this SWAR contributes to filling this gap by randomising review authors to either the sequential screening of titles followed by abstracts of potentially eligible articles or the simultaneous screening of titles and abstracts.

## Interventions and comparators

Intervention 1: Screening of titles only in stage 1 followed by screening of title and abstract of records judged potentially eligible in stage 2.

Intervention 2: Immediate, simultaneous screening of title and abstract in a single stage process.

Index Type: Screening

## Method for allocating to intervention or comparator

#### **Outcome measures**

Primary outcomes: average time per 100 records for both authors to screen records using either title screening followed by the screening of title and abstract or screening of the title and abstract simultaneously

Secondary Outcomes: inter-observer levels of agreement between both reviewers and rate of rejection associated with the one-stage process compared with the two-stage process

#### Analysis plans

Primary outcome: comparison of mean number of minutes in each SWAR group Secondary outcomes: inter-observer levels of agreement between both reviewers for both sets of citations using Kappa. Rate of rejection: proportion of rejected citations after completion of single versus two-stage screening approach.

## Possible problems in implementing this SWAR

Ideally need online citation screening software that can time reviewer screening at the citation level and enables the allocation of citations to reviewers randomly

## References

## Publications or presentations of this SWAR design

Devane D, Clarke M, McCarthy B, Casey D. Citation screening in systematic reviews: two approaches, two authors and time taken (SWAR-1 (Study Within A Review 1)). In: Evidence-Informed Publich Health: Opportunities and Challenges. Abstracts of the 22nd Cochrane Colloquium; 21-26 September 2014; Hyderabad, India. John Wiley & Sons. Available at <a href="https://abstracts.cochrane.org/2014-hyderabad/citation-screening-systematic-reviews-two-approaches-two-authors-and-time-taken-swar">https://abstracts.cochrane.org/2014-hyderabad/citation-screening-systematic-reviews-two-approaches-two-authors-and-time-taken-swar</a> (accessed 25 August 2022)

## Examples of the implementation of this SWAR

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