

SWAT 06: Measuring the time taken for activities in systematic reviews to identify the most rewarding targets to test strategies that might save time

Objective of this SWAT

In developing methods to accelerate systematic reviews, the greatest potential gains might be made by targeting time-saving strategies at the lengthiest activities. Such interventions should be evidence-based and this evidence might come from their evaluation in Studies Within A Review (SWAR). However, systematic reviews differ in the activities they involve (for example, hand-searching of journals may or may not be done), and in the length of time that these activities take (data extraction may be necessary for 2 papers, for 20 or even for 200). Therefore, a record of how much time is taken on the activities within different systematic reviews (and different types of systematic review) will provide data to enable reviewers to target SWARs and time-saving strategies at the activities likely to be the lengthiest in their review. It would also help reviewers to measure the impact of time-saving activities. This SWAR identifies the length of time it takes to carry out each of the activities in a systematic review.

Study area: Time taken to do a systematic review

Sample type: Reviewers

Estimated funding level needed: Low

Background

Systematic reviews usually require between six months and 18 months to carry out [1, 2], and this might be regarded as a long time to wait for its results, particularly in situations which require evidence to inform urgent action [3]. Rapid reviews (including rapid evidence assessments) have emerged to try to fill evidence gaps; and typically take one to six months [4]. There are many limitations of rapid reviews and no clear definition of them. Their methodologies are not clearly defined or scrutinised, and the limitations they impose on activities within a review can lead to a loss of accuracy and reliability in findings and recommendations [5, 6]. Therefore, the need for a faster high quality systematic review is generally still unmet, although some accelerated systematic reviews have succeeded [7]. In developing methods to accelerate systematic reviews, the greatest potential gains might be made by targeting time-saving SWARs and strategies at the lengthiest activities.

Interventions and comparators

Intervention 1: Manually operated, or automated software used throughout all systematic review-related activities by every person contributing to the systematic review, to record type of activities and time taken on each activity in the review [8, 9].

Index Type: Full Review

Method for allocating to intervention or comparator

No comparison

Outcome measures

Primary: List of activities and time taken on each activity in a systematic review.

Secondary:

Analysis plans

Data will be in the form of hours and minutes taken on each activity, and the time period during the carrying out of the review that activities were undertaken, by each reviewer. When the final draft of the review is prepared, the time taken, and the time period in the preparation of the review will be collated and published in a table in the review. The results for each review will be added to the PROSPERO registration of the review. Future reviewers can compare their planned review with those published and target strategies that might save time and SWARs to evaluate these at the activities likely to be the lengthiest for them.

Possible problems in implementing this SWAT

Data will be of most use to reviewers working on reviews that are similar to the reviews that have already been recorded as the number and type of recorded reviews increases. These data will take time to gather for individual reviews (i.e. the total length of time before the review is finished) and for collections of reviews (i.e. the time for a sufficient number of reviews to complete this SWAR).

References

1. Critical Reviews Advisory Group. Introduction to systematic reviews [Online]. School for Health and Related Research, University of Sheffield. 1996. www.irccsdebellis.it/html/ebm/scharr_intro.doc [Accessed 09 March 2016].
2. Higgins J, Green S. Cochrane Handbook for Systematic Reviews of Interventions. www.cochrane-handbook.org: The Cochrane Collaboration. 2011.
3. Centers for Disease Control and Prevention. 2014 Ebola Outbreak in West Africa [Online]. CDC. 2016 www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/ [Accessed 09 March 2016].
4. Khangura S, Konnyu K, Cushman R, Grimshaw J, Moher D. Evidence summaries: the evolution of a rapid review approach. *Systematic Reviews* 2012;1:10.
5. Ganann R, Ciliska D, Thomas H. Expediting systematic reviews: methods and implications of rapid reviews. *Implementation Science* 2010;5:56.
6. Harker J, Kleijnen J. What is a rapid review? A methodological exploration of rapid reviews in Health Technology Assessments. *International Journal of Evidence Based Healthcare* 2012;10:397-410.
7. Hopman JKZ, Edrees H, Allen T, Allegranzi B. WHO Guideline and systematic review on hand hygiene and the use of chlorine in the context of Ebola. Geneva: World Health Organisation. 2015.
8. Toggl, 2017. <https://toggl.com/app/timer>
9. Harvest, 2017. <https://www.getharvest.com/>

Publications or presentations of this SWAT design

Examples of the implementation of this SWAT

People to show as the source of this idea: Rebekah Burrow

Contact email address: rebekahburrow@hotmail.co.uk

Date of idea: 8/MAR/2016

Revisions made by: Rebekah Burrow

Date of revisions: 15/DEC/2017