Screen4Me:
How to report Screen4Me in Cochrane protocols and reviews

December 2020

This document provides template text that can be used in Cochrane intervention protocols and reviews to describe use of the Screen4Me workflow.

This is an updated version of the March 2019 guidance.

This guidance varies from the earlier guidance by including:

- *New:* How to report use of S4M in study flow diagrams in RevMan web (Section 2.5)
- *Updated:* Additional references section (Section 2.7)
- *New:* How to report use of S4M in study flow diagrams where S4M has been used for a review update (Section 3)
- *New:* How to report use of Sreen4Me in study flow diagrams for multiple uses of S4M for a single review (Section 4)
- *New:* Communicating with the Crowd (Section 5)

For queries regarding reporting the use of Screen4Me, contact CIS Support (cis-support@cochrane.org).

Contents

1 Cochrane Intervention Protocol
  1.1 Selection of studies
2 Cochrane Intervention Reviews
  2.1 Selection of studies
  2.2 Results of the search
  2.3 Figures: Screen4Me summary diagram
  2.4 Figures: Study flow diagram (desktop RevMan 5)
  2.5 Figures: Study flow diagram (RevMan web)
  2.6 Acknowledgements
  2.7 Additional references
3 Cochrane Intervention Reviews: updates
  3.1 Figures: Study flow diagram (desktop RevMan 5)
  3.2 Figures: Study flow diagram (RevMan Web)
4 Cochrane Intervention Reviews: multiple uses of Screen4Me for an individual review
  4.1 Figures: Study flow diagram (desktop RevMan 5)
  4.2 Figures: Study flow diagram (RevMan Web)

++++++++++++++++++++

1 Cochrane Intervention Protocol

1.1 Selection of studies

[At the start of this section]

We will be using Cochrane's Screen4Me workflow to help assess the search results. Screen4Me comprises three components: known assessments – a service that matches records in the search results to records that have already been screened in Cochrane Crowd and been labeled as an *RCT* or as *Not an RCT*; the RCT classifier – a machine learning model that distinguishes RCTs from non-RCTs; and if appropriate, Cochrane Crowd (https://crowd.cochrane.org) – Cochrane's citizen science platform where the Crowd help to identify and describe health evidence.

For more information about Screen4Me and the evaluations that have been done, please go to the Screen4Me webpage on the Cochrane Information Specialist's portal: https://community.cochrane.org/organizational-info/resources/resources-groups/information-specialists-portal. In addition, more detailed information regarding evaluations of the Screen4Me components, can be found in the following publications: Noel-Storr 2021, Thomas 2020, Noel-Storr 2020, Marshall 2018.

++++++++++++++++++++++++++

2 Cochrane Intervention Reviews

2.1 Selection of studies

[At the start of this section]

We used Cochrane's Screen4Me workflow to help assess the search results.
Screen4Me comprises three components: known assessments – a service that matches records in the search results to records that have already been screened in Cochrane Crowd and been labeled as an *RCT* or as *Not an RCT*; the RCT classifier – a machine learning model that distinguishes RCTs from non-RCTs, and if appropriate, Cochrane Crowd – Cochrane's citizen science platform where the Crowd help to identify and describe health evidence.

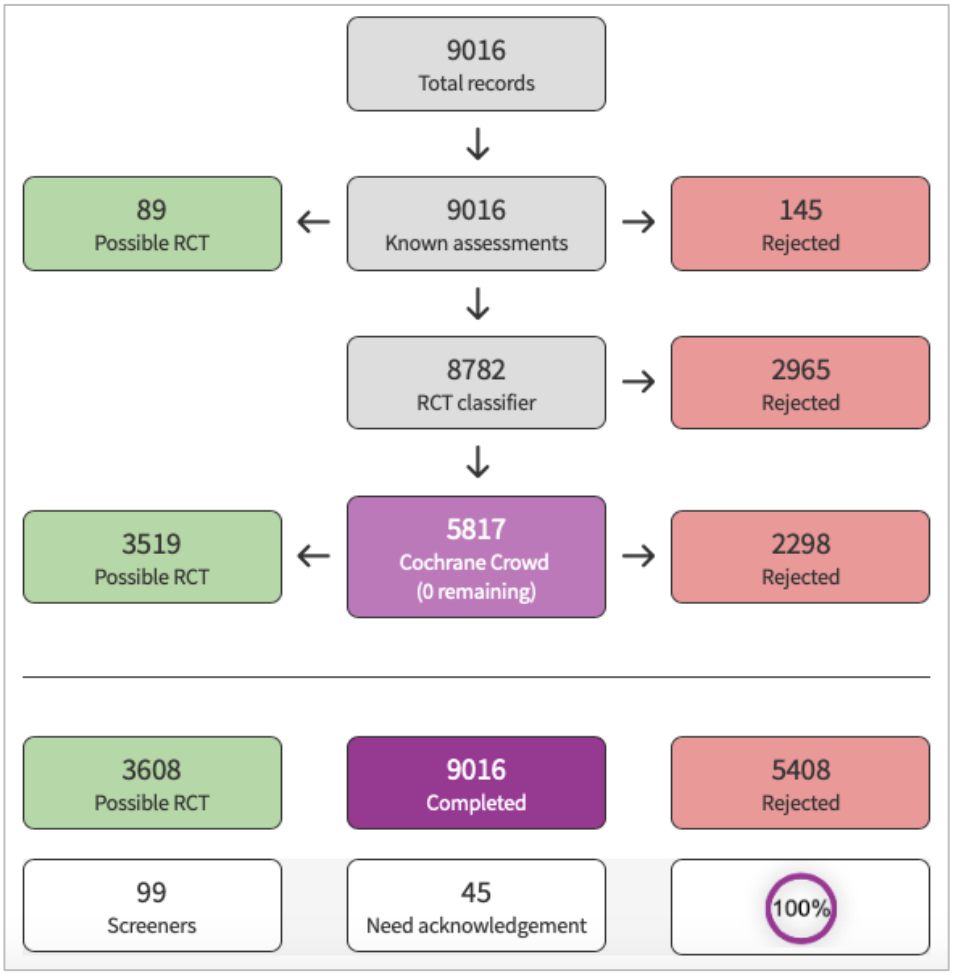
For more information about Screen4Me and the evaluations that have been done, please go to the Screen4Me webpage on the Cochrane Information Specialist's portal: https://community.cochrane.org/organizational-info/resources/resources-groups/information-specialists-portal. In addition, more detailed information regarding evaluations of the Screen4Me components can be found in the following publications: Noel-Storr 2021, Thomas 2020, Noel-Storr 2020, Marshall 2018.

2.2 Results of the search

The search identified a total of [insert number] search results. In assessing the studies we used Cochrane's Screen4Me workflow to help identify potential reports of randomised trials. The results of the Screen4Me assessment process can be seen in Figure x. We then assessed the remaining [insert number] records left in after Screen4Me. *[Author team them continues to describe their screening process e.g. assessing remaining records based on a title and abstract assessment]*

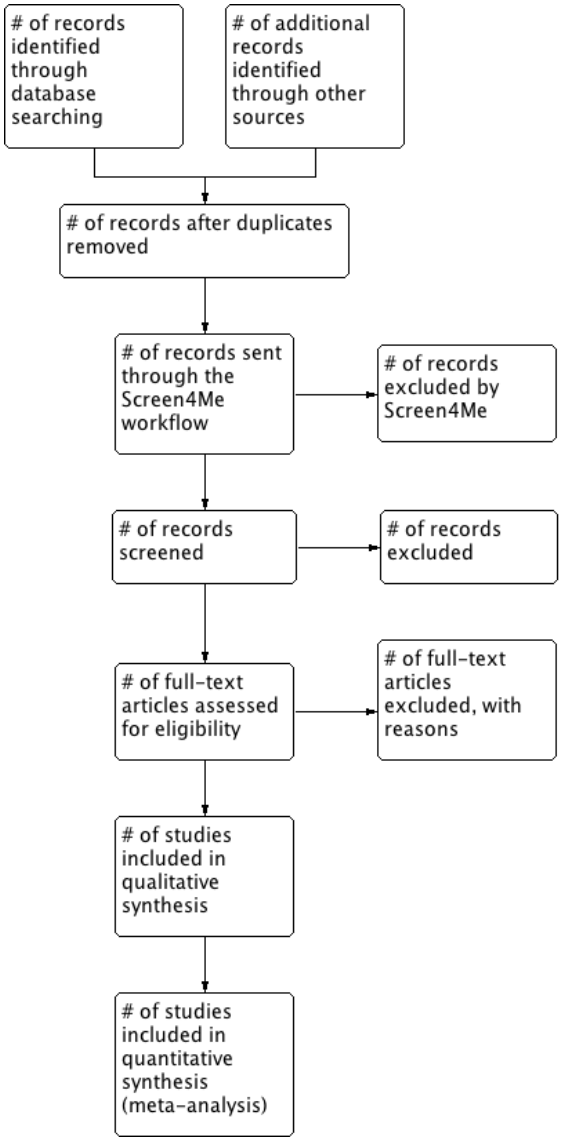
2.3 Figures: Screen4Me summary diagram

[We recommend that you export the Screen4Me summary diagram from your Screen4Me project and import it into the Figures sections of the review. You should call it: Screen4Me summary diagram. Here is an example. Screen4Me produces a flow diagram per search so if you use S4M multiple times for a single review, you will have generated multiple Screen4Me flow diagrams]



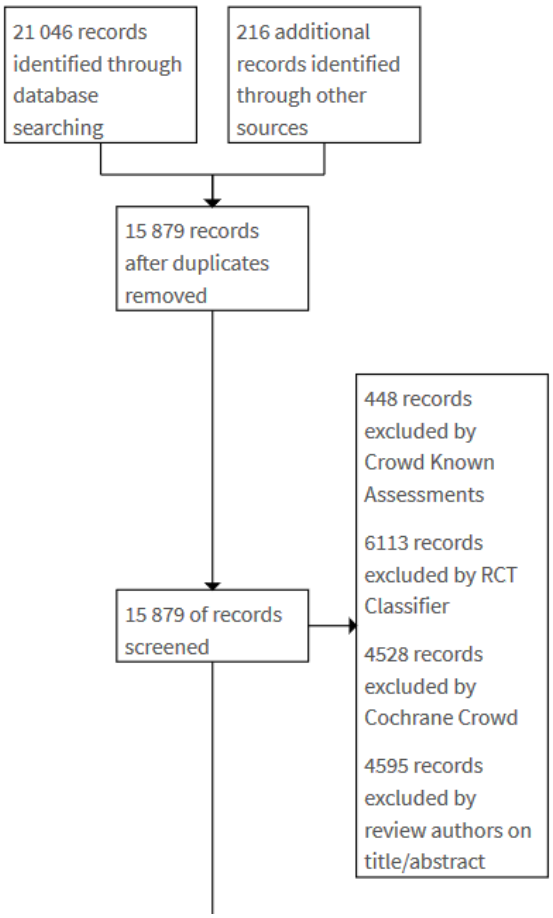
2.4 Figures: Study flow diagram example (desktop RevMan 5)

[As well as exporting the Screen4Me summary diagram, you should also report Screen4Me in the usual Study Flow diagram. Here is an example of how to do this if you are using desktop RevMan 5. ***Please note: if you are using RevMan Web you will not be able to modify the study flow diagram in this way. For RevMan web users we recommend a different approach – see section 2.5****]*



2.5 Figures: Study flow diagram example (for users of RevMan Web)

[Currently in RevMan Web, it is not possible to add additional boxes to the study flow diagram. This is why an alternative approach to reporting the flow of studies is needed for RevMan Web users. In the example below, the key information about what was excluded at the Screen4Me stage of the screening process is detailed in the Screening exclusion box]



2.6 Acknowledgements

[If you do use the Cochrane Crowd component of Screen4Me, you must acknowledge by name those Crowd contributors who screen 250 or more records for your Screen4Me review/project. You can see who should get acknowledgment within the Screen4Me project summary screen. Here is an example of Acknowledgments section]

We would like to acknowledge and thank the following people for their help in assessing the search results for this review via Cochrane's Screen4Me workflow: [insert names].

2.7 Additional references

Noel-Storr AH, Dooley G, Elliott J, Steele E, Shemilt I, Mavergames C, Wisniewski S, McDonald S, Murano M, Glanville J, Foxlee R, Beecher D, Ware J, Thomas J. An evaluation of Cochrane Crowd found that crowdsourcing produced accurate results in identifying randomised trials. Journal of Clinical Epidemiology 2021; Article in press.

Thomas J, McDonald S; Noel-Storr AH, Shemilt I, Elliott J, Mavergames C, Marshall I. Machine learning reduces workload with minimal risk of missing studies: development and evaluation of an RCT classifier for Cochrane Reviews. Journal of Clinical Epidemiology 2020; DOI:https://doi.org/10.1016/j.jclinepi.2020.11.003

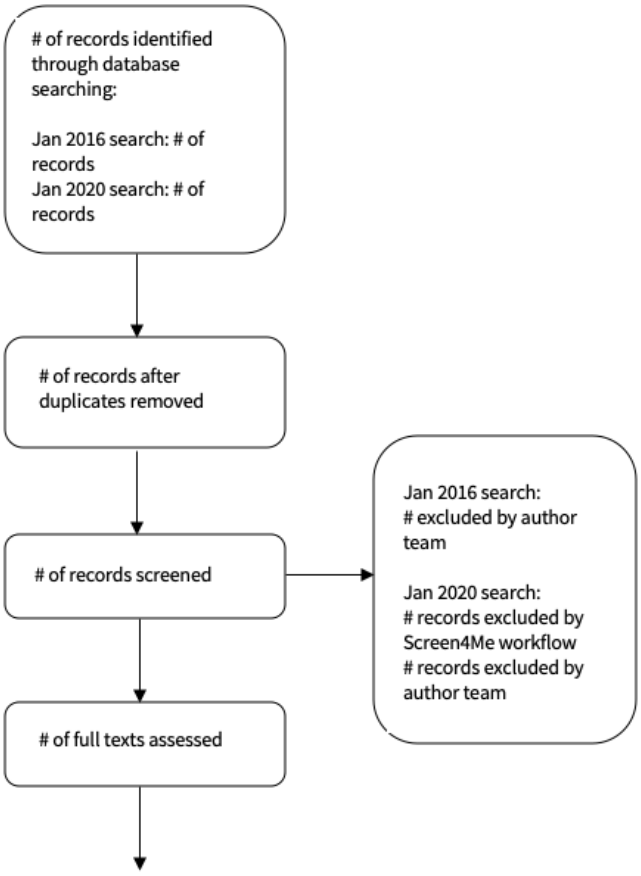
Noel-Storr AH, Dooley G, Wisniewski S, Glanville J, Thomas J, Cox S, Featherstone R, Foxlee R, Cochrane Centralised Search Service showed high sensitivity identifying randomised controlled trials: A retrospective analysis. Journal of Clinical Epidemiology 2020; 127: 142-150 https://doi.org/10.1016/j.jclinepi.2020.08.008

Marshall IJ, Noel-Storr A, Kuiper J, Thomas J, Wallace BC. Machine learning for identifying Randomized Controlled Trials: An evaluation and practitioner's guide. Res Synth Methods. 2018;9(4):602-614

3 Cochrane Intervention Reviews: updates reviews

[Some users will make use of Screen4Me for updates of reviews where previously Screen4Me had not been used. Below we give an example of how to reflect the use of Screen4Me in these circumstances.]

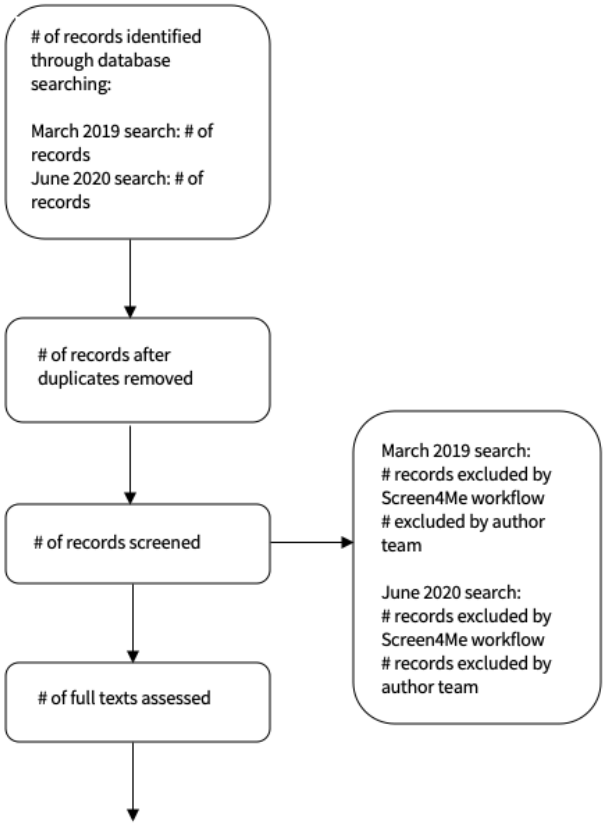
3.1 Figures: Study flow diagram example



4 Cochrane Intervention Reviews: multiple uses of Screen4Me for an individual review

[Some users will make use of Screen4Me more than once for a specific review. Below we give an example of how to reflect the use of Screen4Me in these circumstances]

4.1 Figures: Study flow diagram example



5 Communicating with the Crowd

If you have used Cochrane Crowd, we would like to start alerting crowd contributors when reviews they have contributed to are published. Please could you email Anna Noel-Storr (anna.noel-storr@rdm.ox.ac.uk) when the review is published so that she can send an alert to the Crowd contributors and flag the review as published on the Cochrane Crowd platform.