

Screen4Me Frequently Asked Questions

What is it?

It's a service designed to help review teams get through the screening of search results much more quickly without compromising on quality. It's made up of three components: Known Assessments, the RCT Classifier, and Cochrane Crowd.

Known Assessments are records that have been through Cochrane's citizens science platform, Cochrane Crowd, and received a final classification of either describing a randomized trial (RCT) or not.

The RCT Classifier is a machine learning routine that assigns records a likelihood score based on whether the machine thinks the record is describing an RCT or not.

Cochrane Crowd (<http://crowd.cochrane.org>) is Cochrane's crowdsourcing platform where contributors from around the world help to identify randomised trials and other types of healthcare-related research.

How can I access it?

Screen4Me (S4M) is accessible via the CRS web. You will need to contact your Cochrane Information Specialist if you are interested in using Screen4Me for your Cochrane review.

Can I use it for my Cochrane review?

If your Cochrane review includes only evidence from randomised controlled trials, then yes, you can use Screen4Me. If your review includes other study designs, then at the moment it is not appropriate for Screen4Me.

Can I use it for my non-Cochrane review?

No, Screen4Me is currently just for use on Cochrane intervention reviews.

Can I use for my Cochrane Living Systematic Review?

If your Cochrane Living Systematic Review includes only evidence from randomised controlled trials, then yes, you can use Screen4Me. If your review includes other study designs, then at the moment it is not appropriate for Screen4Me.

What is the evidence for its reliability?

We have performed evaluations on all three components. Here is a list of some of the relevant publications. There are more to come!

1. Noel-Storr AH and the Project Transform team. Cochrane Crowd: new ways of working together to produce health evidence. Evidence Live 2018, Oxford, UK; 18th – 20th June 2018
2. Marshall IJ, Noel-Storr AH, Kuiper J, Thomas J, Wallace BC. Machine Learning for Identifying Randomized Controlled Trials: an evaluation and practitioner's guide. Research Synthesis Methods 2018; 1-12
3. Thomas J, Noel-Storr AH, Marshall I, Wallace B, McDonald S, Mavergames C, Glasziou P, Shemilt I, Synnot A, Turner T, Elliott J; Living Systematic Review Network. Living Systematic Reviews:2. Combining Human and Machine Effort. Journal of Clinical Epidemiology 2017; S0895-4356(17): 30604-2
4. McDonald S, Noel-Storr AH, Thomas J. Harnessing the efficiencies of machine learning and Cochrane Crowd to identify randomised trials for individual Cochrane reviews. Global Evidence Summit, Cape Town, South Africa; 13th – 16th September 2017

What if my review includes non-RCT study designs?

If your review includes non-RCT study designs, then currently it is not eligible for Screen4Me.

How long can I expect it to take?

Two of the Screen4Me components are pretty much instantaneous: Known Assessments and the RCT Classifier. If you also use Cochrane Crowd, we estimate it taking 1-2 weeks for the Crowd to screen around 2000 results. The Crowd have been known to be much quicker than this but it depends how many other S4M Crowd projects that are live at the same time.

Can I just use certain parts so of it?

Yes, you can just opt to use the Known Assessments component, or the Known Assessments and the RCT classifier. You can't opt to use just the Crowd component. This is because we're really trying to make the screening process as efficient as possible, including making sure that we are not sending records to the Crowd when they have already been through the Crowd, and not sending records to the Crowd that the machine is extremely confident are rejects (i.e. not RCTs).

Will the Screen4Me Crowd tasks be open to the whole Crowd?

Anyone who has screened 100 records in Cochrane Crowd's RCT identification task will be able to take part in a Screen4Me Crowd task. They will have to complete and pass a brief training module for the Screen4Me projects.

Is there a maximum number of records we can send to the Crowd?

Currently there is no maximum limit set. However, we will be monitoring carefully all S4M projects and all proposed S4M Crowd tasks will need to be approved before they go live to the Crowd.

Is there a minimum number of records we can send to the Crowd?

We have imposed a minimum number of records that can go to Cochrane Crowd per S4M project (or review). The minimum has been set at 500.

What do the Crowd get in return for helping on a S4M project?

The current reward is acknowledgement within the review if the Crowd contributor completes 250 classifications.

Who is responsible for making sure the Crowd contributors get acknowledged?

The responsibility will lie with the review group and author teams. Once a S4M Crowd task is complete, the Information specialist will send the results and a list of those who have qualified for acknowledgement. It is very important that those who qualify for acknowledgment do get acknowledged. Reviews take a long time to produce and it can be easy to forget to do the acknowledgements. We strongly recommend that author teams add the names of Crowd contributors to the review as soon as the S4M Crowd task is complete.

Will the Crowd be assessing the records based on topic area/relevance to the review question?

The Crowd will simply be screening the records based on study design. In other words, they will not be assessing a record based on whether it might be relevant to the review. This would require bespoke training for each and every S4M project. At the moment the Crowd S4M tasks will all be asking the Crowd to decide whether a title and abstract is potentially describing a randomized trial.

Can I offer the Crowd a different or additional reward?

If you have a different reward in mind or you'd like to thank the Crowd in some way, then let us know (crowd@cochrane.org) but on the whole we'd rather keep things as simple and consistent as possible and give everyone the same reward of acknowledgement within the review for 250 classifications done.

How do I describe this process in my Cochrane review?

We have template text that you can use and a suggested additional box for your PRISMA flow diagram that describes the S4M process. You can access this reporting guidance from the Cochrane Information Specialist Portal or email s4m@cochrane.org to request a copy of the guidance.

Screen4Me is not currently described in the Cochrane Handbook or in the MECIR reporting and conduct standards. Is it really ok to use S4M for my Cochrane review?

We've been working closely with the Cochrane Information Retrieval Methods Group to ensure that the Screen4Me service will deliver high quality data and is reported well in the Cochrane reviews. In time, the process will be added to the Cochrane Handbook and to MECIR if appropriate.

How long will Screen4Me be in beta mode?

It will stay in beta mode until we're absolutely confident that all parts of this new workflow are working well. Whilst Screen4Me is in beta mode, someone from the Screen4Me team will monitor, support and evaluate S4M projects run.