



Project Transform

Citizen Science and LSRs

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What is it and how could it help?



What is crowdsourcing and citizen science?

How can it help Living Systematic Reviews?



What is crowdsourcing?



As with any SR, the search for evidence forms a critical component
What happens here has a knock-on effect for the whole review



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Citizen science success

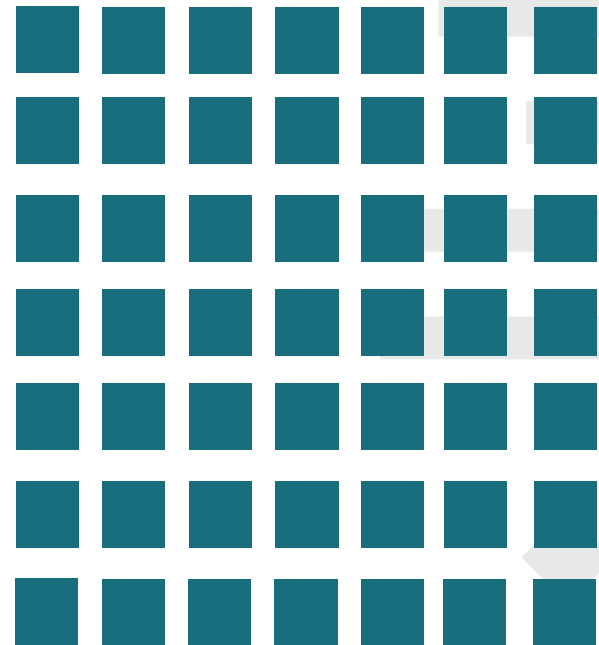


Would this approach work for Cochrane?



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The task: making it doable



Reviews are complex but they are made up of a number of rule-driven, systematic tasks. These kinds of tasks can be re-formed as 'microtasks'



Cochrane

Project Transform

Cochrane Crowd

A background image showing a group of people, including a woman in the foreground wearing a name tag that says 'HMC', smiling and looking towards the right. The image is overlaid with a semi-transparent purple filter.

You can make a difference

Become a Cochrane citizen scientist. Anyone can join our collaborative volunteer effort to help categorise and summarise healthcare evidence so that we can make better healthcare decisions.

Give it a try

crowd.cochrane.org | [@cochrane_crowd](https://twitter.com/cochrane_crowd)



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Cochrane Crowd

Needed
tasks

Doable
tasks

It's about offering needed and doable microtasks aimed at identifying and describing the evidence we need to produce our reviews



Is it an RCT?

The efficacy of internet-based cognitive behavioral therapy for insomnia. [Chinese]
[609918800]

Objective To evaluate the effectiveness of internet-based cognitive behavioral therapy (ICBT) for the treatment of insomnia by comparison of sleep parameters, degrees of anxiety and depression of the ICBT, with traditional face-to-face cognitive behavioral therapy (CBT) and pharmacotherapy for insomnia. **Methods** Seventy-nine cases meeting proposed DSM-5 criteria for insomnia disorder were **randomly assigned to** ICBT (n=27), CBT (n=26), and pharmacotherapy (n=26) group, and treated accordingly for 8 consecutive weeks. The sleep parameters, the levels of anxiety and depression in the 3 groups were compared and analyzed before, 4 weeks after and the termination of treatment. Results Comparing to that of pre-treatment, the sleep parameters were significantly improved, anxiety and depression levels obviously decreased after treatment for 4 and 8 consecutive weeks, the differences were statistically significant ($P<0.05$). After treatment for 4 consecutive weeks, the sleep latency, total asleep time and wake time after sleep were significantly different ($P<0.05$) when **compared with** pharmacotherapy group with ICBT and CBT groups. After the treatment, the sleep latency, anxiety and depression levels were lower in ICBT and CBT groups than those in pharmacotherapy group, and the difference was statistically significant ($P<0.05$). In addition, no significant difference ($P>0.05$) was found in sleep parameters and anxiety level between ICBT group and CBT group. Conclusion ICBT may display a slower effect on improving speed in falling asleep than the pharmacotherapy does, but the efficacy of ICBT is better than that of pharmacotherapy after



RCT/CCT

Reject

Unsure

[Help me decide](#)

[Add a note](#)

Each task is supported by interactive, yet brief, training



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So far

Over **1 million** individual classifications!

Over **5500 people** have signed up to contribute

Around **40,000 randomised trials** have been found by Cochrane Crowd



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Who is the 'online community'?

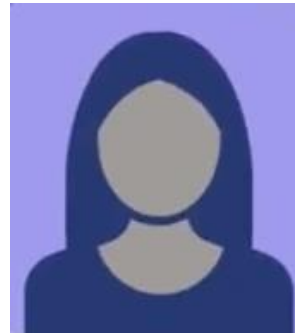




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Who is the 'online community'?

Anyone with an interest in health





Who is the 'online community'?

Most aged between
26-35 years

59% work in a health related
area

21% are students
(health and non-health)

16% are 'consumers'
(patients, carers, public)

Data as of 26 Oct 2016
Survey of sign-up since
launch of new platform

Who is the 'online community'?



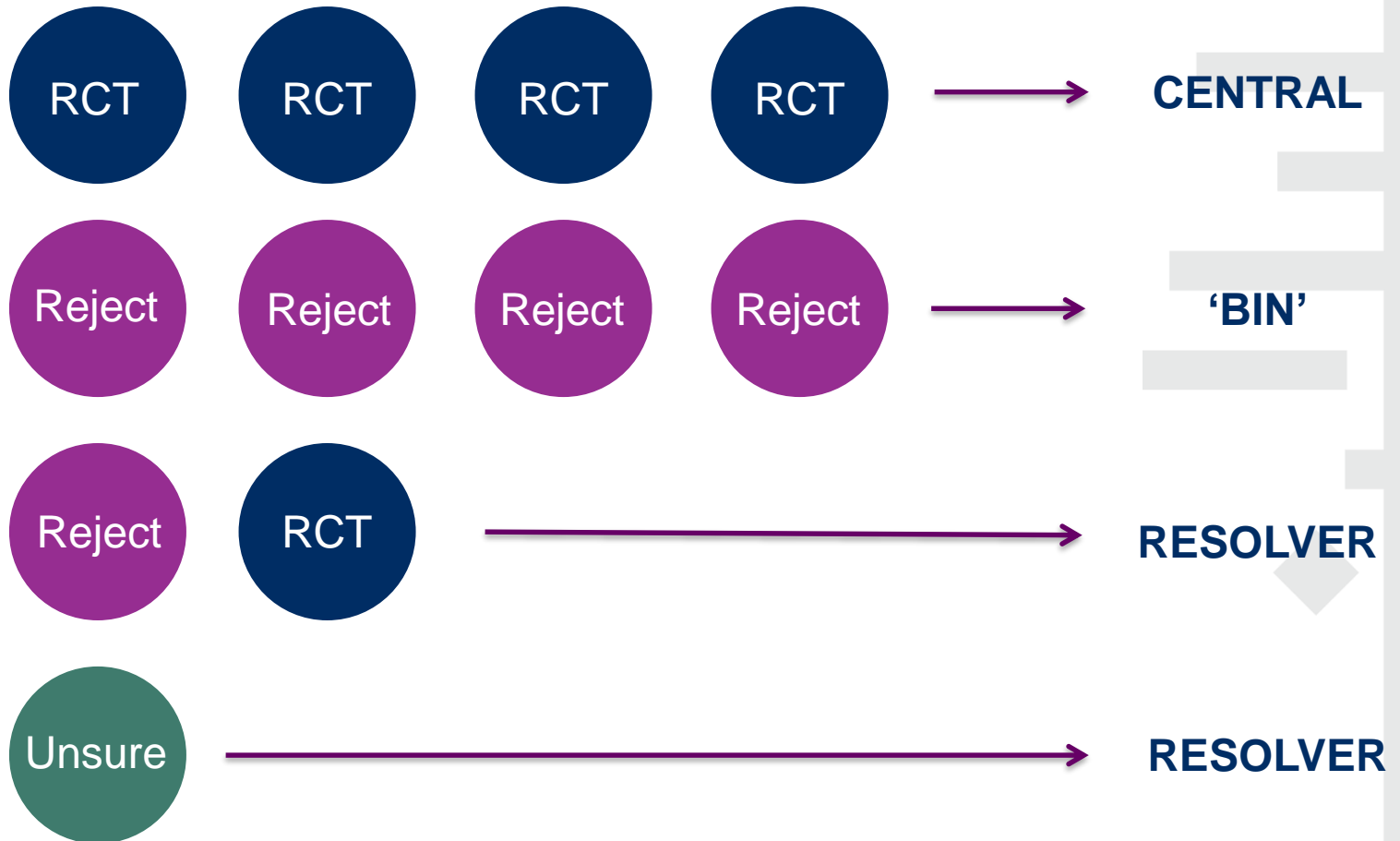
Contributors are from around 120 countries



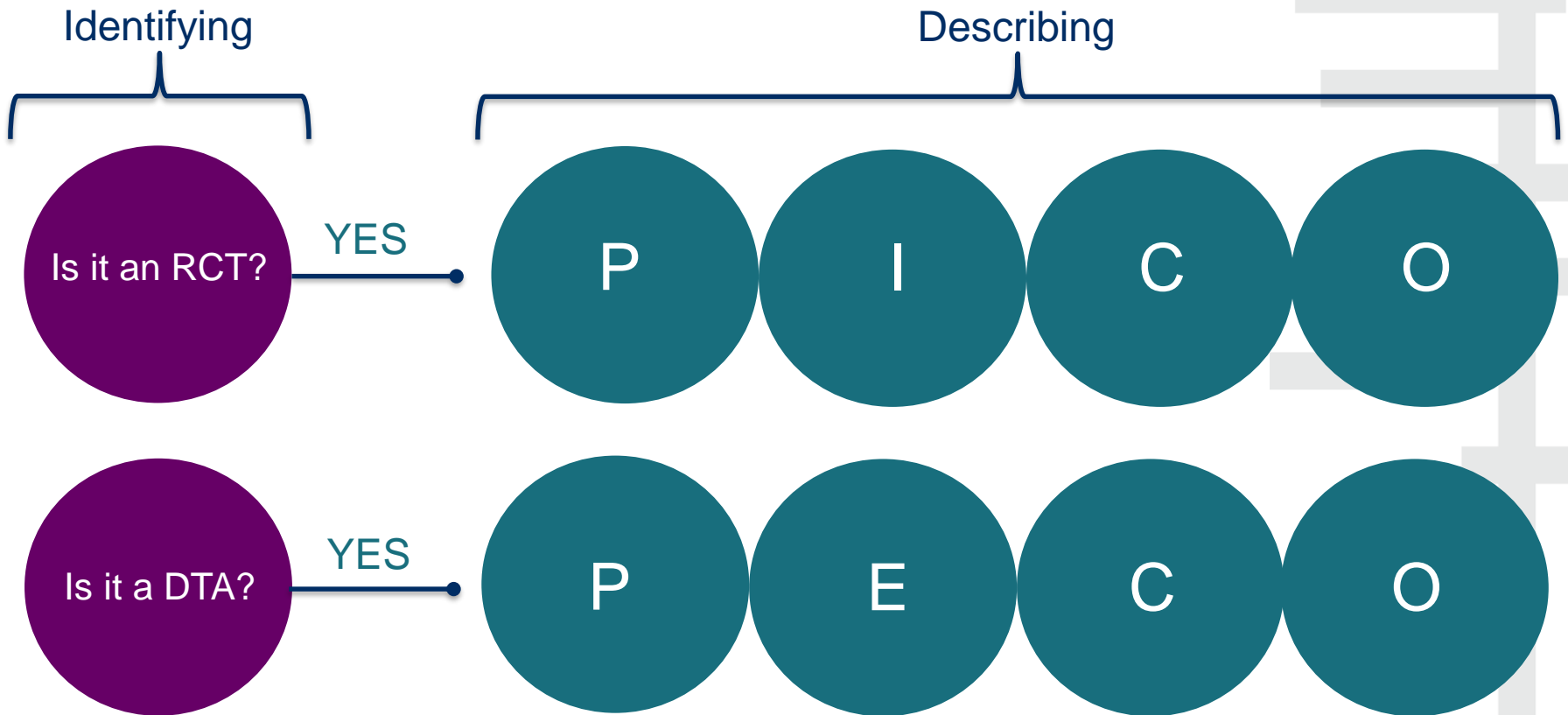
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Quality



More tasks





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Crowd and LSRs

Crowd as 'service'

Known intelligence





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Crowd as service

Send my search
results to the
Crowd!

Much of what is identified from sensitive searches is '**noise**'.
The Crowd can **reduce the noise** significantly



Crowd as service: pilot data

	Int rev P1	Int Rev P2	Int Rev P3
No. of citations	3635	4913	1200
No. of RCTs found	872	831	370
No. took part	54	64	29
Noise reduction	76%	83%	70%
Time given	3 weeks	3 weeks	1 week
Time taken	1 day	3 days	4.5hrs

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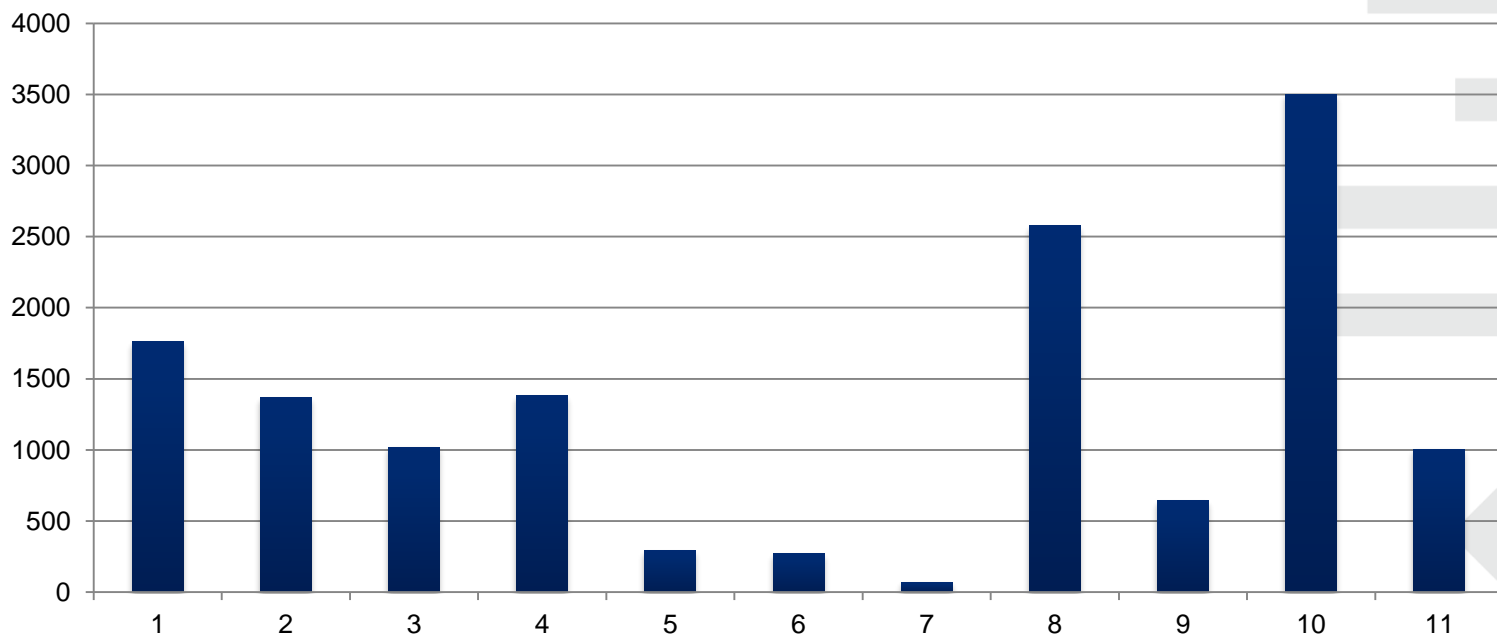
Cochrane

Known intelligence



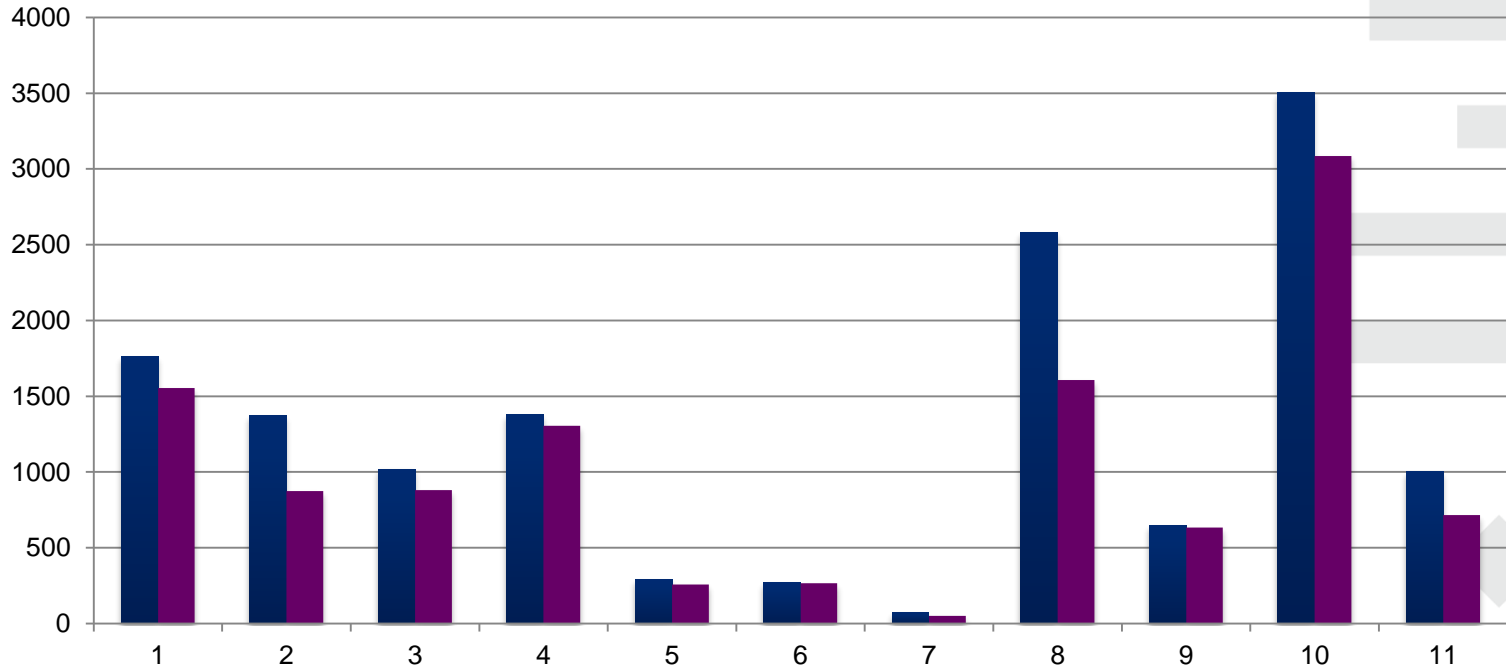
Traditionally we have worked in 'silos'. Crowd and CRS-web offers us the chance to make better use of what we (the community) already know

Known Intelligence



11 review updates published in Sept 2016 that were looking for RCTs and had searched Embase using a methodological filter

Known Intelligence



The **Crowd** have already screened between **62% - 98%** (mean 83%) of records identified from Embase searches done for review updates.

Development of evidence communities



You can work on topics of interest to you