

NIHR CRSU

COMPLEX REVIEWS SUPPORT UNIT



University
of Glasgow



UNIVERSITY OF
LEICESTER

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



FUNDED BY
NIHR | National Institute
for Health Research

Webinar

Living Systematic Reviews: Opportunities and Challenges

The Complex Reviews Support Unit (CRSU) is funded by the National Institute for Health Research
(project number 14/178/29)

Updating Issues of Living Systematic Reviews

Alex Sutton, University of Leicester

- Many practical considerations:
- Efficiency of reviewing
 - Automation of searchers / data extraction / analysis / conclusion writing
 - Utilisation of tools short of full automation
 - Clark J, Glasziou P et al. A full systematic review was completed in 2 weeks using automation tools: a case study. *Journal of Clinical Epidemiology*, 121(2020):81-90,
- Digital publishing
 - In its infancy, tools continuously improving
 - Opportunity to do things not possible in static paper reviews
 - E.g. Incorporate user interactivity.
 - Infrastructure built around updating of LSRs required

When to Update a Living Systematic Review?

- After every new trial?
- After every new “important” trial?
- Fixed time period?
- Need to demonstrate value-for-money?

When to Stop Updating a Living Systematic Review?

- Never?
- When the SR question “answered”?
- Should living systematic review questions evolve over time or be of an open nature?
 - E.g. What is the best treatment(s) for mild depression
 - E.g. Use network meta-analysis to combine all treatments for important conditions going forward

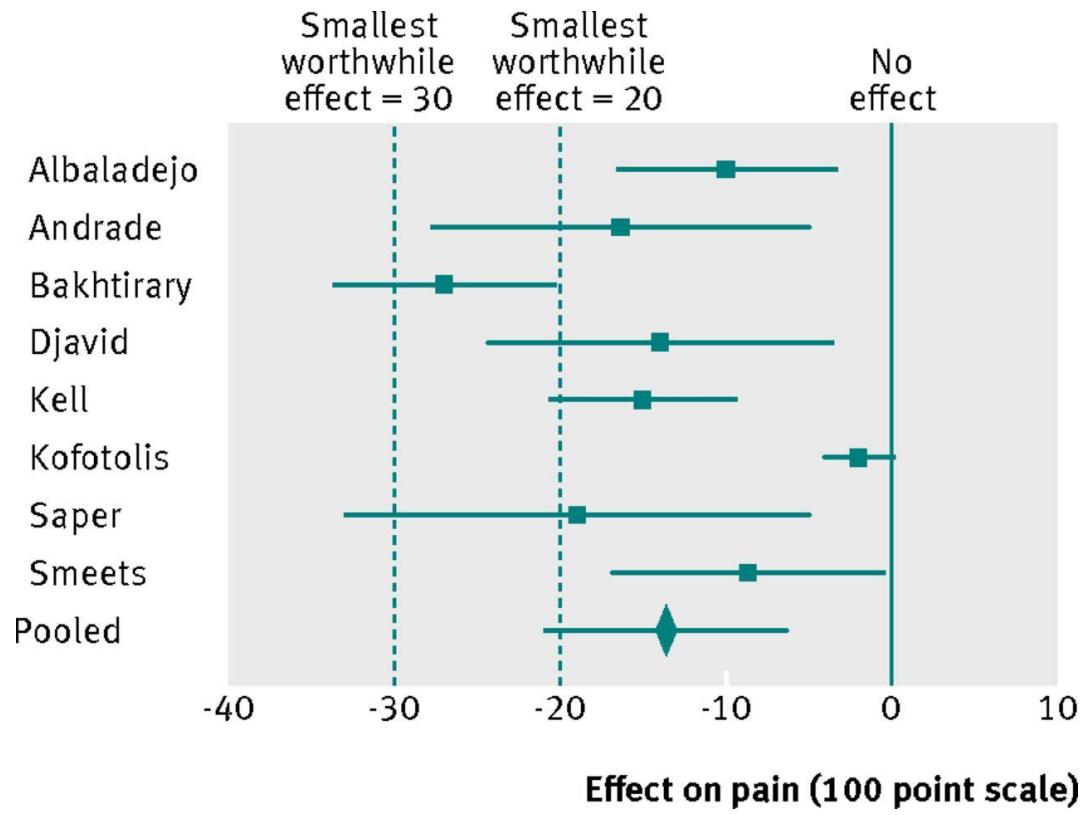
How to Ensure Longevity of a Living Systematic Review?

- Funding beyond initial start-up period?
- Ensuring future-proof to changes in staffing
- Make whole website / resources open access?
 - Ensure others could take over (as well as adding transparency)
- Authorship rewards for academics?
 - Some experience via updates of static reviews in Cochrane and beyond

How Should Ongoing Studies Be Included?

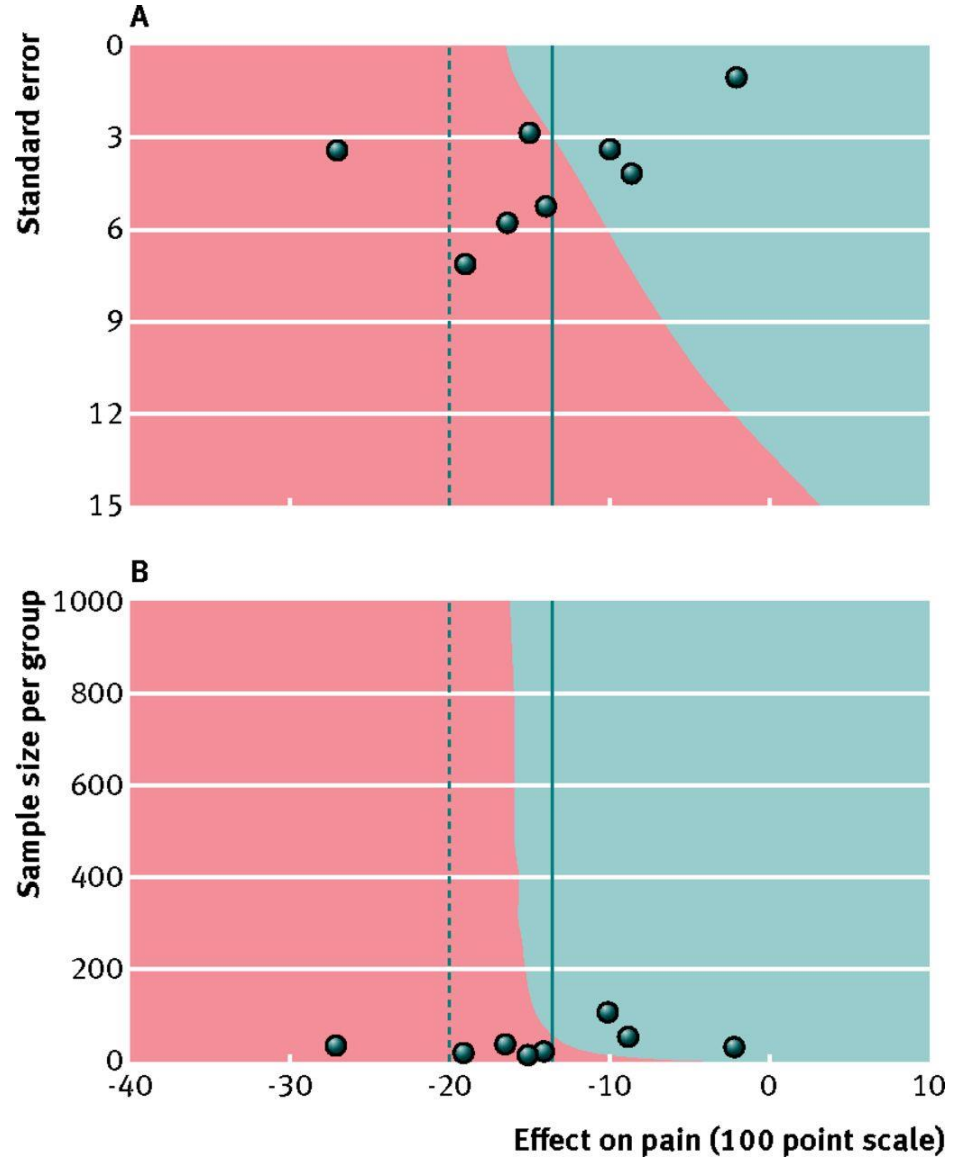
- Ongoing studies rule, not the exception
- Should their potential impact be considered for
 - A) Findings of the existing LSR?
e.g. Is it likely that the findings of the known, ongoing studies will impact on the existing review conclusion?
 - B) Recommendations for future research?
e.g. How should these take into account ongoing research?

Plot Showing Impact of New Study on Meta-Analysis



Forest plot showing estimates of effect of exercise on chronic low back pain.

Ferreira ML, Herbert RD, Crowther MJ, Verhagen A, Sutton AJ. When is a further clinical trial justified? *BMJ* 2012; 345 :e5913



New Study: Blue = Effect not worthwhile in m-a
 Red = Unclear if worthwhile
 * No area for new study showing definitively worthwhile

NIHR CRSU

COMPLEX REVIEWS SUPPORT UNIT



University
of Glasgow



UNIVERSITY OF
LEICESTER

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



FUNDED BY

NIHR

National Institute
for Health Research

enquiries@nihrcrsu.org

[@NIHRCRSU](https://twitter.com/NIHRCRSU)

www.nihrcrsu.org