



Project Transform

# Living Systematic Reviews

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Trusted evidence.  
Informed decisions.  
Better health.





Cochrane

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# Declaration of interests

- **Cochrane**
  - Lead, Evidence Systems
  - Co-lead, Project Transform
  - Senior Research Fellow, Cochrane Australia
- **Founder, Covidence**
- **HIV clinician and clinical researcher**
  - Institution receives research and educational funding from public and commercial sources
  - No travel support, speakers fees or advisory boards





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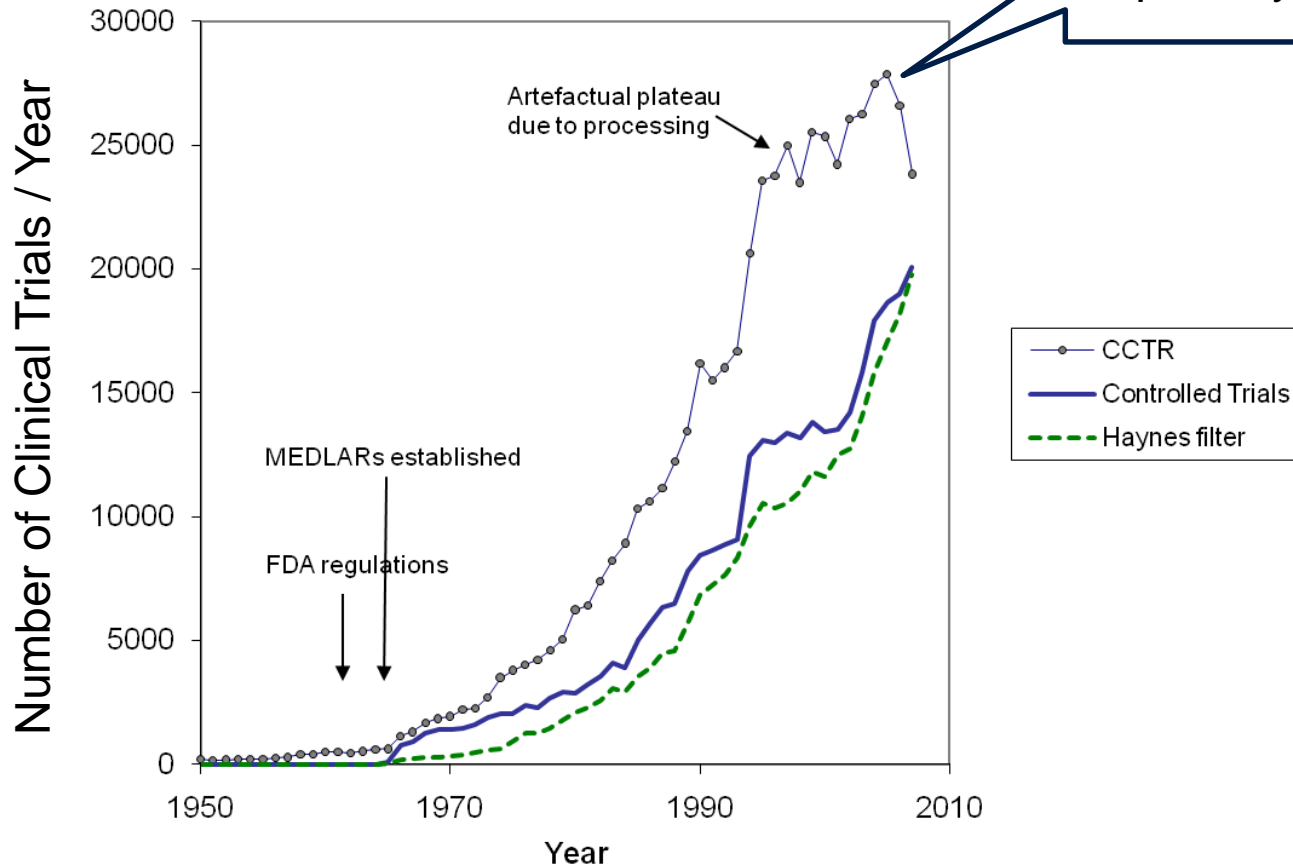
something to offer. Next year the *Oxford Database of Perinatal Trials*<sup>3</sup> will be published by Oxford University Press in electronic form. Besides registers of published<sup>4</sup> and unpublished trials and trials in progress or planned, the data base will include a library of trial overviews which will be updated when new data become available.

Oxford Database of Perinatal Trials,  
National Perinatal Epidemiology Unit,  
Radcliffe Infirmary,  
Oxford OX2 6HE

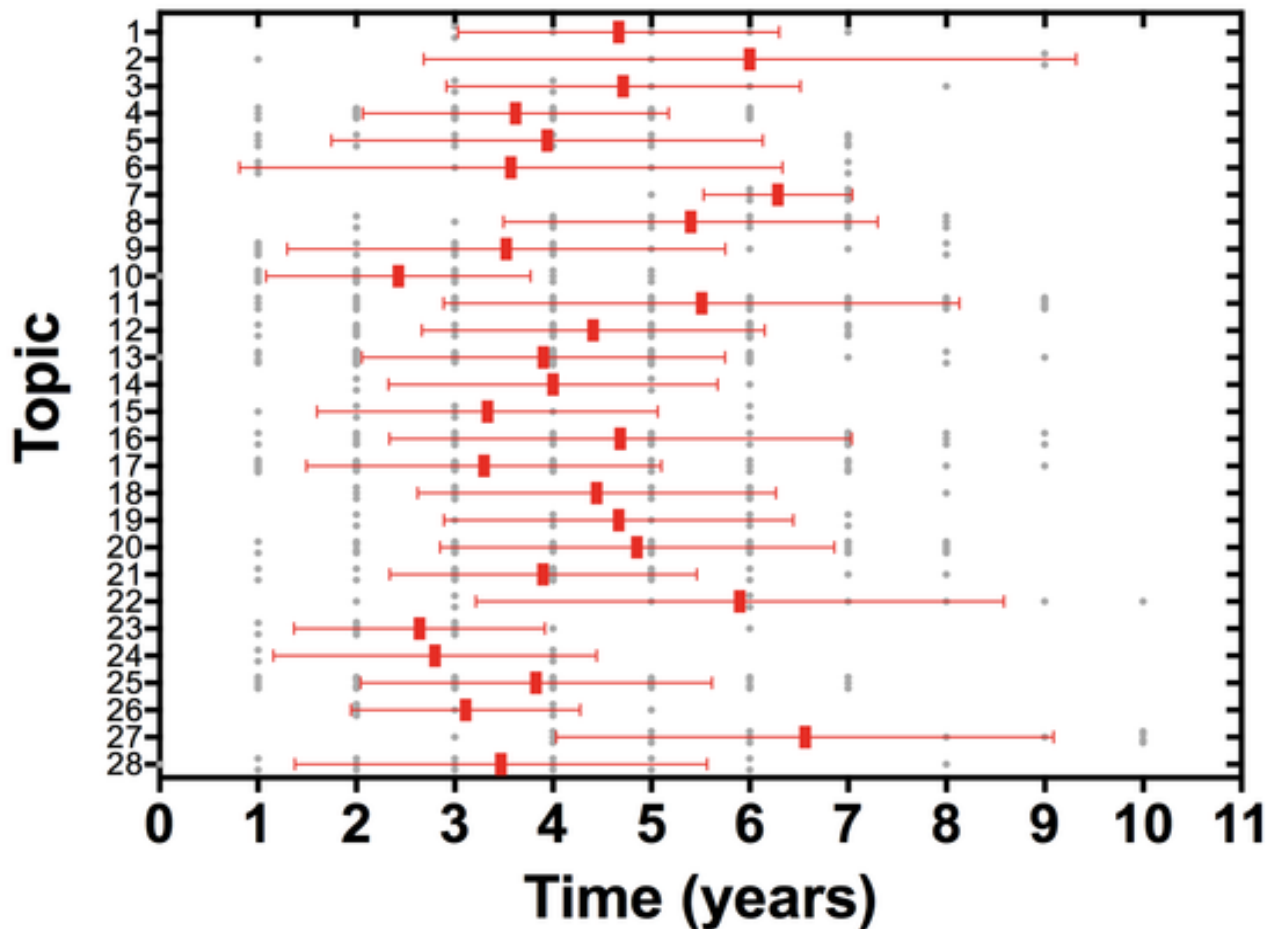
IAIN CHALMERS

## Seventy-Five Trials and Eleven Systematic Reviews a Day: How Will We Ever Keep Up?

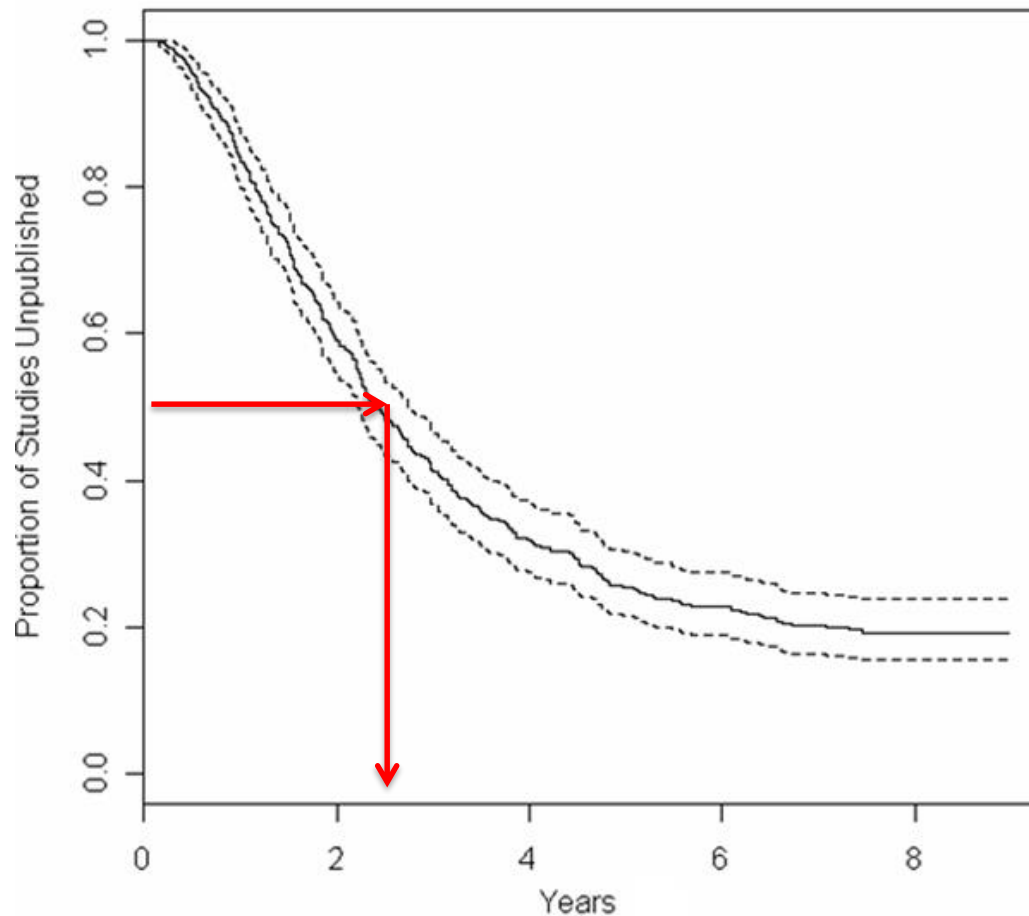
Hilda Bastian<sup>1\*</sup>, Paul Glasziou<sup>2</sup>, Iain Chalmers<sup>3</sup>



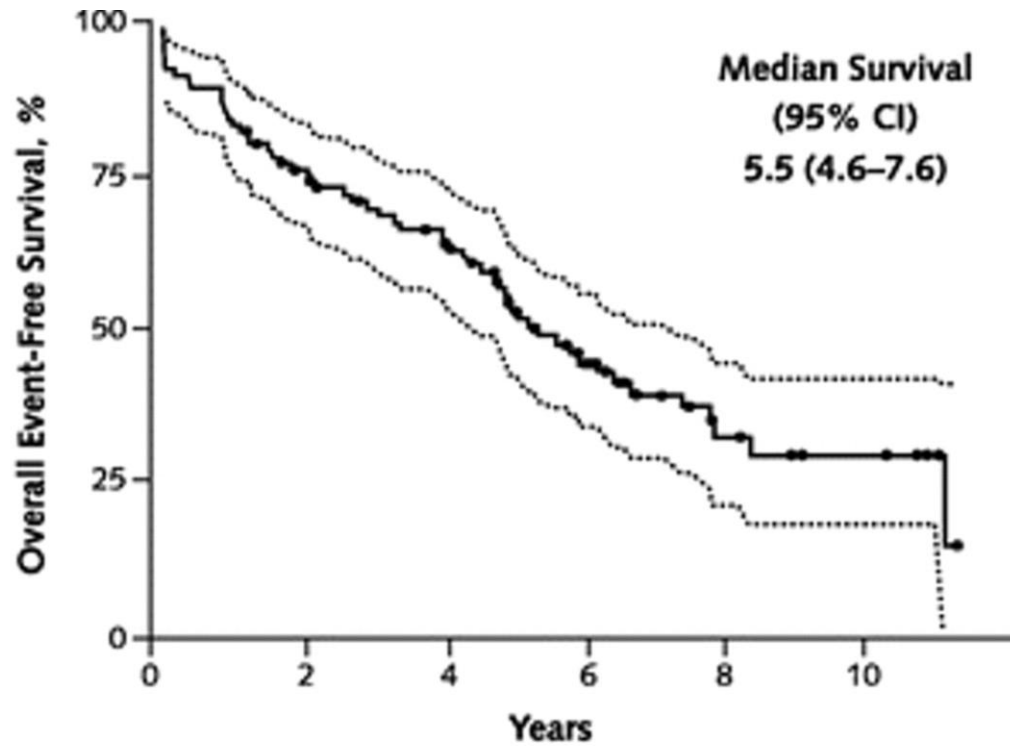
# Time from study to systematic review



# Time from protocol to SR publication



# Survival of systematic review accuracy



Systematic reviews  
at risk, *n*

100    73    59    34    14    6



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OPEN ACCESS Freely available online

PLOS MEDICINE

Policy Forum

# Living Systematic Reviews: An Emerging Opportunity to Narrow the Evidence-Practice Gap

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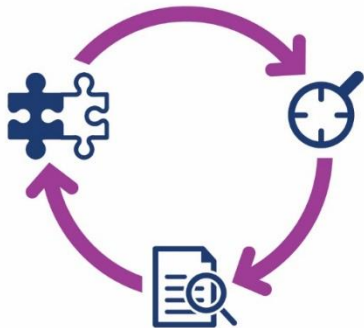
The Bridge from Evidence to Practice

Summary



# What is a Living Systematic Review?

A systematic review that is continually updated, incorporating new evidence as it becomes available.



Key elements:

- “Systematic review” (retains core methods)
- “Continually” (frequency?)
- “Updated” (where?)
- “Incorporating new evidence” (how?)

# LSR vs SR: Key differences

Category	Item	Description
Production	Work processes	Search strategy maintained and fed continuously into SR workflow
	Author team management	Coordinated and continuous effort
	Methods	LSR-specific approach to search and study incorporation is pre-specified;  Potential statistical adjustments to allow for frequent updating of meta-analysis
Publication	Publication format	Persistent, dynamic, online-only publication



# When should I do an LSR?

- ✓ High priority (or emerging) question for policy and practice
- ✓ Important uncertainty in the existing evidence
- ✓ Emerging evidence (e.g. in trial registers) that is likely to impact on what we currently know
- ❖ Network of contributors have capacity and resources to sustain an ongoing SR commitment





# The LSR Network

- Informal international network, 'launched' Feb 2016
- Over 100 members (researchers, guideline developers, policy makers)
- Aims to:
  - Share experiences and information
  - Further the thinking on LSR concept and methods
  - Develop and evaluate LSR pilot approaches
  - International meetings, symposia and State-of-the-Science webinars
  - To join email [anneliese.synnot@monash.edu](mailto:anneliese.synnot@monash.edu)



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# Cochrane LSR pilots

- 5+ author groups, each piloting  $\geq 1$  Cochrane Review
- LSR methods / model devised by LSR Network
- Support and evaluation provided by Project Transform
- Using machine learning and other enablers
- First Cochrane Reviews transitioning to LSRs on the Cochrane Library approx. mid-2017



# LSRs as part of something bigger





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# Living Systematic Review Network

## Living Systematic Review Network interest group leads

Elie Akl, John Hilton, Harriet Macle hose, Steve McDonald, Joerg Meerpohl, Georgia Salanti, Ian Shemilt, Mark Simmonds, Anneliese Synnot, James Thomas, Tari Turner

## Living Systematic Review Network members

Andreas Charidimou, Thomas Agoritsas, Anneliese Arno, Linn Brandt, Alexandra Brazinova, Chris Champion, Jackie Chandler, Rachel Churchill, Maryse Crossen, Emma Donoghue, Julian Elliott, Sarah Elliott, Itziar Etxeandia, Ruth Foxlee, Paul Garner, Martha Gerrity, Paul Glasziou, Sally Green, Kurinchi Gurusamy, Lisa Hartling, Jill Hayden, Julian Higgins, Sophie Hill, Lara Kahale, Stephanie Kolakowsky-Hayner, Toby Lasserson, Stefan Leucht, Nicola Low, Andrew Maas, Malcolm Macleod, Ian Marshall, Rachel Marshall, Laura Martinez Garcia, Chris Maver games, Jo McKenzie, Stefania Mondello, Richard Morley, Marcus Munafo, Melissa Murano, Robby Nieuwlaat, Adriani Nikolakopoulou, Anna Noel-Storr, Annette O'Connor, Matt Page, Charlotte Pestrige, Robert Plovnick, Gail Quinn, Gabriel Rada, Philippe Ravaud, Rebecca Ryan, Holger Schunemann, Karla Soares-Weiser, Velandai Srikanth, Mark Taylor, Kris Thayer, David Tovey, Roger Tritton, Guy Tsafnat, Gert van Valkenhoef, Per Vandvik, Bryon Wallace, Chris Watts,