Update on LSR activities

LSR Network meeting
Global Evidence Summit, Cape Town
12 September 2017

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Disclosure

• I have no actual or potential conflict of interest in relation to this presentation.
Update on LSR activities

- LSR Network
- Pre-pilot activities
- Canadian LSR workshop
- J Clin Epi paper series
- Progress on frequent meta-analysis issue
- LSR pilot progress
- Evaluation of pilots
The LSR Network

- 160+ members
- Researchers, HTA orgs, professional medical associations, guideline developers
- Cochrane and non-Cochrane
- Open invitation via LSR page since June 2017 (≈ 2-3 requests to join per week)
- Interest groups – ready to connect via listservs
- Considerable expertise and interest within the Network
Pre-pilot activities

- Finalised LSR guidance document in April 2017
  - Production and publication model
  - LSR protocol template
  - Next document update: post-GES
- Finalised editorial content of LSR pilots in Aug 2017
  - Editorial note for Abstract and PLS
  - Standardised wording for UCS
  - Promotion of LSR webpage (Cochrane.org/lsr) and the upcoming pilots in June 2017
Canadian LSR workshop

- 13 & 14 May 2017
- Core group ≈ 20 people both days
- Aims:
  - General introduction (D1)
  - Further thinking, methods, research agenda (D2)
- Draft workshop report circulated
- Series of new paper ideas discussed/in train
  - Searching; Coproduction; Health policy implications; Publication; Research agenda
Canadian LSR workshop report

- LSR definition revision and minimum criteria?
- Do we understand user’s perspectives on LSRs value proposition?
- Searching: more open Qs than we originally thought
- What do we want the relationship between tech, Crowd and reviewers to be? Need for an evaluation framework to explore this
- Adjusting MA: Open question but has practical implications
Canadian LSR workshop report

• Distinction between living guideline and living recommendation

• LSRs invite closer collaboration between SR producers and guideline developers, policymakers and consumers

• What is the LSR message we want to sell? And how do we do this to secure ongoing funding?

• Evaluating processes and impacts (many ideas of possible metrics)

• Research agenda in LSRs
J Clin Epi paper series

• Publication this week!
• Paper 2: Combining Human and Machine Effort
• Paper 3: Statistical Methods for Updating Meta-Analyses
• Paper 4: Living Guideline Recommendations
Updating meta-analysis

- Cochrane LSR pilots *not* adjusting meta-analyses
  - Impact of adjusting/not adjusting can be explored separately (i.e. outside of the reviews)
- Empirical work ongoing
- Next steps: 2-day meeting of statisticians in November (Bristol)
- Then to be considered at Cochrane Scientific Board
Parenteral anticoagulation in ambulatory patients with cancer (Review)

Akl EA, Kahale LA, Hakoum MB, Matar CF, Sperati F, Barba M, Yousico VED, Terrenato I, Synnot A, Schünemann H

Editorial note: This is a living systematic review. Living systematic reviews offer a new approach to review updating in which the review is continually updated, incorporating relevant new evidence as it becomes available. Please refer to the Cochrane Database of Systematic Reviews for the current status of this review.
<table>
<thead>
<tr>
<th>Review title</th>
<th>Authors</th>
<th>CRG</th>
<th>Publicat’n</th>
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<tbody>
<tr>
<td>Parenteral anticoagulation in ambulatory patients with cancer</td>
<td>Elie Akl, Lara Kahale (Lebanon)</td>
<td>GNOC</td>
<td>Sept 2017</td>
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<td>Delayed antibiotics in respiratory infections</td>
<td>Geoffrey Spurling (Australia)</td>
<td>ARI</td>
<td>Sept 2017</td>
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<td>Interventions to increase fruit and vegetable consumption in children under 5 years</td>
<td>Rebecca Hodder, Luke Wolfenden (Australia)</td>
<td>Heart</td>
<td>Sept-Oct 2017</td>
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<tr>
<td>Conservative treatments for osteoarthritis (2 x reviews)</td>
<td>Rachelle Buchbinder, Renea Johnston (Australia)</td>
<td>Musc.</td>
<td>2018</td>
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LSR production model

- Monthly database & trial register searches (CRG)
- 3-6 monthly searches ‘other sources’ (Authors)
- Apply RCT Classifier (CRG)
- Screening of potential RCTs (Authors)
- Screening ‘low probability’ RCTs (Cochrane Crowd)

One month

Study = YES
Study = NO
LSR production model (cont.)

Study = NO

- Alert the reader (amend UCS) (CRG)

Study = YES

- Alert the reader (amend UCS) (CRG)

- Data extraction, risk of bias, synthesis (Authors)

Immediate or delayed incorporation
LSR publication model

- Starts with a ‘baseline’ review published on CL (includes prospective LSR methods)
- Cochrane publishing model, splits
  - ‘What’s happening’ (monthly progress updates)
  - ‘What’s New’ (publishing review update)
- Publishing updates (i.e. re-publication of review)
  - New evidence ➔ Publish update (immediate or delayed)
  - No new evidence ➔ no change to review
Example monthly update

<table>
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<tr>
<th>Status</th>
<th>Up to date</th>
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<tbody>
<tr>
<td><strong>Rationale</strong></td>
<td>New information identified but unlikely to change conclusions</td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>This is a Living Systematic Review. Searches are run and screened monthly. Last search date XX. A new stud(ies) [hyperlink to DoIs] has(ve) been identified in a recent search but the new information is unlikely to change the review findings (as assessed by the authors and editorial team). The conclusions of this Cochrane Review are therefore considered up to date.</td>
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Evaluation of pilots

- **Aims**
  - Explore feasibility, and implications for contributors, processes and workflows
  - Identify opportunities to improve the LSR model(s)

- **Participants (Cochrane and non-Cochrane)**
  - Author teams
  - Editorial staff (ME, IS, CEU or journal/publisher)
  - Peer reviewers (if involved in rapid updates)
Evaluation of pilots

• Monthly online surveys
  o Activities/workload: i.e. number of citations screened, time spent on LSR tasks
  o Reflections: e.g. what’s working well, challenges, enablers
• 1-3 brief interviews over course of pilot
• Evaluation lead: Dr Tanya Millard (new to LSR team)
• Timeframes
  o Start: from ≈ publication of ‘baseline’ review
  o End: At LSR or Project Transform end (Oct 2018)
Questions / comments?

Or email: Anneliese.Synnott@monash.edu
LSR definition

‘Systematic reviews which are continually updated, incorporating relevant new evidence as it becomes available’

‘In practice, this means continual surveillance for new research evidence through ongoing or frequent searches and the inclusion of relevant new information into the review in a timely manner so that the findings of the systematic review remain current.’

Elliott 2017 J Clin Epi
Proposed LSR ‘minimum criteria’

- How frequent should updates be? Under what conditions?
- Conclusions are ‘current’ or ‘up to date’ but should be informed by user needs
- Continual evidence surveillance (‘full’ searches)
- Searching is ‘proactive’, but trigger for adding new evidence at least when it affects ‘certainty’
- Explicit commitment to maintain the LSR over time
- A priori specified methods for the living approach
- Retains core SRs methods (retains ‘validity’)

Dissemination of LSRs