Pilot project to peer review search methods and search strategies in 3 Cochrane Skin protocols - Long Term Conditions and Ageing Network 2

Background:

Following discussions at previous Network meetings, Liz emailed the Network IS's in February 2018 to ask if anyone would help peer review the search methods of a group of priority protocols. There was some discussion about how to proceed, and we decided that we'd start with protocols, keep a note of the time spent on refereeing, and provide feedback informally rather than following an existing structure like PRESS. Two volunteers, Sam and Anne, volunteered to referee three of the Skin group's priority titles:

- #173 Interventions for folliculitis and boils – Sam
- #174 Topical treatments for eczema: a network meta-analysis – Anne
- #176 Interventions for pruritus of unknown cause - Sam

Approach:

The protocols went for search methods peer review at the same time as full peer review, and the IS referees had two weeks for the task.

Sam's method was to look at the protocol in conjunction with the searching section of the MECIR standards for protocols. She also looked in detail at the draft strategy for Medline, and she looked up each of the MeSH terms used, but she didn't look for additional terms. She copied the strategy into MEDLINE to see what the search result numbers were and check that the number of PICO elements used was appropriate. She finally ran over the PRESS checklist to make nothing important had been missed.

Anne's method was similar: MECIR was checked against the search methods sections, and the draft strategy for MEDLINE was checked in more detail, taking the PICO terms in the protocol into consideration. Quick MEDLINE keyword searches were run over a couple of terms where there were queries over truncation, and some of the MeSH terms were checked in the MeSH browser.

Time taken:

- #173 - 1.5 hours
- #174 - 45 minutes
- #176 – 45 minutes

What did the referees say?

- They both made the same recommendation around reporting who will conduct the search, and Liz has amended her standard text to include this.
- Other slight changes to search methods text and recommendations around referencing search filters were made.
- Typos were spotted, along with an error in search syntax.

- Some queries were raised around the search terms used – why some were focussed, why not exploded, etc.
- They made some great suggestions for additional free text terms, and alternative spellings.
- They made suggestions for different approaches that could be taken to combining the main PICO elements.

Outcomes:

Liz did not take on board all of the suggestions made, but the referee comments provided a good stimulus to go back to the search strategies and experiment a bit more with different approaches, with the end result being a more robust strategy. Changes to the search methods text have improved the alignment with MECIR standards. Overall, Liz felt that the referees' comments have led to significant improvements in the search strategies and methods.

Liz fed back to the author teams that search methods peer review had been undertaken and outlined the changes that had been made in response to comments. The authors were very positive about the process.

Points to consider:

- Repeatedly reviewing for the same person has some advantages – you'd get to know their standard text, and this would make the reviewing process quicker for the referee. But on the other hand, having a variety of eyes looking at an IS's work may identify different issues.
- If we used standard text within our Network that meets all the MECIR standards, the IS author could state to a referee that they had used standard text and the referee would be able to focus on the search strategy only.
- Sam said, "as learning, I found that most of the stuff on the PRESS checklist I had covered either via the MECIR standards or while looking at the strategy. It was more useful to just run through it at the end to check I hadn't missed anything. Having said that it is much easier to read than the MECIR standards. It would take some work, but we could consider making our own checklist."
- It would be helpful to the referee to know the approximate number of references retrieved by the MEDLINE strategy to understand the appropriateness of the number of concepts used.

Discussion points for our network:

- Should we start doing peer review of search methods in protocols routinely?
- Should we develop a form to use?
- The Skin Group offer certificates to referees to acknowledge their contribution, which Liz provided to Sam and Anne. Could we link peer review of search methods to the rewards offered via the membership scheme?

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