Assessing the feasibility and acceptability of approaches for improving the quality of Plain Language Summaries in Cochrane Reviews: a pilot study

Final report

Claire Glenton, Cochrane Norway, 24th February 2017

Cochrane Norway

Summary

Background

The Plain Language Summary (PLS) of a Cochrane Review is one of its most important elements. However, Cochrane Review PLS' are currently of varying quality. Approaches that may improve PLS quality include offering more guidance to review authors, paying specific attention to the PLS as part of the editorial process, and/or moving the responsibility of writing the PLS to dedicated writers. These approaches can be enhanced using templates and checklists and by access to training and support. However, the implementation of these approaches need to be evaluated.

Aim

To explore the acceptability and feasibility of different approaches for improving the quality of Cochrane Review Plain Language Summaries

Methods

We selected ten CRGs using convenience sampling and critical case sampling, and invited them to participate in a pilot. We asked each CRG to choose between three options: Option 1. The CRG sends a PLS template to review authors, asking them to follow the template when writing their PLS. Option 2. The same approach as Option 1, but the submitted PLS is checked by an editorial team member who has received brief training and a checklist. Option 3. The CRG appoints someone to write the PLS and this person receives brief training in using the PLS template as well as follow-up support.

We held "kick-off" meetings with each CRG via skype or phone, sent them the PLS template and checklist, and gave them a brief introduction to the template. In September 2016, we carried out informal interviews with the CRGs who had started implementing the option. In January/February 2017, we also carried out formal interviews with representatives from each CRG. We performed a qualitative, thematic analysis of the data, focusing on factors that appeared to influence the feasibility and acceptability of the different options.

Results

Over a period of 2-8 months, seven Cochrane Review Groups sent the PLS template to their review authors; used the template to check and edit PLS' written by their review authors; or used it to write the PLS themselves. During this period, each CRG used the template on between one and ten reviews.

Editorial staff from each of the seven CRGs found the template to be useful, and feasible to implement. All seven CRGs plan to use the template after the pilot period has ended. Participants made a number of suggestions about how we could further improve the template. We still lack data about the experiences of review authors who have used the template.

Conclusions

Based on the positive feedback that we received about the template from editorial staff, we suggest that the PLS template is made an official Cochrane resource. We suggest several issues that should or could be addressed either before or after official approval. Current versions of the template and checklist that we used in the pilot can be found at Cochrane Norway's website: http://www.cochrane.no/plain-language-summary-format

Assessing the feasibility and acceptability of approaches for improving the quality of Plain Language Summaries in Cochrane Reviews: a pilot study

Final report

Background

The Plain Language Summary (PLS) of a Cochrane Review is one of its most important elements and may be the only part of the review that people read. However, Cochrane's own assessments have concluded that Cochrane Review PLS' are currently of varying quality. One approach to improving the quality and consistency of PLS' is to offer review authors specific guidance regarding this part of their review. Another approach is to ensure that specific attention is given to this part of the review as part of the Review Group's editorial process. Yet another approach is to move the responsibility of writing the PLS to dedicated writers, for instance editors or others attached to the Review Group's editorial base. All of these approaches can be enhanced through the use of a standardised and tested template and checklist as well as access to training and support.

Each of these approaches have different strengths and weaknesses. Many review authors never produce more than one Cochrane Review, and the use of dedicated PLS writers may therefore be the best way of increasing PLS quality. However, this approach also requires the most amount of time and resources from Review Groups. Editorial teams and review authors are also frequently asked to respond to other quality improvement initiatives and the proposed PLS approaches will also have to compete with these initiatives. The aim of this pilot is to explore the acceptability and feasibility of these different approaches among editorial staff and review authors, and to identify factors that are likely to influence the implementation of these approaches.

Aim

To explore the acceptability and feasibility of different approaches for improving the quality of Cochrane Review Plain Language Summaries

Methods

We contacted Cochrane Review Groups (CRGs) that had previously indicated a willingness to participate in the project or who had shown an interest in the production and improvement of PLS. This strategy was chosen in order to achieve enough participants (convenience sampling), and because we hypothesised that barriers identified in these groups were likely to be generalizable to other CRGs (critical case sampling).

We contacted CRGs by email, usually addressed to the Managing Editor(s) (MEs) and the Coordinating Editor(s). In the email, we described the project and asked CRGs to choose between one of three options during a six-month period (June 2016 – December 2016) or for 1-3 reviews:

***Option 1**:* The Review Group sends the PLS template to review authors, asking them to follow the template when writing their PLS

(http://www.cochrane.no/sites/cochrane.no/files/public/uploads/how_to_write_a_cochrane_pls_28th_feb_2017.pdf).

***Option 2**:* The same approach as Option 1, but when the review is submitted for editorial review, the PLS is checked by someone appointed by the editorial team who has received training (one webinar + follow-up support) in using the PLS template. This person is provided with a checklist for this purpose (http://www.cochrane.no/sites/cochrane.no/files/public/uploads/checklist_for_cochrane_pls_28th_feb_2017_0.pdf)

Option 3: The review authors are told not to write their own PLS. Instead, the Review Group appoints someone to write it. This can be an editor or managing editor, a consumer representative, a professional writer or anyone else chosen by the CRG. This person receives training (one webinar + follow-up support) in using the PLS template

Once CRGs had agreed to participate, the project manager held individual "kick-off" meetings with each CRG via skype or phone to answer any further questions, make a final decision about the option they wanted to use, and go through the practicalities of this option. The project manager also asked the CRGs about their current practice with regard to PLS production and about their reasons for wanting to participate in the pilot and for choosing one particular option. We then sent each CRG the PLS template and checklist. Finally, we gave CRG editorial staff a short introduction to the PLS template, and offered them follow-up by email or skype throughout the pilot period.

During the pilot, we gathered all forms of communication with CRGs, including emails with queries about the template. In September 2016, the project manager carried out short interviews by skype or email with those CRGs who had begun implementing the option. In January/February 2017, we carried out formal interviews with the CRGs by phone or skype, or by email when phone or skype was not possible. These interviews were carried out by Elizabeth Paulsen, Managing Editor for EPOC's Oslo satellite, who had had no involvement with the development of the PLS template. Finally, we then carried out a qualitative, thematic analysis of this data, focusing on factors that appeared to influence the feasibility and acceptability of the different options.

Results

Participants

We invited ten CRGs (including one CRG satellite) to participate in the pilot. Two CRGs did not respond to our emails while one CRG decided not to participate because of time constraints.

Seven CRGs (including one satellite) participated in the pilot. Six of the participating CRGs are UK-based, while one is based in Australia. We received feedback through emails and through formal and informal interviews from representatives of all seven CRGs, including seven managing editors, one editor, one consumer editor, one consumer responsible for writing PLS and four authors. Despite numerous attempts, we were unable to receive feedback from an additional three authors that had been asked to use the template by their CRGs (Table 1).

Over a period of 2-8 months, seven Cochrane Review Groups sent the template to their review authors; used the template to check and edit PLS' written by their authors; or used it to write the PLS themselves. During this period, the CRGs used the template on between one and ten reviews.

How were the CRGs producing PLS before the PLS pilot?

In all of the CRGs, standard practice before the pilot was for the review authors to write their own PLSs. In one review group, however, PLS' that have been written for priority reviews are passed on to a professional writer who edits or rewrites them.

Before the pilot, the CRGs gave different levels of direction to their review authors regarding how to write PLSs. One CRG gave no specific information, but assumed that review authors would see reference to the Plain Language Expectations for Authors of Cochrane Summaries (PLEACS) in RevMan; while two CRGs directed review authors to the MECIR standards, which include reference to the PLEACS. Five CRGs had developed some sort of PLS guidance, including standard headings and checklists that they expected review authors to use.

The CRGs sent PLS support material to review authors at different stages in the review process. At least one CRG sent materials out as soon as the protocol is published. Another CRG sent materials to review authors when they were getting the review ready for submission. However, they pointed out that this depended on them knowing that the review authors were at this stage.

Before the pilot, the extent to which particular attention was paid to the PLS during the editorial process varied across CRGs. In two CRGs, the PLS was reviewed alongside the rest of the review but was not checked specifically. In at least five CRGs, the editors paid particular attention to the PLS and to the abstract.

Consumer involvement in the production of PLS also varied across CRGs. Four of the CRGs did not involve consumers in their PLS processes. Three of the CRGs sent each PLS to a consumer for comments as part of the review's editorial process.

Why did the CRGs want to participate in the pilot?

The CRGs who agreed to participate in the pilot gave a number of reasons for this. They were glad to see a focus on implementation; they were glad to see a focus on the quality of PLS; they were keen to have tools to help them support review authors: they were already doing something similar; or they saw this as an opportunity to improve their own template.

Why did the CRGs choose one option over another?

Option 1 is the least work-intensive for the editorial teams as it only involves sending the PLS template to review authors. However, only one CRG chose Option 1. One ME pointed out that Option 1 would have been less work, but that MEs are curious to learn. Another ME saw Option 1 as representing "*yet another set of instructions with which to overload an author team*".

Option 2 involves sending the template to review authors and then assessing the PLS, using a checklist once the review authors have submitted the review. In Option 3, the PLS is written by someone appointed by the review group, thereby moving most of the work from the review team to the editorial team.

When describing why they chose either Options 2 or 3, some MEs saw this as an opportunity to support the review team and take some of the burden off them. One ME saw the extra work as worth the time and effort in the long run:

"Even though I am busy – I do it – as you can't keep asking the authors to keep revising things. It's sometimes easier to do it yourself"

"It makes sense to us to intervene and assist our authors as much as we can. We believe that if we invest the time at our end, the less we will have to do on a particular section later on and one less job for the authors."

The same ME pointed out that these options would also be more achievable as the CRG began to take in fewer reviews.

Option 2 was preferred by one ME because she "*likes that the review authors do their own PLS because they know the topic and it's an opportunity for them to check their own review*".

Option 3 was preferred by one editor because she thought it would improve the consistency of PLS' across the CRG's reviews and would enable her to assess the internal consistency of a review. Option 3 was chosen by another CRG because it involved training the least amount of people:

"Option 2 involves the same as Option 1, and also involves training someone on the team. So Option 3 is actually easiest because there are fewer people to train or administer!"

In practice, however, most CRGs used combinations of all three options.

Overall reactions to the PLS template among editorial staff

The editorial staff were generally very positive to the use of the PLS template. The main reason they gave was that they thought it would lead to a better PLS. One editor also suggested that the template would lead to more consistency across reviews. Some editorial staff also saw the template as an opportunity to highlight problems in the rest of the review, a helpful form of communication with review authors, and a way of distilling the results for use in other dissemination products.

Editorial staff and review authors found the template easy to use and reader-friendly. One ME emphasised the importance of this for authors who did not have English as their first language. Other characteristics of the template that CRG staff and review authors appreciated included:

- The layout, including the step-by-step instructions and boxes with information
- The structure, with standard headings
- The appendix with standardised statements about effect
- The level of detail (although some wanted a shorter version – see below)
- The use of examples

CRG staff identified few disadvantages with the template. One ME suggested that some of the instructions might be unnecessary for more experienced authors. For instance, they were unlikely to need information about where in the review to find the information they needed to write the PLS.

One ME reported that it could be a bit difficult to check the key messages reported in the PLS as the review authors knew the review and the topic area best. One ME pointed to the fact that the key messages are presented first in the PLS while an explanation of the topic appears later in the PLS. She also felt that there was sometimes a lot of repetition between the key message and the main results in cases where there were not many results (for example, where there were high levels of uncertainty in the evidence).

Overall reactions to the PLS template among review authors

It was difficult to get feedback from review authors about the template. Of the eight review authors we contacted, only four replied to emails and offered feedback. These four authors were writing their first Cochrane reviews and therefore had no previous experience of writing PLS. They were generally positive about the experience of writing the PLS and following the PLS template and said that they would recommend the template to other review authors. For them, the main disadvantage had been that they had been given the template late in the review process. The additional work at this late stage in the process was noted as negative by two of the authors. One author also wanted a shorter template with less explanation.

Using the PLS template to check the rest of the review

The writing or checking of PLS by editorial staff is also an opportunity for them to check the quality of the review in general. For instance, when developing or checking the PLS using the template's standardised statements about effect, editorial staff can assess whether results have been presented consistently in other parts of the review. While this use of the template was mentioned by two MEs, the template was generally not used in this fashion. Two MEs suggested that this was because they had used the template when it was too late to make changes to the rest of the review.

Relationship between the PLS template and the MECIR standards

Several of the editorial staff referred to the relationship between the template and the PLEACS. One ME mentioned that the PLS template and the PLEACS standards did not completely align, and that the PLEACS standards gave more detailed guidance about how to address issues of evidence quality. She preferred to follow PLEACS when there was divergence as these standards had been formally approved by Cochrane. However, another ME thought the template helped the review authors meet the PLEACS standards. She preferred the PLS template because she thought it gave clearer guidance and more structure than the PLEACS standards.

Implications of using the PLS template on people's time

The implications the use of the PLS template had for the amount of time spent by editorial staff depended on how the chose to use the template. For staff who chose to use the template to write the PLS themselves or to re-organise PLS' that had been submitted by review authors, this process involved more time, including the time it took to read the instructions. However, these staff members assumed that this time would decrease as they became more familiar with the template. One consumer who had previously written PLS for her CRG found that the process was quicker than before, although she also spent some time reading the instructions.

Editorial staff who primarily used the template to check existing PLS' did not think that this took more time than before. One CRG reported that the template actually saved the sign-off editor's and copy editor's time because the first draft from the review authors was more likely to be in a reasonable state.

Three of the review authors and one CRG editor who wrote the PLS themselves said that this took between few hours and four days.

Suggestions for how the template can be improved

Editorial staff pointed to a number of factors they thought were likely to influence implementation of the PLS template. These included:

1. Making the PLS template official Cochrane policy
2. Incorporating the template into their usual editorial processes / as a task within the workflow
3. Incorporating the template, including instructions and examples, into RevMan
4. Ensuring that the template is consistent with other Cochrane resources, including the CEU's Common Errors document; Cochrane's style guide; CRGs' own standards; and PLEACS. Currently, there are inconsistencies between these documents
5. Ensuring that formatting suggestions in the template are possible to implement in RevMan (e.g. use of bullet points)

Editorial staff and review authors also had suggestions about we could improve the PLS template and instructions. Several people pointed to a need for more guidance on how to write in plain language. For instance, they called for guidance regarding the use of active versus passive voice with examples, a reminder to use short rather than long sentences, and more suggestions about how common terms could be expressed in plain language. One editorial staff member who wrote PLS found that it was useful to keep a bank of useful phrases for use in similar types of reviews.

Other suggestions about how the template could be improved included the following:

- Offer more guidance about how to describe the population and intervention (The instructions stating that the writer should "give enough information for readers to judge whether the intervention is comparable to those available to them" is not very clear).
- Make it clear that the population, intervention, comparison and outcomes do not always need describing if they are obvious to the reader
- Give more examples of PLS'
- Ensure that the PLS examples reflect the template instructions. For instance, make sure they include a key message and make sure they use active voice
- Give an explanation of why the template does not refer to the number of people in the study
- Discuss who the target audience is, and what is meant by the term "consumer"
- Make it clear that all outcomes in the Summary of Findings table should be reported in the PLS
- Decide on past or present tense in PLS as the template currently uses both ("The aim was" or "The aim is"?)
- Give clear guidance about the use of "review authors" or "we". The template currently uses both
- Make sure that the standardised statements in Appendix 1 of the template are not overlooked (e.g. by putting examples of real sentences into the template)
- Add "compared with [*comparison*]" to the standardised statements
- Offer advice about how to explain situations where the review's included studies have a clear conflict of interest
- Develop a shorter version of the template with less descriptions / explanations for more experienced authors
- Offer guidance about a minimum length for the PLS

At what stage of the review process should people use the template?

Editorial staff varied in their opinions of when in the review process the PLS template should be introduced. Most agreed that the PLS should be written after the results and summary of findings tables were prepared, but before the review was sent to peer review. However, they also pointed out that changes made to the review in response to editors' or referee comments would have to be reflected in the PLS.

What kind of training and support would be useful?

At the beginning of the pilot period, we gave editorial staff a short introduction to the PLS template, and also offered them follow-up via email or skype. The editorial staff thought that this was sufficient. One participant liked the fact that this support was given verbally, which she preferred over written guidance. One editorial staff member who wrote PLSs thought that getting feedback from CG on specific PLS' had been the most helpful. She and others thought it would be helpful in the future to find ways of receiving feedback from others experienced in writing PLS.

Will the CRGs continue to use the template in the future?

All seven CRGs said that they would continue to use the PLS template after the pilot period was over. CRGs said that they would add it to their resources for authors; insert it as a task in the review workflow to ensure that they share it with authors at a suitable time; put it in their RevMan template; or make the template available on their website.

Conclusion and suggested next steps

Editorial staff from each of the seven CRGs found the template to be useful, and feasible to implement. While they had several suggestions about how we could improve the template, all seven CRGs plan to use the template after the pilot period has ended.

We still lack data about the experiences of review authors who have used the template. However, based on the positive feedback that we received about the template from editorial staff, we suggest that the PLS template is made an official Cochrane resource.

Before this stage, we suggest that the following issues are addressed:

- The PLS template and instructions should be updated in response to comments from participants
- Consistency should be ensured between the template and other relevant Cochrane resources, including RevMan, the CEU's Common Errors document and the Cochrane style guide
- The relationship between the PLEACs and the PLS template should be clarified

Other issues that we suggest could be explored after the template has been officially approved include the following:

- The incorporation of the PLS template and instructions into RevMan

- The establishment of support systems for PLS writers, for instance through central support staff and/or writer networks
- The development of guidance on how to write in plain language
- Links to a plain language glossary for terms commonly used across Cochrane reviews
- Support for CRGs wanting to develop online topic-specific plain language glossaries
- Continued user testing, evaluation and development of the plain language summary format

Current versions of the PLS template and checklist that we used in the pilot can be found at Cochrane Norway's website: http://www.cochrane.no/plain-language-summary-format

Table 1: Cochrane Review Groups that participated in the pilot

CRG	Country	Option	Asked for interview	Informal interview, September 2016	Formal interview, January/ February 2017
1. EPOC	UK	Option 2 / Option 3	Managing editor	Yes	Yes
			Review author	No	Yes
			Review author	No	No response
2. EPOC, Australia satellite	Australia	Option 1	Review author	Yes	Yes
3. Oral Health	UK	Option 2	Managing editor I	Yes	Yes
			Managing editor II	Yes	No
			Review author	Yes	No
4. Skin	UK	Options 2 and 3	Managing editor	Yes	Yes
			Review author	No	Yes
			Review author	No	No response
			Review author	No	No response
			Review author	No	No response
5. Infectious Diseases	UK	Options 2 (potentially 3)	Managing editor I	Yes	No
			Managing editor II	Yes	Yes
6. Eyes and Vision	UK	Option 3	Editor	Yes	Yes
			Managing editor	Yes	Yes
7. Pregnancy and Childbirth	UK	Option 2/3	Consumer editor	NA (hadn't started)	Yes
			Consumer writer	NA (hadn't started)	Yes