Introduction

Plain Language Summaries (PLSs) are a key dissemination product for every Cochrane Review. These summaries are freely available through our main organizational website, Cochrane.org, and also as part of reviews published on the Cochrane Library website. Along with the review Abstract, they are often the first (or only) opportunity potential health decision-makers will have to: 1) engage with Cochrane as an organization, and 2) understand, gain familiarity, or introduction to a Cochrane Review. PLSs are the product most frequently translated into other languages. Google Analytics for Cochrane.org shows that 94% of web traffic goes to PLSs, and 80% of this access through language translations (47% Spanish).

It is critical that PLSs are of a consistently high quality, fairly representing results of Cochrane Reviews in clear, simple language (measured against Cochrane’s Dissemination Checklist and Guidance – see below), and understood by the general public especially non-expert audiences.

Currently PLSs produced in Cochrane vary in style, language, production, and quality. There are many existing resources available for guidance including the Cochrane Handbook, Plain Language Expectations for Authors of Cochrane Summaries (PLEACS), the Cochrane Style Manual, and bespoke guides created by Cochrane Review Groups (CRGs). PLSs are traditionally written by the Cochrane Review authors and although some are well written, feedback from language translation teams and external research work (such as: https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/2046-4053-2-81https://link.springer.com/article/10.1186/s12911-019-0772-5) indicates this is not always the case.

Some PLSs lack structure, are difficult for general, non-academic audiences to understand, and are more technical than would be recommended for a ‘lay’ audience: a standardized approach to producing PLSs is required.

The drive to improve consistency and quality of PLSs is not new. In 2016-17 Cochrane Norway ran a pilot scheme, https://community.cochrane.org/news/results-and-conclusions-ceus-plains-language-summary-pilot-project, exploring three options for developing PLSs:

- Option 1: providing guidance to Cochrane Review authors to support production of the PLS for their review;
- Option 2: providing guidance to Cochrane Review authors to support production of PLSs that are subsequently checked, and improvements suggested by trained members of the CRG editorial teams;
- Option 3: rather than PLSs written by Cochrane Review authors, they are assigned to other CRG editorial staff (e.g., editor or managing editor, consumer representative or professional writer).

Based on Cochrane Norway’s pilot scheme, and in consultation with editorial and methods colleagues, we recommend a 12-month project with the recruitment of a small team of scientific writers to produce PLSs with the objective of improving the quality of the PLS. Towards the end of the project, when the writers have experience and knowledge of plain language writing, they will be asked to create guidance in whatever formats they deem suitable (e.g. templates, documents, training) to support PLS writing within Cochrane beyond the project timeline.

Time, resource, and the complexity of PLS production will be considered alongside other Knowledge Translation (KT) and Editorial and Methods Department (EMD) priorities and projects for 2020 and beyond. The implementation of this 12-month project begins with the appointment of a small team of PLS writers (in May 2020).
Rationale

- Plain language is key to achieving Goal 2 of making “Cochrane evidence accessible and useful” to everybody, everywhere in the world;
- Content written in plain language is a key dependency for producing effective and usable KT products, including multi-language translations, for health decision-makers.

Progress

Although the Cochrane Norway pilot scheme did not recommend any specific option for implementation, it highlighted:

- the strengths and weaknesses of different approaches to writing PLSs within Cochrane;
- the need to provide standardized language for all PLSs to assist the facilitation and uptake of multi-language translation;
- the requirement for guidance in producing templates and subsequent training for writing PLSs; and,
- the need for general agreement and engagement for improving the quality of PLSs.

Using plain language is one of the key elements for Cochrane’s new ‘Dissemination Checklist and Guidance,’ launched in late 2019 and being implemented across Cochrane during 2020. Now is an ideal time to raise awareness, explore what plain language looks like in practice, ease facilitation of multi-language translation, and build capacity for people across Cochrane to produce dissemination products, including PLS, that meet the criteria provided within the Checklist and Guidance: https://training.cochrane.org/sites/training.cochrane.org/files/public/uploads/Checklist%20FINAL%20version%201.0.pdf

Intervention

A small team of PLS writers has been recruited. The same PLS resources and templates currently available to author groups will be presented to the writers as part of their orientation. Working closely with the Editorial and Methods and KT Departments, the writers will be equipped with institutional and contextual learnings and knowledge around PLSs at Cochrane through their close connections with colleagues in these departments.

An ongoing and iterative evaluation process will be conducted throughout the project, so writers will be given constant feedback on the quality of and reaction to their work from end-users (namely consumers/patients, carers and the public) as well as editorial teams. This information, coupled with the writers’ own plain language writing skillsets, should equip them with the knowledge needed to produce good-quality PLSs fit for comparison against the current process.

Project Aim

This project’s primary aim is to:

- Determine whether a small team of professional scientific writers dedicated to writing PLSs for Cochrane would provide editorial production and processes with a feasible way of improving their quality, consistency, and translatability.
• Harness the expertise of these writers, who will also be equipped with iterative feedback on their work through evaluation with the PLS’s target audience, to inform a set of guidance to support PLS writing moving forward, which will include:

  ○ development of plain language guidance for Cochrane Review Groups (CRGs) to produce PLSs in the future;
  ○ development of an agreed PLS template and format (including consolidating existing resources in one central place within Cochrane’s Training website) for future PLS writing in Cochrane relevant for the public, patients and carers defined within Cochrane’s KT Framework;
  ○ provision of support and training to people within Cochrane engaged with writing PLSs and to offer clear recommendations on how Cochrane will produce PLSs in 2021 and beyond.

Measures of success

A thorough evaluation plan has been designed to assess the following:

1. Translatability: translation teams should find PLSs produced by writers to be quicker and easier to translate.

2. Improved quality:

   a. Accuracy will be measured by comparing the PLS to the ‘Summary of findings’ table and Abstract. Successful PLSs will have no inconsistencies.

   b. Conciseness will be measured with a simple word count (approximately 700 words). Successful PLSs will have shorter word counts but this figure will be considered taking into account the number of trials included in the review and the lack of results.

   c. Plain language calculation will be measured using an online plain language calculator such as SMOG. Successful PLSs will have a good score but this figure will be considered taking into account the complexity of the subject.

   d. Understandability and comprehension will be assessed by asking patients and carers to mark the PLS according to how easy or hard it is to understand, and to comment on what made it easy or hard. They will be asked questions about the content of the specific review to test their understanding of the PLS.

   e. Usability will be assessed by asking patients and carers to rate the extent to which the information would influence decisions about their health and to provide comments on what could be done to make it more accessible.

3. Consistency will be assessed toward the end of the project when the writers have produced their guidance and are using it in PLS production.

4. Length of time it takes to produce a PLS with hired writers vs the ‘usual’ processes.
5. Methods and procedures used by the hired writers use to produce their PLSs vs the ‘usual’ processes.

6. Impact on processes for Cochrane Review authors and Editorial teams, including time taken to copy edit.

Project deliverables

1. The employment of the equivalent of a small team of professional scientific writers for a 12-month period, on a fixed-term, contract-for-services basis to produce as many PLSs of Cochrane intervention reviews from new reviews as possible. The professional writers will report to the Copy Editing Manager within Copy Edit Support. Each writer will work within one CRG Network alongside the Senior and Associate Editor, Network Support Fellow, editorial teams, the Knowledge Translation Department, Products Working Group, and Review authors (as necessary), though there is a need for flexibility that will be based on the work available. The writers will work across the MOSS and Public Health Networks and the EMD Editorial Services unit.

2. We explore the feasibility of using specifically trained, professional scientific writers as part of the PLS production process to assess the average time and costs to produce a final PLS and the impact on the current CRG editorial teams. These factors will be balanced against the impact on the quality of the product.

3. Towards the end of the pilot, the professional writers should present ideas for improvement of the PLS structure or process, and how these could be implemented. This may include changes to existing PLS writing standards, headings, workflows (in the Editorial Management System), or in the software used to produce the reviews (Review Manager).

4. Proposal guidance is produced in formats deemed suitable by the PLS writers (e.g. template, document, training programme), which considers the factors above and presents a series of recommendations for future steps including future PLS training requirements with editorial approval (through the EMD and CRG Network Senior and Associate Editors).

Excluded:

1. This project will not consider the location or hosting of the PLS documents within the Cochrane online structure. It will not consider the number of times the PLS are accessed or cited for the reviews. Nor will it consider how we currently share and disseminate the PLSs once they are written.

2. This project is not intended to evaluate any of Cochrane’s existing dissemination products other than the PLS. However, with the introduction and implementation of Cochrane’s Dissemination Checklist and Guidance and the emphasis on ‘plain language,’ there may be learning from the project that can be applied across other dissemination products as part of KT implementation work during 2020.

Constraints and considerations
1. During the duration of this project, Cochrane’s ‘New Review Format’ project will also be in development. It is assumed that the PLS will continue to play a fundamental role in any future review format changes. The progress of this project will be monitored closely.

2. This Plain Language Summaries project throughout 2020 is one of Cochrane’s five annual organizational Targets. It will require quarterly reporting on project progress and evaluation as well as the need to align with ongoing implementation of Cochrane’s Knowledge Translation Framework led and facilitated by Cochrane’s KT Department and Advisory Group.

**Stakeholders**

**Key stakeholders (manage expectations):**

- Editorial and Methods Department: this department is responsible for the delivery of Cochrane Reviews and will need to be included in consultation at all stages of the project;

- Senior Editors, Associate Editors and Network Support Fellows from the pilot CRG Networks: the success of the project will be hugely dependent on the ownership and capacity of these staff/members;

- CRG staff from the pilot CRG Networks; the project will be dependent on the ownership and capacity of these CRG staff.

- Copy-Edit Support (CES) team: several reasons:
  - copy-editors are currently involved in plain-language work as part of their job, in the absence of any systematic Cochrane-wide approach;
  - when PLSs from this project feed through to CES, copy-editors need to know which they are, as there will be a greater need to respect the PLS writers’ word and styling choices;
  - copy-editors can provide feedback, but they are not part of the CRG so a system for this needs to be devised;
  - if the PLS writers maintain a style sheet as part of the project, copy-editors could have access to that. This would enable them to spot any deviations in the professional PLSs and also to start applying the professionals’ experience to other reviews at the earliest opportunity.

- Multi-Language Translation teams: representatives from our multi-lingual teams, (including those from our priority languages, Spanish, French and Chinese) will be engaged and involved with user-testing of formats and templates to assess language translatability as the project develops;

**High priority stakeholders (keep satisfied):**

- Central Executive Team – Informatics and Technology and People Services: although not directly affected by the pilot, the results may impact on systems which are owned by them (e.g. Review Manager and Editorial Management Systems).

**Engaged stakeholders (keep informed):**
• CRG staff from all Networks, geographic Groups and Fields (Group Executives) not involved in the pilot project: the result of the project may affect the future ways of working for these people and so it is important to keep them updated on the progress;

• Cochrane community and CET: these stakeholders may be interested in the results of the pilot study;

• KT Advisory Group and Editorial Board.

Project team

**Sponsor:** Deputy Editor in Chief, Toby Lasserson; Head of Knowledge Translation, Jo Anthony  
**Project Manager:** Copy Editing Manager, Elizabeth Royle.

**KT Projects Officer:** Stephanie Lagosky – responsible for monitoring and evaluation.  
**Subject matter experts:** Claire Glenton, Juliane Reid, Peter Tugwell, Lisa Bero and Luke Wolfenden.  
**Additional support/engagement:** John Hilton, Monaz Mehta, Nuala Livingstone, Roses Parker and Lee-Yee Chong.

Project timeline

• April 2020 – May 2021 – depending on the commencement of employment of the team of PLS writers;

• Monitoring of PLSs produced by the team of professional science writers to take place during Q2 and Q3 2020;

A project evaluation process and framework, together with an Induction plan and priorities for the writers for their first three months, will accompany this project.

Risks

• **Quality of professional scientific writers:** Success of project is partially down to the quality of the professional scientific writers recruited. Whilst this can be explored through interviews, (asking them to prepare a PLS as an interview task), it is likely this will only be realised once the selected candidate has started working with Cochrane. A full job description and required skillset with full reporting accountabilities will be made available. All new PLSs will be approved prior to publication by the designated Senior, Associate Editor and Network Support Fellow.

• **Proposed process adds unworkable time and/or complexity:** if the process of writing the PLS increases dramatically or it requires considerably more time and input from Cochrane Review Authors or Editorial teams than it does currently, then the time for review output could be affected. This will need to be monitored carefully through the pilot process.

• **Resistance from Cochrane Authors or Review Group Staff:** there may be some individuals who feel that this project is a snub to their ability to produce high quality summaries for other audiences. They may be resistant to ‘handing over’ the project to an individual outside the Review Group. Clear communication and consultation will be required with those affected.
Recommendations
The project plan has been approved as an organizational Target for Cochrane in 2020 by Cochrane’s Governing Board. The project investment has been approved as part of the Knowledge Translation implementation plan and budget for 2020-1.

29 April 2020