Checklist and Guidance

For disseminating findings from Cochrane intervention reviews

Version 1.0

October 2019

Project in collaboration with Cochrane Knowledge Translation and Cochrane Norway

Who is this guidance for?

This guidance is for anyone preparing a dissemination product based on a Cochrane intervention review; this could include review authors, editors, or anyone else working on communication or dissemination activities. The aim of the guidance is to improve the quality of dissemination products that present the findings of Cochrane intervention reviews (i.e. reviews of effectiveness). However, many of the items presented here can also be useful when disseminating other types of Cochrane Reviews or other research.

In particular, we hope it will help improve communication with **non-experts** (i.e. people who are not familiar with systematic review methodology).

This guidance is first and foremost for people creating dissemination products that present review **findings**. It is not primarily for those who are only building awareness about a review without presenting the findings.

You can use this guidance when you are:

- preparing **content** for an individual dissemination product;
- developing or improving a dissemination product **template.**

What is a Cochrane dissemination product?

A Cochrane dissemination product is any piece of communication that aims to present the findings of a Cochrane Review to any target audience with the aim of supporting an informed decision.

Cochrane dissemination products should aim to give a reasonably complete, nuanced and unbiased representation of the evidence. They should also be presented in ways that are useful, accessible, desirable, and understandable to their target audience(s).

In Cochrane, examples of dissemination products include review summaries, podcasts, press releases and social media posts. Target audiences for Cochrane dissemination products could include consumers and the public; health practitioners; policy makers and healthcare managers; researchers and research funders; as well as intermediary audiences such as journalists or guideline development groups.

Make sure you know your target audience

To use this checklist and guidance and make sensible decisions about how to disseminate the findings of a Cochrane Review, you should have some understanding about your target audience. This includes understanding issues such as:

- Are the review topic and findings likely to be of interest to your target audience?
- Is there additional information they are likely to think is important and that you are able to provide? For instance, are they likely to ask for information about other interventions that exist, implementation costs, or local availability?
- How much time are they likely to have or be willing to spend?
- What information resources are available to them? For instance, do they have easy and reliable access to the Internet? This may be particularly important to think about in resource-poor settings
- What languages are they fluent in?
- What are their literacy and numeracy skills likely to be?
- How familiar are they likely to be with medical terminology?
- What type of sources are they likely to regard as credible?
- Are they likely to expect recommendations?

If you don't know much about your target audience, read the full guidance for checklist item 1 for ideas on some strategies to help you think about this.

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Cochrane

The dissemination checklist: with details

This guidance is for anyone preparing a dissemination product based on a Cochrane intervention review. The aim is to improve the quality of the dissemination products that present the findings of Cochrane intervention reviews (i.e. reviews of effectiveness).

Use items in any order

☐ 1. Have you **involved your target audience** or sought their feedback?
Full guidance

At a minimum:

- **Decide who your target audience is,** even if it is "everybody". This will guide your choices about language and content.
- **When creating content for individual products**, consider whether it is possible to show the product in advance to a member of your target audience.
- **When developing product templates** or for larger, ongoing products: carry out at least one cycle of user feedback from three or four people who represent your target audience.

Also, ideally, **when developing product templates**:

- Carry out several small cycles of user feedback and development.

☐ 2. Have you used **plain language**?

Full guidance

What constitutes "plain language" depends on your target audience. But at a minimum:

- Use the active voice (e.g. "We included 12 studies", not "12 studies were included").
- Keep sentences and paragraphs short.
- Avoid abbreviations - apart from ones that are in common use (e.g. HIV, ADHD) or explain them.
- Make sure that you use words and concepts that are familiar to your target audience.
- Avoid research jargon.
- Where you need to use medical terms or concepts, use them consistently and consider whether you need to explain them.

☐ 3. Have you used words in your **title** that your target audience is likely to search for, recognize, and find relevant?

Full guidance

At a minimum:

- Use words that your target audience are likely to search for, recognize, and find relevant, for instance terms for the treatment or condition that they are familiar with.
- Avoid very long titles.

☐ 4. Have you communicated to your target audience that this product is **relevant for them**?

Full guidance

At a minimum:

- Decide whether you need to make it clear to your target audience that this product is relevant to them. For instance, would they likely not pay attention to the product or realize it is relevant to them unless you clearly state this?

☐ 5. Have you **structured the content** so people can find key messages, then access more detail if they want?

Full guidance

At a minimum:

- Provide information (as a reference or link) about where to find the full review so that people can find more detailed information.

Ideally also:

- Help people find the information that is most important to them by preparing different layers of information (giving them the opportunity to access more detail on demand).

☐ 6. Have you made the content easy for people to **quickly scan and read**?

Full guidance

At a minimum, for text-based products:

- Put the most important content first, or make it easy to spot.
- Break up large blocks of text (use white space, bullets, tables, images, graphs, boxes, etc.).
- Use short, meaningful headings and subheadings that stand out; start these with key words where possible.
- Use clear, clean and consistent typography (fonts).
- Avoid presenting text as an image (this won't be accessible for people with impaired vision who are using screen readers). Alternatively, provide access to a transcript of this text.

Ideally, also:

- Highlight keywords in **bold** (avoid italics and words in all capital letters).
- Reduce the amount of information as much as possible, or use other simplification strategies, such as layering.

☐ 7. Have you shown that the evidence involves **real people**?

Full guidance

At a minimum:

- Refer to "people, "women", "children", rather than "participants".
- Refer directly to these people ("*Women who had home births had more….*" instead of "*Home births led to more….*"). If this takes up a lot of space, try to refer to them once or twice to remind the audience that real people are involved.

Ideally, also:

- Consider giving a more detailed description of the people who use the intervention or treatment.
- Refer to "*the review authors*" or "*we*" and not only to "*the review*".
- Consider giving space to the review authors' perspective.

☐ 8. Have you specified the **populations**, **interventions**, **comparisons,** and **outcomes**?

Full guidance

At a minimum:

- Indicate the review's population, intervention, and outcomes of interest (the scope of the review). Use the actual names rather than "intervention", "outcome", etc.
- Indicate the comparison (what the intervention was compared to). In some cases, it will be obvious to your target audience that the comparison is "no intervention" or "usual care". For very brief summaries such as tweets, you can therefore consider dropping this information. But in most cases you should specify what the comparison is somewhere in your dissemination product.

Ideally, also:

- Consider whether you need to provide a more detailed description of the population, intervention, comparison, and outcomes that the review authors searched for, as well as what they found.
- Provide information about the setting and context that the review authors searched for, as well as what they found.
- Describe people or treatments that were excluded from the review, if this is important for your target audience to know.

☐ 9. Have you stated that this information is from a **systematic review**?

Full guidance

At a minimum:

- State that the findings are from a systematic review ("systematic review", "Cochrane Review").
- Indicate that this is a systematic review and not a single study by referring to the number of included studies.

Ideally, also:

- Explain in more detail what a systematic review is.

☐ 10. Have you specified how **up to date** the review is?

Full guidance

At a minimum:

- Include the review's publication year.

Ideally, also:

- Include information about when the most recent search was done.

☐ 11. Have you avoided **misleading** presentations and interpretations of the effects?

Full guidance

At a minimum:

- Report the most important benefits and harms, including ones for which the authors found no evidence.
- Report all benefits and harms in the same way, where possible, using the same types of words, numbers, or symbols.
- Decide whether it is important to specify the time point when the outcomes were measured.
- Focus on important rather than "statistically significant" differences.
- Do not confuse "a lack of evidence of effect" with "no effect".

Ideally, also:

- Consider engaging people in your target audience to decide which outcomes to focus on.
- Consider using narrative, plain language statements to present the findings of the review.

☐ 12. If you have used numbers to present the findings, have you used **absolute numbers** and **labelled numbers** clearly?

Full guidance

At a minimum:

- Always label the numbers you are presenting to indicate to what these numbers are referring (E.g. refer to "*12 out of 100 children.…*"; "*three days per year*"; "*four hospital admissions per person").*
- When presenting outcomes that are measured using scales, describe the range of the scale. Explain what the scale measured and whether a high or a low score is best, if this is not clear.
- Use absolute effects whenever possible. Do not report relative effects (for instance, "*a 50% increase*…", "*a doubling*", "*twice as many*") unless you have also reported the absolute effects.

Ideally, also:

- Consider using tables or figures to present numbers. People may prefer this to numbers inserted in the middle of text, which they may find off-putting or too complicated.

☐ 13. Have you described the **certainty** of the evidence?

Full guidance

At a minimum:

- Never state that an intervention works or doesn't work if the certainty is less than high. Instead, modify your statement to reflect your uncertainty.
- Always refer to the certainty of the evidence, either explicitly or implicitly.
- Make sure that information about certainty is close to or integrated into the findings.

Ideally, also:

- Refer to the certainty of the evidence explicitly, by specifying the level of certainty for each outcome.
- Explain what "certainty of the evidence" means and what the different GRADE levels mean. Do this either as part of your dissemination product, or through links.

☐ 14. Have you presented the findings in **more than one way**?

Full guidance

At a minimum:

- Consider using both words and numbers and using different media to present the findings.
- If you cannot present findings in more than one way, provide links to additional products that use other formats where possible.

☐ 15. Where the topic or findings may be upsetting, controversial, or disappointing: have you handled this sensitively?

Full guidance

At a minimum:

- Think about whether the review's topic or the findings are likely to be upsetting, controversial, or disappointing to people. Where this is the case, think critically about the language and images you use, and make sure you are sensitive to these issues.

Ideally, also:

- Where the topic or findings could be **upsetting**, **controversial,** or **disappointing**, acknowledge this.
- Explore this further through gathering feedback from your target audience.
- Where findings are likely to be **disappointing,** make sure that **"Further research is needed" is not your only conclusion**. Consider whether you can offer more constructive messages.

☐ 16. Have you made it clear (a) that the review was prepared by **Cochrane** and (b) **who prepared** the dissemination product?

Full guidance

At a minimum:

- Mention that the information is from a Cochrane Review.
- Consider using the Cochrane logo or the logo of your Cochrane group.
- Make it easy to find out who prepared and funded the dissemination product (for instance, the name of the Cochrane group and any collaborating organization).

Ideally, also:

- Explain what sort of organization Cochrane is (i.e. an international, independent, non-governmental, not-for-profit organization). Do this either as part of your dissemination product, or through a link.
- Explain what is good about Cochrane Reviews (i.e., high-quality methods, policies regarding conflict of interest, keeping reviews up to date, etc.). Do this either as part of your dissemination product, or through a link.

☐ 17. Is it easy for people to find information about who the **review authors** are, how they were **funded,** and any **conflicts of interest**?

Full guidance

At a minimum:

- Provide information about author names, review funders, and declarations of interest. This information is openly available to anyone using the Cochrane Library. The easiest way to provide this information is therefore by providing a link to the review.

☐ 18. Have you avoided giving recommendations?

Full guidance

At a minimum:

- Do not give recommendations in your dissemination product.

Ideally, also:

- State explicitly that recommendations are not included.
- Think about how you can help people reach their own decisions.

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Full guidance: with examples and references

Item 1

Have you involved your target audience or sought their feedback?

Description

We can never know for sure how something we create will be experienced by others. As we get more experience with developing content or templates for dissemination products, we may even become overconfident. Getting input from your target audience is therefore probably one of the most important things you can do to improve your products [1-8].

Who is your target audience?

Cochrane's Knowledge Translation Framework has identified four main groups as the key audiences when disseminating Cochrane Reviews: consumers and the public; health practitioners; policy makers and healthcare managers; and researchers and research funders. Your target audience can include one or several of these groups. Additionally, you may want to target intermediary audiences, such as journalists. But one of the most important things to remember is that, with the exception of some researchers, **people in all of these groups are not likely to be familiar with systematic review methodology.** Therefore, we created this checklist and guidance document to support dissemination to people who are not research experts, regardless of which target audience group they come from.

Questions that can help you better understand your target audience are:

- Are the review topic and findings likely to be of interest to your target audience?
- Is there additional information they are likely to think is important and that you are able to provide? For instance, are they likely to ask for information about other interventions that exist, implementation costs, or local availability?
- How much time are they likely to have or be willing to spend?
- What information resources are available to them? For instance, do they have easy and reliable access to the Internet? (This may be particularly important to think about in resource-poor settings.)

- What languages are they fluent in?
- What are their literacy and numeracy skills likely to be?
- How familiar are they likely to be with medical terminology?
- What type of sources are they likely to regard as credible?
- Are they likely to expect recommendations?

The less you know about these issues, the more important it is to start engaging directly with your target audience. User experience evaluations can be done according to budget and ambition [3]. But some level of user feedback is always useful.

At a minimum:

- **Decide who your target audience is,** even if it is "everybody". This will guide your choices about language and content
- **When creating content for individual products**, consider whether it is possible to show the product in advance to a member of your target audience.
    - If you can't do this for every product, try and do this once or twice a year.
    - If you can't get hold of people from your target audience, at least ask a co-worker, colleague, friend, or family member with less research experience or topic expertise than your own. [3]
- **When developing product templates** or for larger, ongoing products, carry out at least one cycle of user feedback from three to five people who represent your target audience.
    - At the very least, ask them for feedback about their understanding of the content (for example, ask them to mark text they don't understand, or how they would explain the findings to a friend to see if this correlates to the review). You could also ask them about the amount of information, things they liked, and things that could be improved [3].
    - Consider the questions we have listed above about your target audience. Consider how the answers to these questions should shape your template and your individual product.

Ideally, when developing product templates:

- Carry out several small cycles (iterations) of feedback and development. Strategies for doing this include:
    - Recruit people who represent your target audience. (Remember that you may be aiming to reach an international audience.)
    - Carry out several small cycles of feedback and revision during development, starting with simple sketches or early prototypes. This is more helpful than gathering feedback from a large group of people at the end of your work.

- Interview three to five people, one at a time, for each feedback cycle. This should be enough people to identify major problems. When you make revisions to change the most obvious problems, new cycles of feedback will reveal issues that were previously overshadowed by these. [9]
- Remember to gather input from the staff who will be using your template to create content.
- For larger or ongoing projects, consider establishing a broader advisory group of stakeholders (people with perspectives or competence relevant to your project) to provide additional feedback.
- Remember to collect feedback early enough for you to incorporate your findings. It's important to get early feedback about users' experiences with your product, so you have time to be able to act on it. We call this kind of structured feedback 'user testing' (see suggested reading list at the end of this section).
- At a later stage, if you have the resources, you can use quantitative evaluations to measure whether your dissemination product has had the intended reach and effect [3].

Applying feedback

You may find that people give you conflicting feedback about specific issues, such as how much information they want or what document format they like. Feedback does not always provide you with a neat and tidy recipe for what you should do, but it will likely provide insight about how people perceive or use the product, where they might have problems, and give you a better basis for making informed improvements.

TIP: You could pay to have a company help you collect feedback. But for many products, you can probably also achieve useful results by finding a person at your workplace who has some knowledge of qualitative research methods and Cochrane Reviews to facilitate collecting feedback. Meeting and listening to people who represent your target audience can be a valuable experience for your team. If you do this in-house, it might also be worth getting professional help from people with expertise (such as designers) to translate findings into improvements to your products.

*The '**Honeycomb** framework **of user experience**' below is based on a framework originating from Peter Morville, adapted for the purposes of exploring and reporting user experience of evidence in the context of evidence-informed decision making* [8]. *You can use these themes to guide feedback collection or analysis.*

For assessing accessibility, see:

- Web Content Accessibility Guidelines (WCAG) 2.1: Internationally recognized standards for making web content more accessible (free online resource).

Suggested reading about methods for gathering feedback that can inform development of products:

- Fischhoff, Brewer and Downs 2011 [3]: an excellent in-depth description of evaluating different kinds of communication, with 'no budget' to 'serious budget' (free online pdf).
- Cochrane Norway: "How we work" and "Our user test package". We developed a stand-alone package of instructions and materials for user testing. These materials have been used successfully by many researchers with no previous experience in this method (free downloadable resources).
- Busert L et al. [10]: an example of a formative evaluation of a dissemination product for Cochrane Reviews, using the Cochrane Norway Package of user test materials (above) (open access).

- “Don’t make me think”: a good book to read if you are collecting quick feedback or don’t have a lot of resources. It provides clear direction and guidance about improving web sites, but the methods can be applied to other products (paper or digital book, not free).
- “Observing the User Experience”: book with many different techniques for exploring users’ experiences, described in enough practical detail that you can carry them out yourselves. Focus groups, interviews, usability tests, etc. (paper or digital book, not free).
- “Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests”: a leading resource about methods for usability testing (paper or digital book, not free).
- Rosenbaum SE, Improving the user experience of evidence. A design approach to evidence-informed health care. PhD thesis, Oslo College of Architecture and Design, December 2010:
  doctoral thesis about communicating evidence from systematic reviews, explored from a design perspective (free online PDF).
- Usability.gov: US government site with good guidance on all aspects of working with web sites and improving user experience (free online resource).
- GOV.UK Government design principles: UK government site with good guidance on all aspects of working with web sites and improving user experience (free online resource).

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Item 2

Have you used plain language?

Description

"Writing is intended for readers" [11]

The use of plain language in dissemination products is widely recommended [1-3, 5, 12, 13]. Plain language does not always mean 'lay language'. Plain language is 'writing that is clear, concise, well-organized, and follows other best practices appropriate to the subject or field and intended audience' [14]. Plain language is not only helpful for patients and consumers, but **for any person who is not an expert** in systematic review methodology. This often includes health professionals. Plain language may also make language translations easier [15].

What constitutes "plain language" depends on your target audience, the languages they speak, and the terms and concepts they are familiar with [6]. But some general rules apply.

At a minimum:

- Use the active voice (e.g. "We included 12 studies", not "12 studies were included") [13].
- Keep sentences and paragraphs short [13, 15].
- Avoid abbreviations, apart from ones in common use, such as "HIV" or "ADHD", or explain them.
- Make sure that you use words and concepts that are familiar to your target audience.
    - Some words or terms are only used in some parts of the world [13]. (For instance, "general practitioner" is a common term in some countries, while people in other countries may find it easier to understand "family doctor". Similarly, people may not see themselves as "consumers", but may prefer "patients" or "healthcare users"). If you are in doubt, use more than one option.
- Avoid research jargon. Some strategies could include:
    - Using narrative plain language statements to present the findings of the review [16-20].
    - Avoiding terms like "intervention", "comparison", and "outcome". These terms are not commonly used by many people. Use the actual names of the treatment, comparison, or outcome instead (e.g. refer to "psychotherapy" instead of "the intervention").
    - Avoiding terms tied to risk of bias and study design. Remember that review authors should already have taken these issues into account when they

assessed the certainty of the evidence. It is therefore not usually necessary to refer to these issues again.

- Where you need to use medical terms or concepts, use them consistently [21, 22], and consider whether you need to explain them.
    - Many medical terms and concepts are difficult to understand and it can be a good idea to use lay terms instead. But remember that your target audience may find it helpful to learn terms and concepts that might be important to them [21, 23].

"…these are the sorts of words that get used when you go and get treatment.... It's nice that they get explained. Because when you go to hospital and go to get treatment and stuff then it's those foreign words that get used, and then it's good to know what they mean."[21]

Some strategies when providing explanations include:

- Explaining the term or concept within the text – this may be particularly helpful for people who have little background knowledge.
- Explaining terms and concepts in pop-ups or links to a glossary (e.g. the GET-It glossary) [10, 21, 24, 25]. This allows people to ignore the explanations if they want to. But remember that not everyone has reliable access to the internet, particularly in resource-poor settings.
- Another option, at least for printed products, is to add an explanation of important concepts such as "systematic review" in a box [22]. But remember that people may overlook explanations if they are not placed close to the terms they are referring to [17, 26].

Some people find it helpful to assess the readability of your content using approaches like the SMOG or Flesch-Kincaid tests (at least for English-language content).

- **But remember** that difficult but necessary words that you have included and explained may partly drive your test score. To test this, try applying what we refer to as the "milk and cookies" test. For instance, when presenting a review on the effects of "misoprostol" for "preeclampsia", substitute these two terms with "milk" and "cookies". If you still end up with a score that you think is too high for your target audience, think about how you can simplify your text further.

If you are trying to reach an international audience:

- Consider translating your dissemination product into other languages. Most people are likely to appreciate dissemination products in their native language [27].
- Avoid slang, metaphors, and colloquialisms.

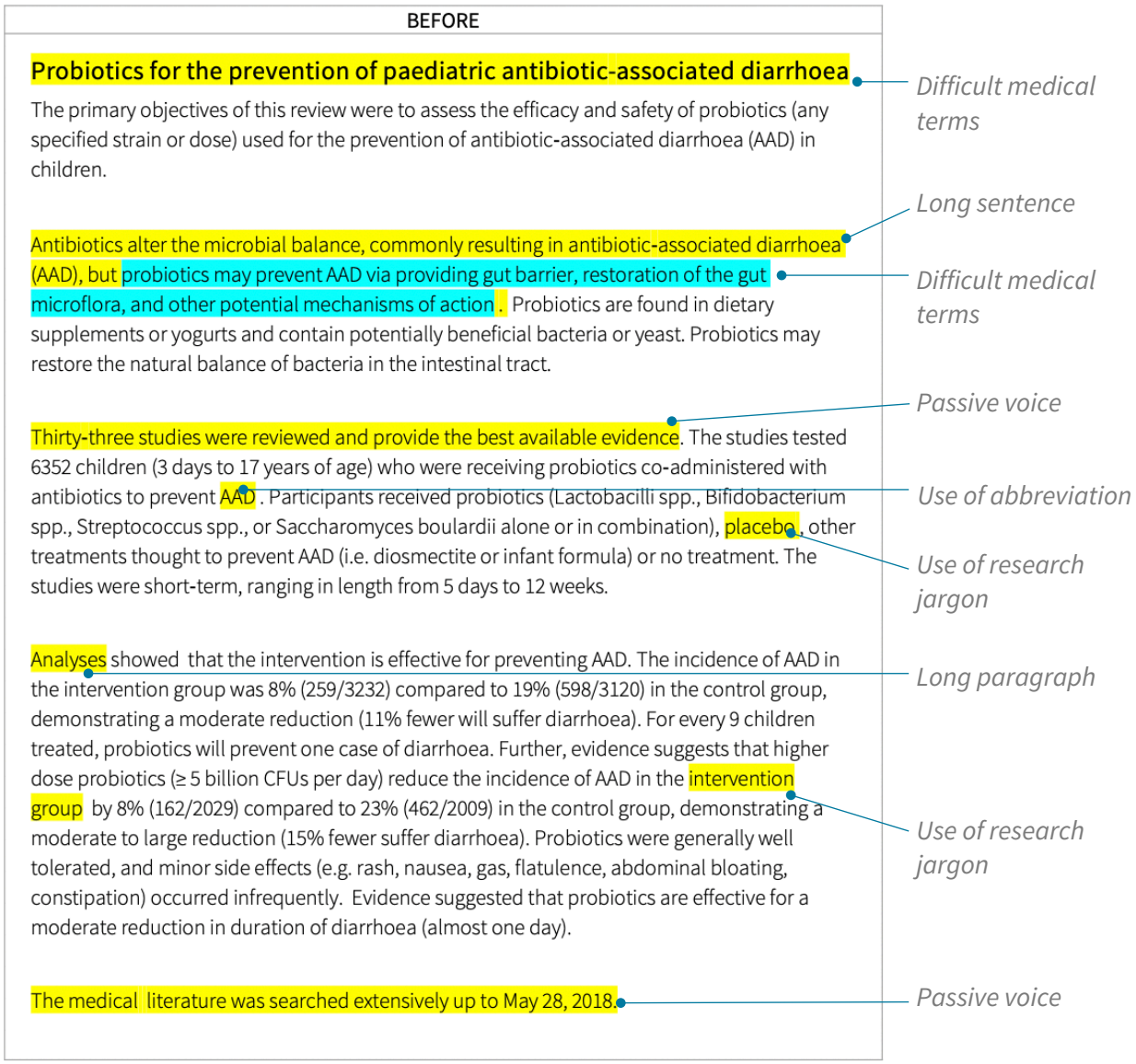
Relevant links

- For more suggestions about language in Cochrane products, see the Language section in Cochrane Brand Guidelines.
- For guidance on using narrative plain language statements to present the findings of the review, see https://training.cochrane.org/handbook/version-6/chapter-15-draft.

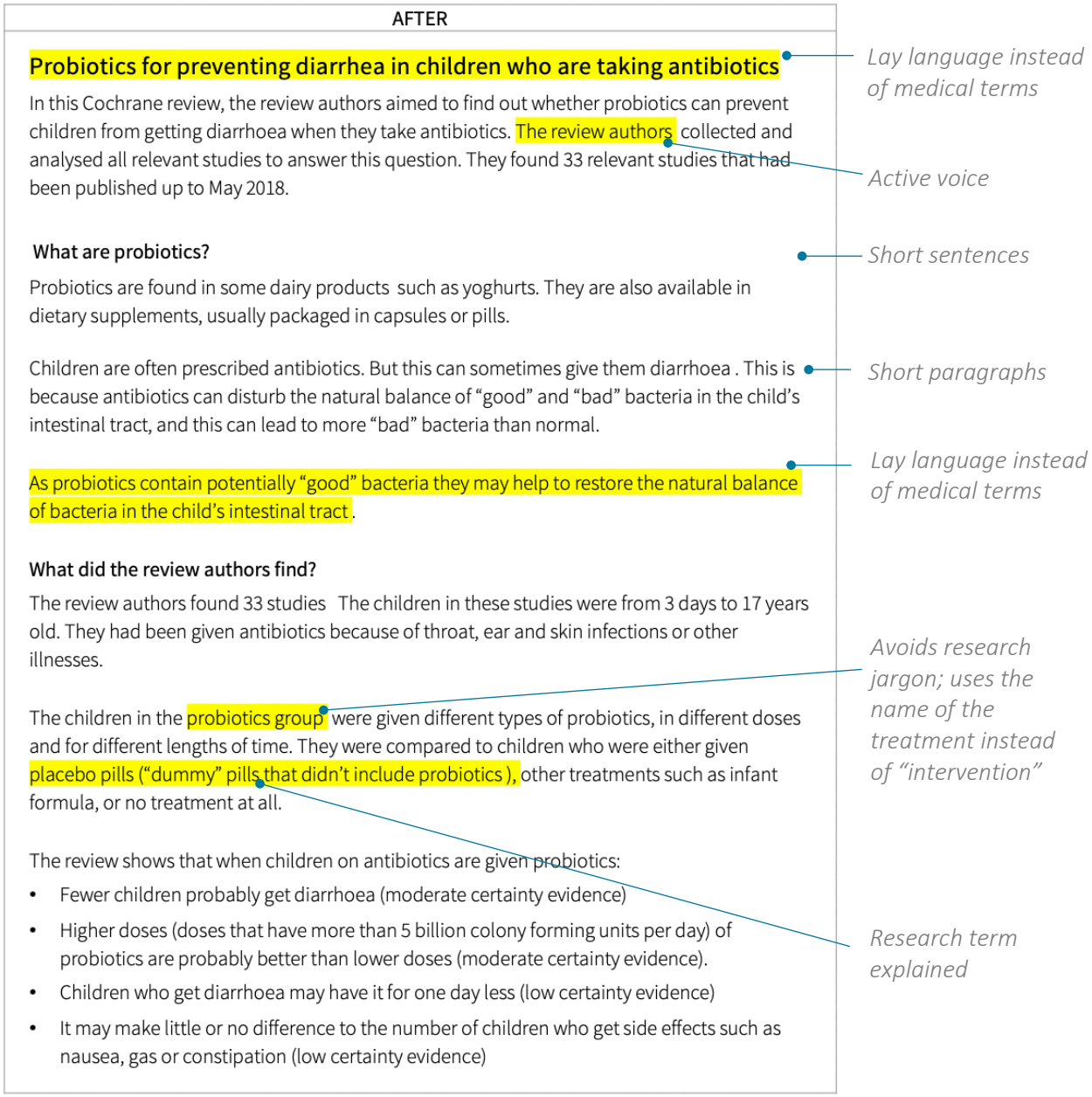
Examples

Here is an example of a text before and after we applied the plain language guidance (both the "before" and "after" versions are adapted from a Cochrane Review by Guo et al 2019).

Before *applying the plain language guidance*



***After** applying the plain language guidance.*



Item 3

Have you used words in your title that your target audience is likely to search for, recognize, and find relevant?

Description

Titles are usually the first part of your dissemination product that people will see. People will often use the title to decide if this looks like information they want or need [28]. Remember that you don't have to use the same terms for the condition or treatment as those used in the review. For instance, you can call "hypertension" "high blood pressure" if you think this will help your target audience.

At a minimum:

- Use words that your target audience are likely to search for, recognize, and find relevant, for instance terms for the treatment or condition that they are familiar with.
- Avoid very long titles.

Be careful about:

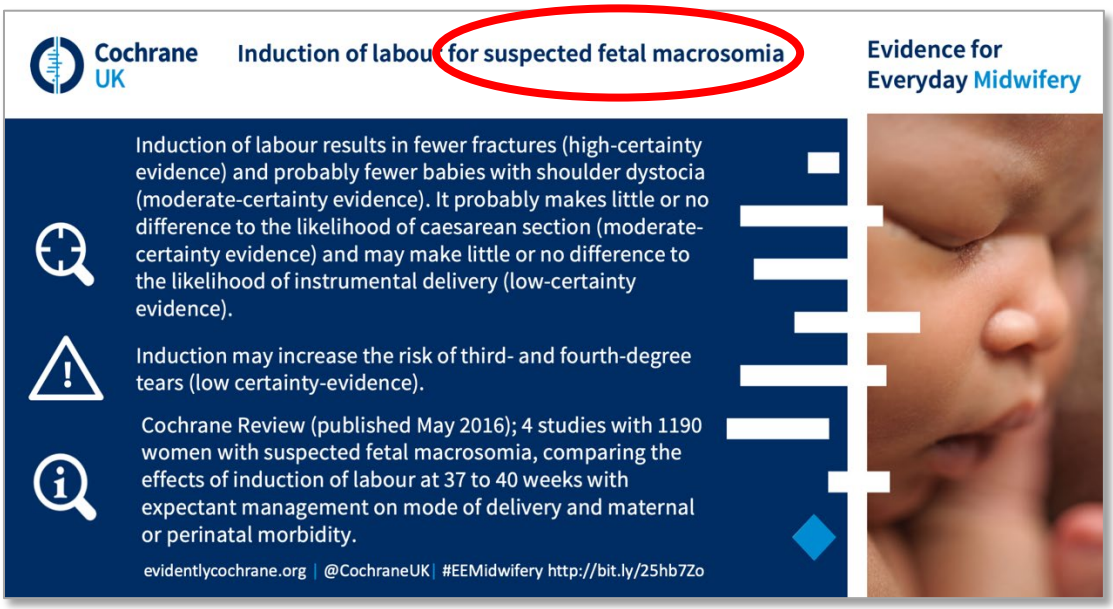
- Brand names
    - Cochrane does not encourage the use of brand names in Cochrane Reviews [29]. You should also avoid them where possible in your dissemination product. However, some brand names are more familiar to people than their generic names, and may be what people look for and recognize. In these cases, use the generic name and the brand name. For instance, "*Sildenafil (also known as "Viagra") for treating erectile dysfunction.…*"

Examples

In these examples, the blogshot authors have presented the same review in two versions, one for midwives and one for parents, and have chosen title words that the two different target audiences are likely to search for, recognize, and find relevant.

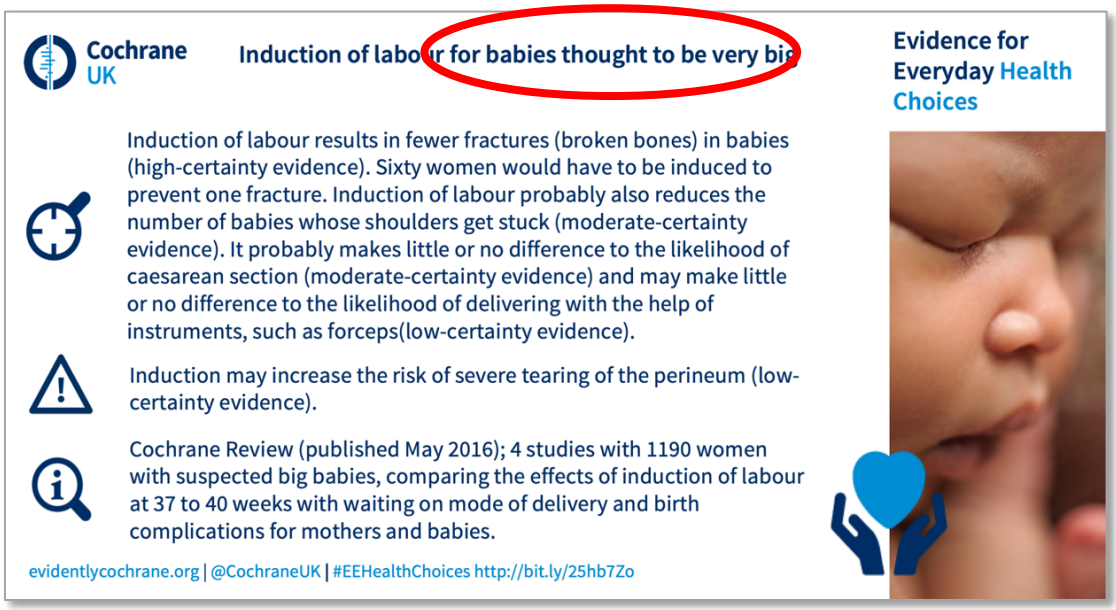
Example 1

Blogshot (target audience - midwives)



Example 2

Blogshot (same review but different target audience - parents)



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Item 4

Have you communicated to your target audience that this product is relevant for them?

Description

"Even though it was stated [who this summary is designed for] I still felt a bit unsure as to who it was aimed at. By looking at it, it's not aimed at people who work in a hospital, as it was talking about primary care providers, physicians, and general practitioners, but then [in] other parts it started talking about the National Standards I thought oh it is" [6].

Different dissemination products target different audiences, including consumers and the public, health practitioners, policy makers, or all of these groups. But people may be uncertain about who the target audience is and may not realize that your dissemination product is for "people like them" [6, 30].

Sometimes it is obvious who your dissemination product is for. For instance, if you write a column for a nursing journal about new Cochrane Reviews, it is probably not necessary to make it explicit that your target audience is nurses. However, for other products it may be necessary to state this explicitly or indicate this implicitly.

At a minimum:

- Decide whether you need to make it clear to your target audience that this product is relevant to them. For instance, would they likely not pay attention to the product or realize it is relevant to them unless you clearly state this?

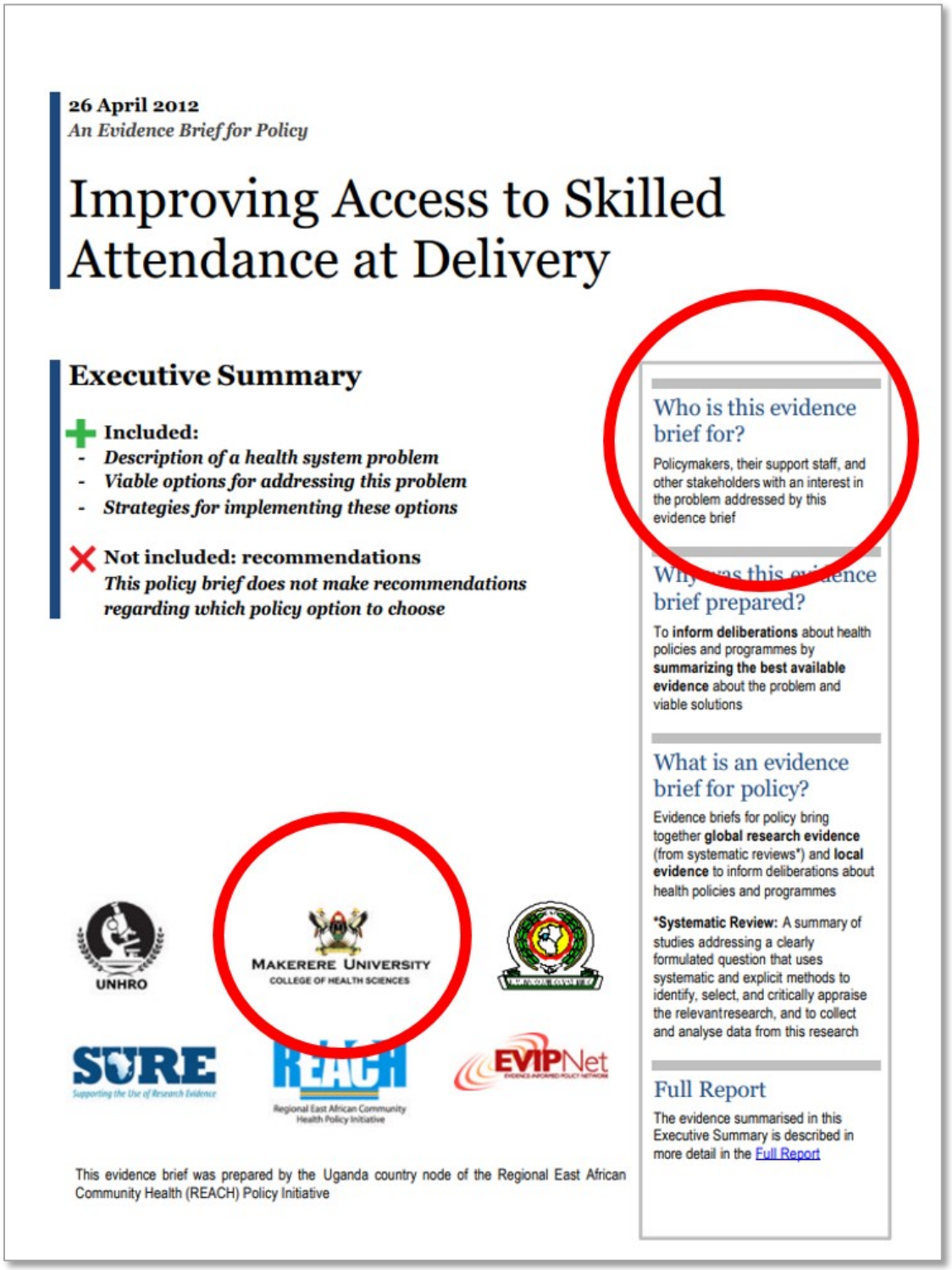
Some strategies for indicating who your target audience is could include:

- Talking directly to your target audience – e.g. by using "you", "your patients", "your population".
- Emphasizing links to organizations or associations that are relevant to your target audience [24].
- Using pictures, illustrations, or other visuals or sounds to signal who your target audience is.
- Describing why this topic is relevant or applicable to your target audience.

Examples

Example 1

In this policy brief example, the authors state explicitly who the target audience is, and emphasize links to organizations or associations that are relevant to that particular target audience.



26 April 2012
An Evidence Brief for Policy

Improving Access to Skilled Attendance at Delivery

Executive Summary

Included:
- *Description of a health system problem*
- *Viable options for addressing this problem*
- *Strategies for implementing these options*

Not included: recommendations
This policy brief does not make recommendations regarding which policy option to choose

Who is this evidence brief for?

Policymakers, their support staff, and other stakeholders with an interest in the problem addressed by this evidence brief

Why was this evidence brief prepared?

To **inform deliberations** about health policies and programmes by **summarizing the best available evidence** about the problem and viable solutions

What is an evidence brief for policy?

Evidence briefs for policy bring together **global research evidence** (from systematic reviews*) and **local evidence** to inform deliberations about health policies and programmes

***Systematic Review:** A summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise the relevant research, and to collect and analyse data from this research

Full Report

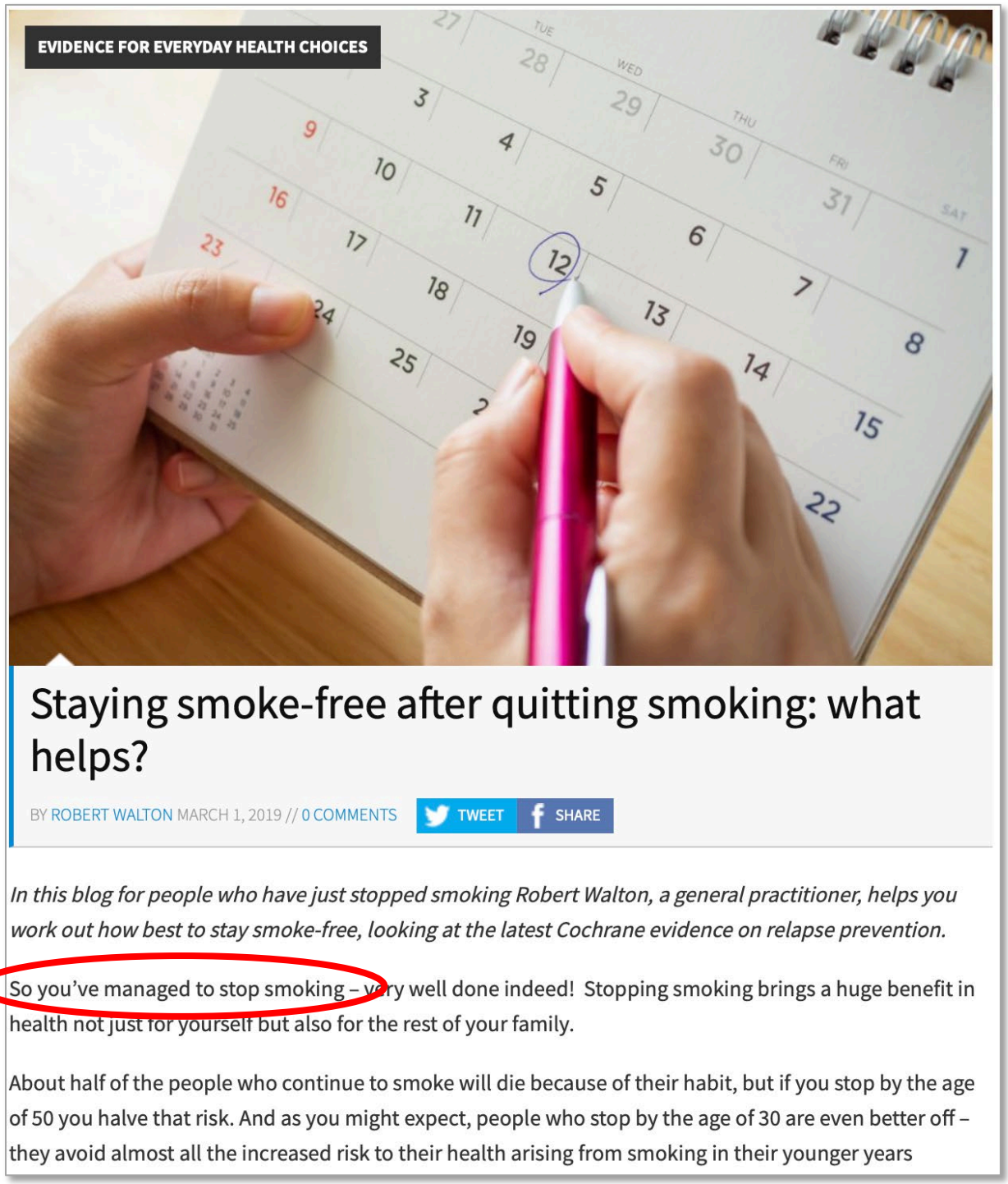
The evidence summarised in this Executive Summary is described in more detail in the Full Report

UNHRO
MAKERERE UNIVERSITY COLLEGE OF HEALTH SCIENCES
SURE Supporting the Use of Research Evidence
REACH Regional East African Community Health Policy Initiative
EVIPNet

This evidence brief was prepared by the Uganda country node of the Regional East African Community Health (REACH) Policy Initiative

Example 2

In this Evidently Cochrane example, the authors talk directly to the target audience and signal that the product is for a broad, non-scientific audience by avoiding research jargon.



Return to the checklist

Item 5

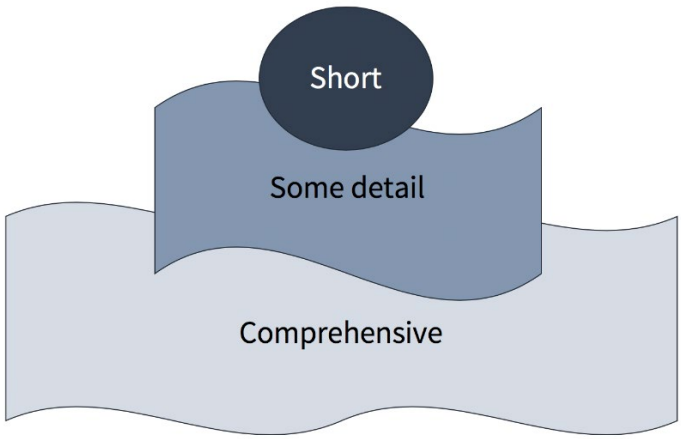
Have you structured the content so people can find key messages, then access more detail if they want?

Description

Different people want different amounts of information. This can depend on the amount of time they have, their prior knowledge, language skills, or levels of interest. Some people may prefer short, clear summaries rather than large blocks of text. Others may want access to in-depth information. For instance, they may want to know more about how the treatments assessed in the studies were implemented, or about why the review authors assessed the certainty of the evidence as low.

"But if you're looking for information then you want to find some information! That's our problem, that we don't find it. Then it's better to have a proper description, that there's something there...."[21]

"Layering" entails stratifying your content so that people can find the information that is most important to them up front, while being able to access more detail on demand [8, 31, 32]. Many studies suggest that people prefer a layered format when accessing evidence [6, 10, 12, 22, 25, 33-39]. It is also possible that information acquired in sequence may be easier and faster to understand [40]. Seeing a summary first may also help mitigate the "recency effect" (placing more emphasis on whatever outcomes – benefits or harms - were the last to be presented) [12].



At a minimum:

- Provide information (as a reference or link) about where to find the full review so people can find more detailed information. But remember that:
    - While the abstract and plain language summary of all Cochrane Reviews are free, the full review is often not available for free.
    - The full review is not written for a non-expert audience.
    - Not everyone has reliable access to the internet.

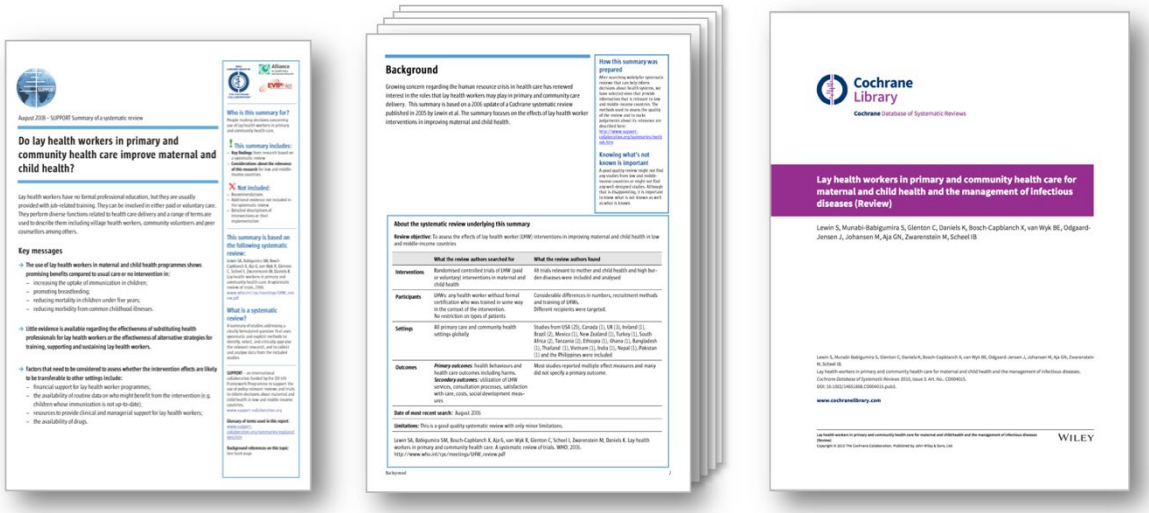
Ideally, also:

- Help people find the information that is most important to them by preparing different layers of information (giving them the opportunity to access more detail on demand). Most audiences are likely to want to read the key results first.
    - Decide whether you want to create layers within one product, for instance by giving a summary and then presenting more detail; or create layers across products by linking them.
    - Remember that different audiences may have different preferences about the content they want to see first [6] and want to know more about. Feedback from the target audience can help you prioritize what information people see first. But most audiences are not likely to want details about methods in a top layer. (See also Item 9 about labelling the information clearly as coming from a systematic review.)
    - If you create layers within one product, consider whether repeating the same information across each layer might be off-putting to readers [6]. Where you need to repeat information, make sure the content is consistent [41]. This also includes information that you have linked to in other products.

Examples

Example 1

This SUPPORT summary format provides a reader with access to different layers: the first page functions as a one-page summary of key messages; the next 5-6 pages present more information about the systematic review within the same product. For readers who want even more detail, there is a link to the full review.



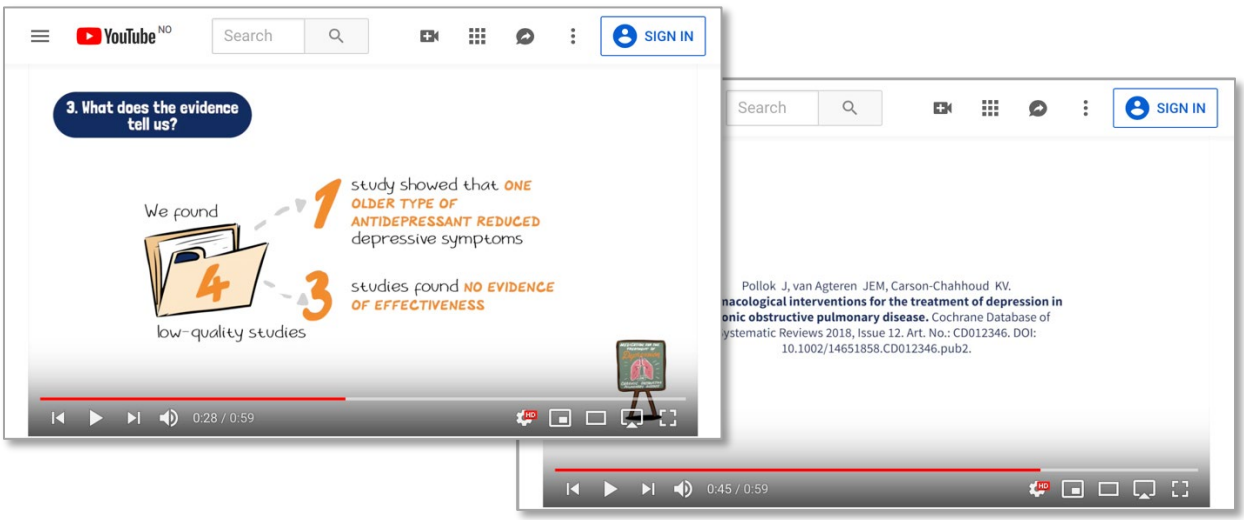
Layer 1
Key messages
(First page)

Layer 2
Full Summary

Layer 3
Cochrane Review

Example 2

This YouTube video is also an illustration of a layered approach. It presents the main findings of a review in just under a minute, with a link to the full review at the end.



Return to the checklist

Item 6

Have you made the content easy for people to quickly scan and read?

Description

Regarding text-based information, people tend to scan content visually before committing to read. Typically, people scan to assess whether there is any content that is important to them and how difficult it might be to access [25, 28, 42]. On a web page, people will often scan in an F-pattern, starting with a horizontal scan across the upper part of the content area, then moving further down the left side (or right side, for right-to-left languages), pausing to read sub-headings or the first few words of new sections [28, 42]. Some may skip the text and look at tables or figures first [42]. People may find large walls of unbroken text off-putting, and too much information can distract from the main messages [12, 24, 28]. We need to write and format content to make it easy to scan and read. Thoughtful formatting can also support comprehension [1].

"It's very messy. Do I have to read all of this?" [30]

At a minimum, for text-based products:

- Put the most important content first [8, 22, 28, 36], or make it easy to spot. For most audiences, this is likely to be the key results.
- Break up large blocks of text into chunks (use white space, bullets, tables, images, graphs, boxes etc.) [3, 22, 28].
    - If you have used tables or figures, label them clearly so they can “stand alone”.
- Use short meaningful headings and subheadings that stand out; start these with key words where possible [1, 22, 28].
- Use clear, clean, consistent typography (fonts) [1, 43].
- Avoid baking text into images (this won’t be accessible for people with impaired vision who are using screen readers). Alternatively, provide access to a transcript of this text.

Ideally, also:

- Highlight keywords in **bold**. Avoid italics and words in all capital letters [1-3].
- Reduce the amount of information as much as possible [3, 12], or use other simplification strategies, such as layering [31].

If you want or need to follow Cochrane’s visual identity, use Source Sans Pro font. Find more guidance about Cochrane’s typography, colours, logos, and use of images in The Cochrane Brand Guidelines.

You should also have a basic understanding of accessibility standards which ensure that your content can be reached by as many people as possible. Many organizations are also obliged to follow international accessibility guidelines: Web Content Accessibility Standards. Read guidance about getting started.

Examples

Example 1

This newsletter is a good example of writing and formatting strategies that help readers scan and read: short headings, images that help break up the text into meaningful segments, clean consistent typography, and generous use of white space.

The latest Cochrane news from around Australia

No Images? Click here

Cochrane Australia

ELEMENTS

Issue 13 | August 2018

MEDIA WATCH

Latest fish oil findings

A new Cochrane review challenges the popular belief that omega 3 supplements reduce the risk of heart disease, stroke or death. Lead author Lee Hooper outlined the evidence in The Conversation, and many Australian media outlets including the Sydney Morning Herald, the Guardian and the AJP featured the findings. Lee also explored the findings on this week's ABC RN Health Report, and provided a detailed response to a Blackmores Institute article that audaciously claimed the review was 'fake science'.

Flu vax debate

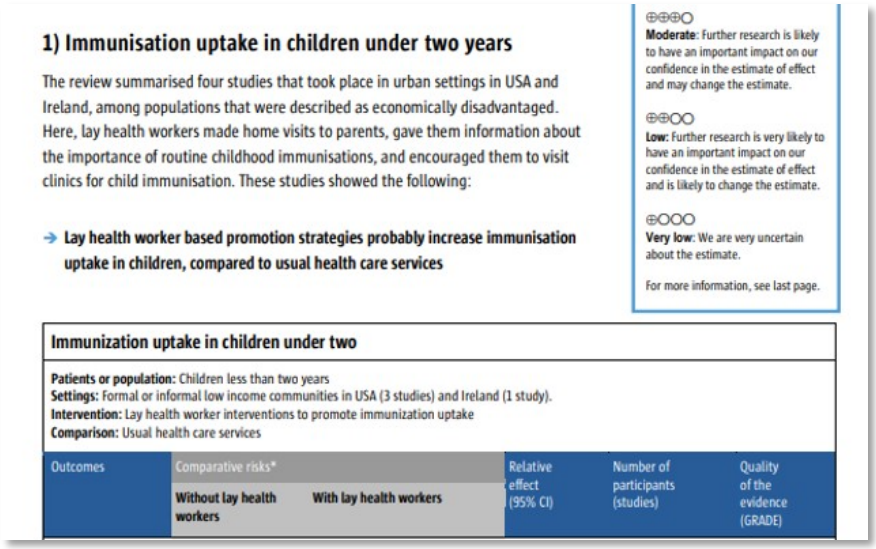
Few topics in health attract as much attention and polarisation of public opinion as vaccination. This was evident last month as Cochrane evidence on both the HPV and Influenza vaccines hit the headlines and sparked an intense debate here in Australia. Catch up on all the coverage with our vaccination media wrap.

Consumers & the evidence eco-system

Cochrane Australia's Julian Elliott, Tari Turner and Anneliese Synnott explore the role consumers are set to play in the new health evidence eco-system in the latest

Example 2

This detail from a SUPPORT summary format is a good example of making the finding statements easy to spot, by highlighting them in bold and using a blue arrow. This strategy is used consistently throughout the series of summaries, so that a returning reader learns that text formatted in this way means that it is a finding.



1) Immunisation uptake in children under two years

The review summarised four studies that took place in urban settings in USA and Ireland, among populations that were described as economically disadvantaged. Here, lay health workers made home visits to parents, gave them information about the importance of routine childhood immunisations, and encouraged them to visit clinics for child immunisation. These studies showed the following:

→ **Lay health worker based promotion strategies probably increase immunisation uptake in children, compared to usual health care services**

⊕⊕⊕○
Moderate: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

⊕⊕○○
Low: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

⊕○○○
Very low: We are very uncertain about the estimate.

For more information, see last page.

Immunization uptake in children under two

Patients or population: Children less than two years
Settings: Formal or informal low income communities in USA (3 studies) and Ireland (1 study).
Intervention: Lay health worker interventions to promote immunization uptake
Comparison: Usual health care services

Outcomes	Comparative risks*		Relative effect (95% CI)	Number of participants (studies)	Quality of the evidence (GRADE)
	Without lay health workers	With lay health workers			

Example 3

This infographic is a good example of making the content easy to scan by breaking it into chunks, using short headings that stand out, and shortening text through use of drawings. However, you should not solely rely on images when presenting findings. Provide access to text-based alternatives when presenting findings as images, in order to not exclude people with visual impairments.

Return to the checklist

Item 7

Have you shown that the evidence involves real people?

Description

Trials and reviews focus on groups of people rather than individuals. Study participants are lifted out of their contexts in order to make generalizations. Some audiences may therefore see summaries of Cochrane Reviews as “lifeless” or “impersonal” [21].

> *“I think it's a typical research site, lifeless, there's no warmth. That was my first impression anyway.” [21]*

Pictures and personal stories can help place the individual back into the review findings. Fictional characters and vignettes may be able to do the same [44]. Personal stories also describe a person’s definite experience rather than a probable experience [1]. For these and other reasons, target audiences may see personal stories as more familiar, more realistic, and more useful or meaningful than statistical findings [1, 21, 24, 44, 45].

Pictures and stories can illustrate what it means for a person to **have a health condition** or **use a treatment**. But the use of pictures or stories to illustrate the **effects** of a treatment may introduce bias [21, 24, 44]. For instance, it may over-emphasize a benefit or a harm [44, 46].

At a minimum:

- Refer to “people, “women”, “children” rather than “participants”.
- Refer directly to these people (“*Women who had home births had more…*.” instead of “*Home births led to more*....”). If this takes up a lot of space, try to refer to them once or twice to remind the audience that real people are involved.

Ideally, also:

- Consider giving a more detailed description of the people who use the intervention or treatment. One strategy could include:
    - Using stories or pictures to describe people’s experiences of the condition or the treatment. This can include the experiences of healthcare users, carers, healthcare providers, or others with first-hand experience of the topic. You could use stock photos or fictitious stories. But you could also use “real” photos

or stories of people that you or the review authors have contact with (with their permission).

- Refer to "*the review authors"* and not only to "*the review".*
- Consider giving space to the review authors' perspective. Some strategies could include:
    - Using names, pictures, or stories to describe who the review authors are (with their permission).
    - Using names, pictures, or stories to describe the review authors' motivation for or thoughts about the review (with their permission).

Be careful about:

- Using pictures or stories to illustrate the **effects of a treatment** as this may over-emphasize benefits or harms. If you do choose to do this, think carefully about the extent to which these pictures or stories reflect the evidence. Clearly distinguish between what the evidence says and people's personal views, experiences, and choices.
- Relying on pictures as your only way of showing that the evidence involves real people.
- Pictures published online need text descriptions so that the information in them is available to people using screen readers (for instance, people with visual impairments).
- Your choice of pictures:
    - Make sure that you have **permission** to use the pictures in this context.
    - Find pictures that look like people who could have the condition; that are respectful, diverse, accurate and sensitive towards these people; and that don't reinforce stereotypes. For instance, in this Evidently Cochrane blog about prevention of type 2 diabetes, the authors deliberately chose a positive image of two overweight adults exercising with their child.
    - Choose pictures that are sensitive to the cultural setting of your target audience. For instance, show people dressed in a way that is culturally acceptable.

Examples

Example 1

In this example from Cochrane Australia's website, the writers have used pictures and personal stories to describe people's experiences of the condition in question, as well as review authors' motivations for doing the review.

"……..The impact of these new findings is perhaps nowhere more evident than on daily ward rounds at Westmead Children's Hospital, where Jonathan and review co-author Deirdre Hahn see on average one case of childhood nephrotic syndrome every one to two weeks.

'Childhood nephrotic syndrome is a well recognised chronic condition in which the kidneys leak protein from the blood into the urine, causing swelling in the face, stomach and legs,' explains Deirdre. '(….) (….).'

Lively ten year old Clay Wu typifies the experience of many children who suffer from nephrotic syndrome, as his father Dean explains. 'Clay is a really active kid who loves nothing more than spending time with his friends and getting along to as many birthday parties as he possibly can,' he says. 'But just before Christmas last year he started feeling tired and listless, and just wasn't himself. He had minor swelling in his leg, which we thought was some kind of mozzie bite. Before long though the swelling spread right up through his body to his face. I took him straight to Emergency and he was admitted right away. Since then he's had to spend a bit of time in hospital and a lot of time at home resting up. It's pretty hard going for such an active boy (….)'"

Photo of review author Deirdre together with Clay, a child who suffers from the condition in question

Reference to the review authors and what motivated them to write the review on corticosteroid therapy for children with nephrotic syndrome

Use of review author's first name

A description of what it is like to have the condition, seen from the perspective of Clay's father Dean

Example 2

This podcast has used personal stories to describe the review author's motivations for and experiences of doing the review.

"…We decided to review the evidence base for this because gum could be an incredibly simple and cheap intervention which, if it worked, might help a very large number of people undergoing surgery. We decided that I would lead on this review as part of my PhD, but at the time we hadn't really anticipated the sheer scale of this research area. The largest review of the topic before ours included 17 studies, so we were completely shocked to end up with 81 randomized trials. We were really surprised that such a huge body of evidence on a topic that appears to be so popular has never been comprehensively reviewed before."

Return to the checklist

Item 8

Have you specified the populations, interventions, comparisons, and outcomes?

Description

People need enough information about the scope of the review to judge whether it is relevant to them [13]. For instance, they need to be able to judge whether the people in the review are similar to themselves, their patients, or their population. They also need to know what the intervention involves, whether what it was compared to is relevant for them, and whether the outcomes measured matter to them.

At a minimum:

- Indicate the review's scope: the **population**, **intervention,** and **outcomes** of interest [13]. Use the actual names rather than "intervention", "outcome", etc.
- Indicate the **comparison** (what the intervention was compared to). In some cases, it will be obvious to your target audience that the comparison is "no intervention" or "usual care". For very brief summaries such as tweets, you can therefore consider dropping this information. But in most cases, you should specify what the comparison is somewhere in your dissemination product.

Ideally, also:

- Consider whether you need to provide a more detailed description of the population, intervention, comparison, and outcomes that the review authors searched for as well as what they found; for example:
    - when your target audience may not easily understand what the population, intervention, comparison, or outcomes are and you need to explain this;
    - where several definitions or variations of the population, intervention, comparison, or outcomes exist, and you need to specify.
- Provide information about the setting and context that the review authors searched for, as well as what they found [6, 26, 33, 47].
- Describe people or treatments that were excluded from the review if this is important for your target audience to know.

Examples

Example 1

In the example below (translated from Norwegian), the writer has specified the population, intervention, comparison, and outcomes of interest.

> "In this systematic Cochrane Review, the review authors asked the following question: Are compression stockings effective for preventing deep vein thrombosis among patients admitted to hospital? People using compression stockings were compared to people who did not use these. "

Example 2

This infographic specifies the populations, interventions, and outcomes of interest, using both words and illustrations. The heading does not indicate what the intervention was compared to (in this case, turning babies was compared to doing nothing), but this information is mentioned elsewhere in the product.

Example 3

In the example below (translated from Norwegian), the author has provided more detail about the included studies, including how the intervention was implemented and the setting.

> "The patients were for the most part hospitalized for surgical procedures….The compression stockings were put on at the day of the procedure or the day before. The patients used them until they were discharged or no longer were bedridden….The studies were conducted in Sweden (6), England (7), Denmark (2), Singapore, and Japan."

Example 4

This adapted SUPPORT summary shows what the review authors looked for and what they found. This can make it easy to find important gaps.

	What the review authors searched for	**What the review authors found**
Studies	Randomized trials, non-randomized trials, controlled before-after studies, and interrupted time series.	45 studies: 8 cluster-randomized trials, 6 randomized trials, and 31 interrupted time series studies.
Population	Any type of healthcare professionals.	Physicians, psychologists, psychiatrists, nurses, critical care fellows, Masters-level therapists, and allied health professionals in the field of community health.
Intervention and comparisons	Printed educational materials, such as clinical practice guidelines, journals, and monographs, delivered personally, through mass mailing or passively via wider channels such as the internet or mass media. Comparison not specified.	Most studies (36/45) evaluated a single item of printed educational material. The 45 studies included the following printed educational materials: journal publications (23); evidence-based guidelines (16); newsletters (6); summaries of clinical guidelines (3); and clinical article reprints (1). Comparisons were no intervention.
Outcomes	Any objective measure either of professional practice (e.g. the number of tests ordered, prescriptions for a particular drug) or of patient health outcomes (e.g.	Prescribing/treatment (39); financial (resource use) (2); general management of a problem (8); diagnosis (4); procedures (7); referrals (4); test ordering (5); surgery (5); patient education/advice (4); clinical prevention

	blood pressure, complications after surgery).	service (3); screening (2); reporting (1); discharge planning (2); patient health outcome (4).
Setting	Any setting.	Country: Canada (12), United States (11), United Kingdom (11), Spain (1), Belgium (1), The Netherlands (2), Finland (1), Ireland (1), Germany (1), Italy (1), Japan (2), Brazil (1), United States & Canada (1). Healthcare setting: general family or community-based practice (10); outpatient (ambulatory) settings (9); hospitals (6); mixed settings (3); municipal health centre (1); managed behavioural healthcare organization (1); clinical setting unclear (15).

Return to the checklist

Item 9

Have you stated that this information is from a systematic review?

Description

People do not always understand that a dissemination product presents the findings of a systematic review rather than a single study [6, 17, 18, 22, 38, 48]. Furthermore, people may not know what a systematic review is, and you may need to explain this [49-51].

At a minimum:

- State that the findings are from a systematic review ("systematic review", "Cochrane Review" etc.) [6, 17, 18, 22, 38, 48].
- Indicate that this is a systematic review and not a single study by referring to the number of included studies [51].

Ideally, also:

- Explain in more detail what a systematic review is [49-51]. Some strategies could include the following:
    - Provide an explanation in your dissemination product.
    - Link the term to an explanation or glossary [10, 21, 24, 25]. But remember that people may overlook explanations if they are not placed close to the terms or concepts they are referring to [17, 26]. Remember also that not everyone has reliable access to the internet, particularly in resource-poor settings.

Examples

Example 1

This example gives a brief explanation of what a systematic review is at the start of the dissemination product.

> "In systematic reviews we search for and summarize studies. The question in this systematic Cochrane Review was.…"

Example 2

This example presents information about the number of included studies at the start of the dissemination product. This helps to underline that this is a systematic review rather than an individual study.

> "We collected and analyzed all relevant studies to answer this question and found 18 studies for inclusion in the review."

Example 3

This example includes a brief explanation of what a systematic review is.

> "**What is a systematic review?**
> A summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise the relevant research, and to collect and analyze data from the included studies."

Example 4

This example also includes a brief explanation of what a systematic review is as well as a link to more information.

> "In systematic reviews we search for and summarize studies that answer a specific research question. The studies are identified, assessed, and summarized by using a systematic and predefined approach (read more Cochrane Consumer Network)."

Example 5

If you have space limitations you can **link** the term “systematic review”, either within the dissemination product or to other external sites, or both. Use of pop-up or explanation boxes may work within your own product. If you are linking an explanation to another site, consider whether the content fits your dissemination product.

Here are some examples of sites that may be useful to link to (but not at all limited to!):

Videos: Does portion size matter?, What is a systematic review?

Illustrations: Cochrane Consumers and Communication Infographics

Text: Cochrane Library, GET-IT Glossary, and Wikipedia

Return to the checklist

Item 10

Have you specified how up to date the review is?

Description

It is important that your target audience knows how up to date the evidence is. The date of the most recent search for studies will provide the most precise information about this. However, the publication date may be easier to understand by people unfamiliar with systematic review methodology.

At a minimum:

- Include the review's publication year.
    - If you have provided a full reference to the review somewhere in your dissemination product, the publication date will be included there. But it is even better to present this information explicitly somewhere in your product.

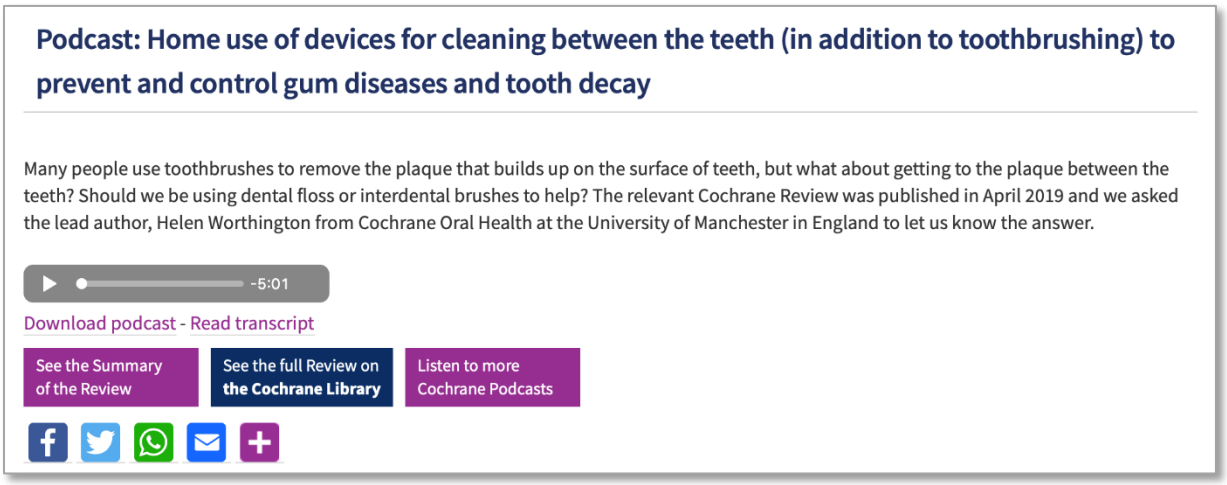
Ideally, also:

- Include information about when the most recent search was done [49-51].

Examples

Example 1

This podcast includes information about the publication year.



Example 2

Text from a plain language summary that includes information about the date of the last search.

> **How up to date is this review?**
>
> The review authors searched for studies that had been published up to January 2019.

Return to the checklist

Item 11

Have you avoided misleading presentations and interpretations of the effects?

Description

There are a number of things to think about when presenting the effects of an intervention.

First of all, you need to focus on the **outcomes that are most important** to patients or other decision makers, regardless of what the review actually found [13]. Don't fall for the temptation of reporting an outcome just because it showed an effect, even if that outcome was not an important one.

Ideally, you should also **present different outcomes in the same way** so that you don't introduce differences where there are none. This can sometimes be difficult if outcomes were measured in very different ways (for instance, as number of people and as points on a scale). But if two outcomes both show an important effect and the certainty in that evidence is the same, you should report this effect using the same types of words, numbers, or symbols wherever possible. The use of narrative plain language statements may be helpful here. These types of statements are based on an assessment of the magnitude of effect and the certainty of the evidence and are used by several Cochrane groups [16-20].

It can also be important to specify **when the effect of an intervention was measured**. Some interventions may make a difference to people in the short term, but not over time, and vice versa. For instance, lower levels of smoking straight after cognitive behavioural therapy may be different to 12 months later. This can be important information for the end user.

When thinking about whether you should present an effect as an important one, **don't be misled by whether or not it was "statistically significant"**. This doesn't actually tell us much about whether the effect was meaningful to the person using the treatment.

You also need to make it clear whether you are talking about a **lack of evidence of effect or evidence of no effect**. People presenting the findings of Cochrane Reviews sometimes confuse these two issues [52]. **A lack of evidence of effect** means that we are very uncertain about the effect. This may be because the review didn't find any studies for that outcome, or that the certainty of the evidence was "very low". Where we have **little or no**

effect, on the other hand, the review did find studies, but the findings show little or no difference between the intervention group and the comparison group, and the certainty of this evidence has been assessed as high, moderate, or low. (Remember that even where the level of certainty is high, studies can never show that there is "no difference" ("no effect"). They can only rule out differences of a specific size. You should therefore refer to "little or no effect" rather than "no effect".)

At a minimum:

- Report the **most important** benefits and harms, including ones for which no evidence was found.
    - The review authors should already have presented the outcomes they consider to be most important in their Summary of Findings Table [29]. However, you may want to check whether they have remembered to include important outcomes for which no evidence was found, such as adverse effects.
    - If there are too many outcomes in the Summary of Findings table to present in your product, decide which outcomes are most important for the people affected by the intervention, and present the other outcomes through a link or another layer.
- Report all benefits and harms **in the same way**, where possible, using the same types of words, numbers, or symbols.
- Decide whether it is important to specify the time point **when the outcomes were measured.**
    - If you decide that this is important information, present it alongside the findings.
- Focus on **important** rather than "statistically significant" differences.
    - Do not use terms such as "not significant", "not statistically significant", "significant", "statistically significant", "trend towards [an effect]", and "borderline significant" [53].
- **Do not confuse** "a lack of evidence of effect" with "no effect".
    - For the first situation, avoid the phrase "no evidence of effect" or "a lack of evidence of an effect". Instead, use statements such as "we are uncertain" or "we don't know".
    - For the second situation, avoid the phrase "no evidence of effect" or "the intervention had no effect". Instead, consider using narrative plain language statements, such as "little or no difference" [17-20, 51].

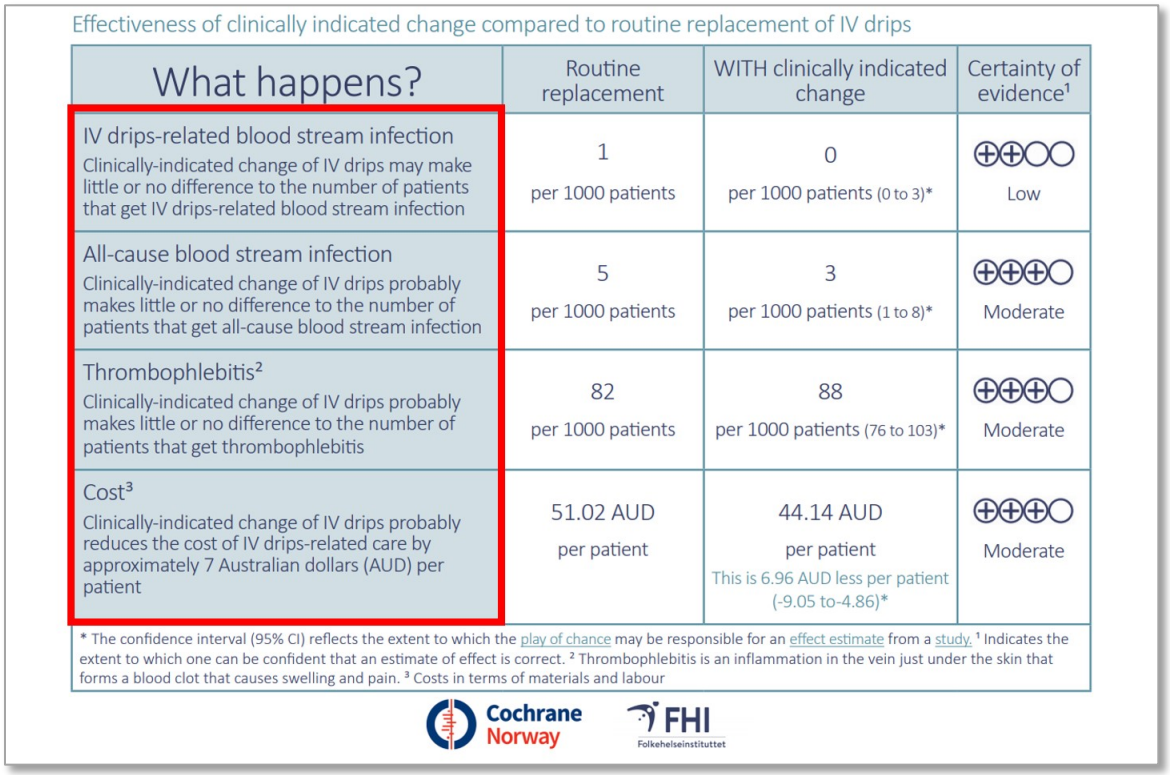
Ideally, also:

- Consider engaging people in your target audience to decide which outcomes to focus on.
- Consider using narrative plain language statements to present the findings of the review [16-20].

Examples

Example 1

In this example, each outcome is presented in the same way, using the same narrative plain language statements and GRADE symbols. They have also used absolute numbers.



Effectiveness of clinically indicated change compared to routine replacement of IV drips

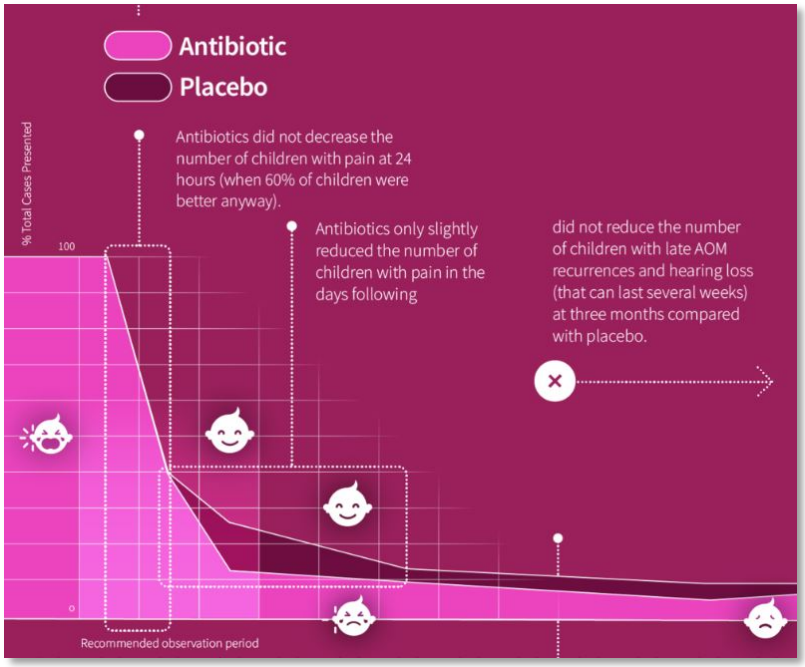
What happens?	Routine replacement	WITH clinically indicated change	Certainty of evidence[1]
IV drips-related blood stream infection Clinically-indicated change of IV drips may make little or no difference to the number of patients that get IV drips-related blood stream infection	1 per 1000 patients	0 per 1000 patients (0 to 3)*	⨁⨁◯◯ Low
All-cause blood stream infection Clinically-indicated change of IV drips probably makes little or no difference to the number of patients that get all-cause blood stream infection	5 per 1000 patients	3 per 1000 patients (1 to 8)*	⨁⨁⨁◯ Moderate
Thrombophlebitis[2] Clinically-indicated change of IV drips probably makes little or no difference to the number of patients that get thrombophlebitis	82 per 1000 patients	88 per 1000 patients (76 to 103)*	⨁⨁⨁◯ Moderate
Cost[3] Clinically-indicated change of IV drips probably reduces the cost of IV drips-related care by approximately 7 Australian dollars (AUD) per patient	51.02 AUD per patient	44.14 AUD per patient This is 6.96 AUD less per patient (-9.05 to-4.86)*	⨁⨁⨁◯ Moderate

* The confidence interval (95% CI) reflects the extent to which the play of chance may be responsible for an effect estimate from a study. [1] Indicates the extent to which one can be confident that an estimate of effect is correct. [2] Thrombophlebitis is an inflammation in the vein just under the skin that forms a blood clot that causes swelling and pain. [3] Costs in terms of materials and labour

Cochrane Norway FHI Folkehelseinstituttet

Example 2

This infographic from Cochrane Australia emphasizes the time point when the outcomes were measured.



Example 3

List of narrative statements to communicate results of systematic reviews [16]

Size of the effect estimate	**Suggested statements** *(replace X with intervention, replace 'reduce/increase' with direction of effect, replace 'outcome' with name of outcome, include 'when compared with Y' when needed)*
HIGH Certainty of the evidence	
Large effect	X results in a large reduction/increase in outcome
Moderate effect	X reduces/increases outcome X results in a reduction/increase in outcome
Small important effect	X reduces/increases outcome slightly X results in a slight reduction/increase in outcome
Trivial, small unimportant effect or no effect	X results in little to no difference in outcome X does not reduce/increase outcome
MODERATE Certainty of the evidence	
Large effect	X likely results in a large reduction/increase in outcome X probably results in a large reduction/increase in outcome
Moderate effect	X likely reduces/increases outcome X probably reduces/increases outcome X likely results in a reduction/increase in outcome X probably results in a reduction/increase in outcome
Small important effect	X probably reduces/increases outcome slightly X likely reduces/increases outcome slightly X probably results in a slight reduction/increase in outcome

	X likely results in a slight reduction/increase in outcome
Trivial, small unimportant effect or no effect	X likely results in little to no difference in outcome X probably results in little to no difference in outcome X likely does not reduce/increase outcome X probably does not reduce/increase outcome
LOW Certainty of the evidence	
Large effect	X may result in a large reduction/increase in outcome The evidence suggests X results in a large reduction/increase in outcome
Moderate effect	X may reduce/increase outcome The evidence suggests X reduces/increases outcome X may result in a reduction/increase in outcome The evidence suggests X results in a reduction/increase in outcome
Small important effect	X may reduce/increase outcome slightly The evidence suggests X reduces/increases outcome slightly X may result in a slight reduction/increase in outcome The evidence suggests X results in a slight reduction/increase in outcome
Trivial, small unimportant effect or no effect	X may result in little to no difference in outcome The evidence suggests that X results in little to no difference in outcome X may not reduce/increase outcome The evidence suggests that X does not reduce/increase outcome
VERY LOW Certainty of the evidence	
Any effect	The evidence is very uncertain about the effect of X on outcome X may reduce/increase/have little to no effect on outcome but the evidence is very uncertain

Return to the checklist

Item 12

f you have used numbers to present the findings, have you used absolute numbers, and labelled numbers clearly?

Description

When you present the findings of a review using numbers, it may **not always be clear to what the numbers are referring**. For instance, some findings may be referring to the number of people, while others may be referring to the number of hospital visits.

"5 to 9 what? People?" [26]

In addition, many outcomes, such as pain or quality of life, are measured using ranges or scales. Some scales are easy to understand, such as the number of hours or days. But **many scales may be unfamiliar to many people**. For instance, people may not know how big the scale is (for instance, whether it goes from 1 to 10 or 1 to 100) or whether a high score or a low score is a good finding.

To confuse the issue even further, you may also have used numbers in tables and figures to report other types of information, such as the number of studies or study participants.

For these reasons, numbers need to be clearly labelled and scales need to be explained.

Another challenge when presenting numbers is **what sort of numbers to present**. The effect of an intervention can be presented as an absolute effect (for instance, "8 out of 100 people who used the treatment had pain relief compared to 4 out of 100 people who did not use the treatment"). But it could also be presented as a relative effect ("there was a 50% increase in the number of people who experienced pain relief…").

The problem with relative effects is that they may give people the impression that a difference is more important than it actually is when the likelihood of the outcome is small to begin with [54, 55]. For instance, a relatively unimportant increase - from 1 out of 100,000 people to 2 out of 100,000 - can also be presented as a 50% increase, which sounds more important. Absolute effects are generally less likely to be misleading than relative effects. They may also be easier to understand. For most Cochrane Reviews, you should also be able to find the absolute effects for most outcomes presented in the

Summary of Findings table. For these reasons, you should present absolute effects rather than relative effects.

When presenting the findings of a Cochrane Review using numbers, most review authors include **confidence intervals**. While the main result (the "point estimate") indicates our best estimate of the effect, the confidence interval indicates the range where the actual effect may be (the "worst case-best case scenario").

Mobile phone message reminders compared to no reminders

People: Patients with healthcare appointments

Settings: All settings (primary, hospital, community, outpatient)

Intervention: Mobile phone text message reminders

Comparison: No reminders

Outcome	***Without reminder***	***With mobile phone reminder***
Attendance at healthcare appointments	678 out of 1000 patients	773 out of 1000 patients (698 to 854 patients)

Point estimate

Confidence interval

There are pros and cons to reporting confidence intervals, and little evidence to support a recommendation to either include or exclude them, or how to present and explain them, if they are included. Deciding whether and how to report confidence intervals may depend on the target audience.

At a minimum:

- Always label the numbers you are presenting to indicate what these numbers are referring to [3]. (For instance, refer to "*12 out of 100* ***children***"; "*3 days* ***per year***"; "*4 hospital admissions* ***per person****".)*
- When presenting outcomes that are measured using scales, describe the range of the scale. Explain what the scale measured and whether a high or a low score is best, if this is not clear.
- Use absolute effects whenever possible. Do not report relative effects (for instance, "*a 50% increase*", "a doubling", "twice as many") unless you have also reported the absolute effects.

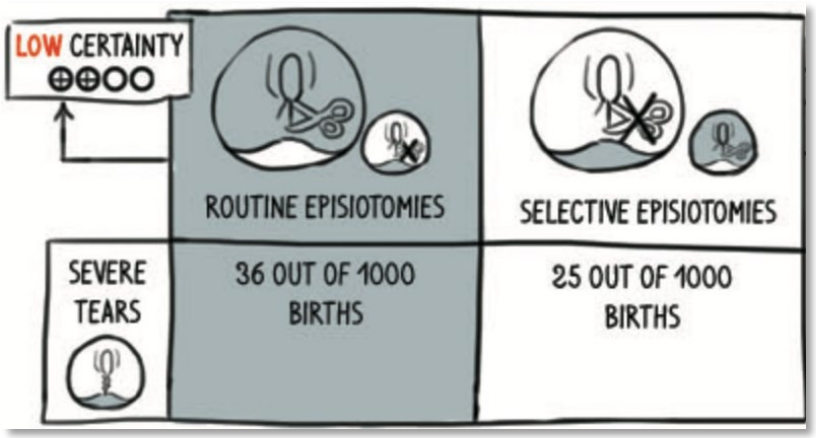
Ideally, also:

- Consider using tables or figures to present numbers. People may prefer this to numbers inserted in the middle of text, which they may find off-putting or too complicated [17].
    - When using a table, don't just depend on column or row headings – they are usually too far away from the number itself to function as a helpful label.
- Consider whether it is useful to include confidence intervals. For instance, in situations where the confidence interval indicates both an important benefit and an important harm, or an important benefit and no effect, you may want to include it and explain it.

Examples

Example 1

In this example, which is part of a larger infographic, the absolute effect of the treatment has been presented, and the numbers have been labelled.



Example 2

In this example, the absolute effect of the treatment (as percentages) has been presented.

	With the drug	*With no drug*
Number of people who said they experienced pain relief	8% of the people in the studies	4% of the people in the studies

Example 3

In this example, pain has been measured using a scale. The range of the scale has been described, and it is clear whether a high or a low score is best.

> People measured their pain on a scale from 0 to 100 points, where 0 points meant no pain. The people who took the drug scored on average 23 points. The people who didn't take the drug scored on average 5 points higher.

Example 4

In this example, the confidence interval has been referred to, using one of the statements suggested by EPOC for reporting confidence intervals in statements of effects [19].

> People taking the drug may have more pain relief than people not taking the drug. However, the effects of the drug vary, and it is possible that the drug makes little or no difference.

Return to the checklist

Item 13

Have you described the certainty of the evidence?

Description

It is important to tell your target audience that not all the findings of a review are equally certain, and not doing so can be misleading. Giving people information about the certainty of the evidence is therefore commonly recommended [1, 12, 13]. Some people have also argued that admitting uncertainty is a sign of humility and can build trust [2] and increase credibility [10].

All authors of Cochrane intervention reviews are now expected to use GRADE to assess the certainty of the evidence (also referred to as "quality of the evidence") for each outcome [29]. This means that it should be relatively straightforward to extract this information from the review.

However, people may have mixed views about being presented with uncertainty [33, 56]. People may also have difficulties in understanding what a GRADE assessment is, what it is based on, and its implications for the interpretation of review findings [10, 18, 34]. You may therefore need to explain some of these issues.

At a minimum:

- **Never** state that an intervention works or doesn't work if the certainty is less than high. Instead, modify your statement to reflect your uncertainty.
- **Always** refer to the certainty of the evidence, either explicitly or implicitly.
- Make sure that information about certainty is **close to or integrated** into the findings.

Some strategies for doing this include:

- Using narrative plain language statements [16-20]. The use of standardized narrative text here, and elsewhere in the summary, can also be helpful when translating summaries to other languages [57].
- Referring to the certainty of the evidence using the GRADE symbols or other visual presentations.

Ideally, also:

- Refer to the certainty of the evidence explicitly, by specifying the level of certainty for each outcome.
- Explain what “certainty of the evidence” means [10] and what the different GRADE levels mean [17]. Do this either as part of your dissemination product, or through links.

Be careful about:

- Using colours as the only way to indicate certainty of the evidence. This can be difficult for people with vision problems. This information will also be lost completely when documents are printed in black and white.

Relevant links

- For guidance on using narrative, plain language statements, see the Cochrane Handbook version 6, chapter 15 [16].

Examples

Examples where the certainty of the evidence has been referred to implicitly and explicitly, using narrative, plain language statements:

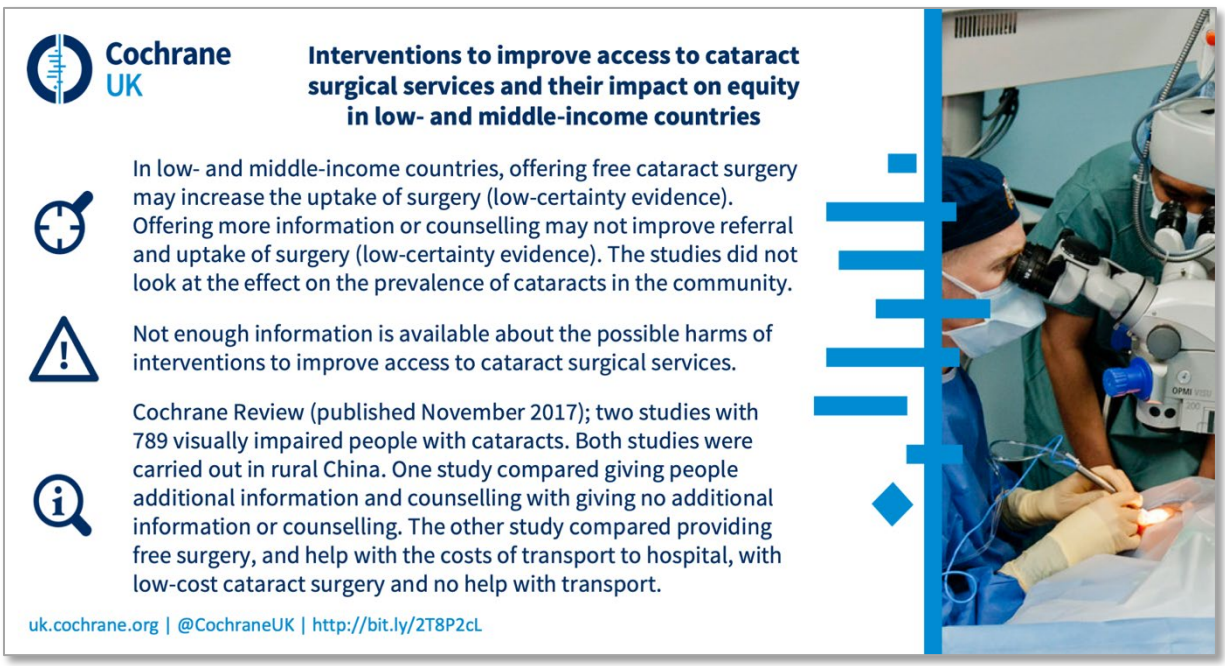
Example 1

In this plain language summary, the review authors have used a modifier ("may") to implicitly indicate that the evidence is low certainty. They have also added the level of certainty explicitly at the end of each statement.

- Offering more information or counselling may not improve referral and uptake of surgery (low-certainty evidence).
- Offering free cataract surgery may increase the uptake of surgery (low-certainty evidence).
- There was no evidence on what happens to the levels of cataract in the community.

Example 2

In this blogshot of the same review, the "may" modifier is still used to implicitly indicate the level of certainty. The explicit information about levels of certainty has been dropped to keep the blogshot short.



Examples where there is an explanation of "certainty of the evidence" and what the different GRADE levels and symbols mean:

Example 1

This example from a SUPPORT summary also includes an explanation of certainty of the evidence.

About certainty of evidence (GRADE)

The "certainty of the evidence" is an assessment of how good an indication the research provides of the likely effect, i.e. the likelihood that the effect will be substantially different from what the research found. By "substantially different" we mean a large enough difference that it might affect a decision. These judgements are made using the GRADE system, and are provided for each outcome. The judgements are based on the study design (randomized trials versus observational studies); factors that reduce the certainty (risk of bias, inconsistency, indirectness, imprecision, and publication bias); and factors that increase the certainty (a large effect, a dose response relationship, and plausible confounding). For each outcome, the certainty of the evidence is rated as high, moderate, low, or very low using the definitions on page 3.

For more information about GRADE

About the certainty of the evidence* (GRADE)

High: This research provides a very good indication of the likely effect. The likelihood that the effect will be substantially different† is low.

Moderate: This research provides a good indication of the likely effect. The likelihood that the effect will be substantially different† is moderate.

Low: This research provides some indication of the likely effect. However, the likelihood that it will be substantially different† is high.

Very low: This research does not provide a reliable indication of the likely effect. The likelihood that the effect will be substantially different† is very high.

* This is sometimes referred to as "quality of evidence" or "confidence in the estimate".

† Substantially different = a large enough difference that it might affect a decision.

Example 2

This example includes an explanation of certainty of the evidence.

Certainty of the evidence (GRADE)

When we summarize studies and present the finding (the "effect estimate"), we also need to say something about how certain we are about this finding. The certainty of the evidence tells us something about how sure we can be that the finding reflects real life. GRADE is a system (or a tool) that we use to make these judgements. Among the elements we judge in GRADE are:

- how well the studies were conducted
- if the studies are large enough
- if the studies are similar enough
- how relevant the studies are
- if all relevant studies have been identified

Example 3

This example from an infographic developed by Shauna Hurley from Cochrane Australia is a novel way of indicating the certainty (or quality) of the evidence.

Return to the checklist

Item 14

Have you presented the findings in more than one way?

Description

When presenting the findings of Cochrane Reviews, different formats (such as words together with numbers, graphs, or tables) have different strengths and weaknesses.

Numbers are more precise than words. Words, such as “low” or “moderate risk” and “some” or “rare side effects” can mean different things to different people [58-60] and can cause misunderstandings, such as overestimation [61]. On the other hand, **words** are often easier to understand, and easier to use than numbers [62]. Words can also help give your audience a quick summary of the findings, and can help them decide whether they want to continue on to more precise information [26].

People may prefer a **combination of words and numbers** when reading about Cochrane Reviews [17, 18]. Seeing findings presented in both words and numbers may also help people feel more confident in their understanding of the numbers [26].

People’s preference for words or numbers also depends on the manner in which they are presented. Some people may find it off-putting and complicated to see numbers in the middle of a paragraph or sentence, and may prefer them in tables [17]. **Graphs**, **figures,** and **tables** can help organize and give structure to numbers. They can also help break up blocks of text [17]. Some people may also see **infographics** as more enjoyable, user friendly, and easy to read than mainly text-based presentations [63, 64]. But others may see mainly text-based presentations as clearer or more concise [64].

People have different needs and preferences, and the same format is unlikely to be suitable for everyone [2, 64]. The format you use may depend on your audience. For all audiences, however, non-text content like images, charts, icons, and infographics, must provide access to an appropriate text equivalent so the information is universally accessible. Likewise, audio content, such as podcasts, should be accompanied by a transcript.

At a minimum:

- Consider using both words and numbers and using different media to present the findings.

- If you cannot present findings in more than one way, provide links to additional products that use other formats where possible:
    - For providing numbers: link to the Summary of Findings table.
    - For providing words: link to the plain language summary.
    - For providing graphics: link to a visual summary or infographic, if there is one.

For text-heavy presentations:

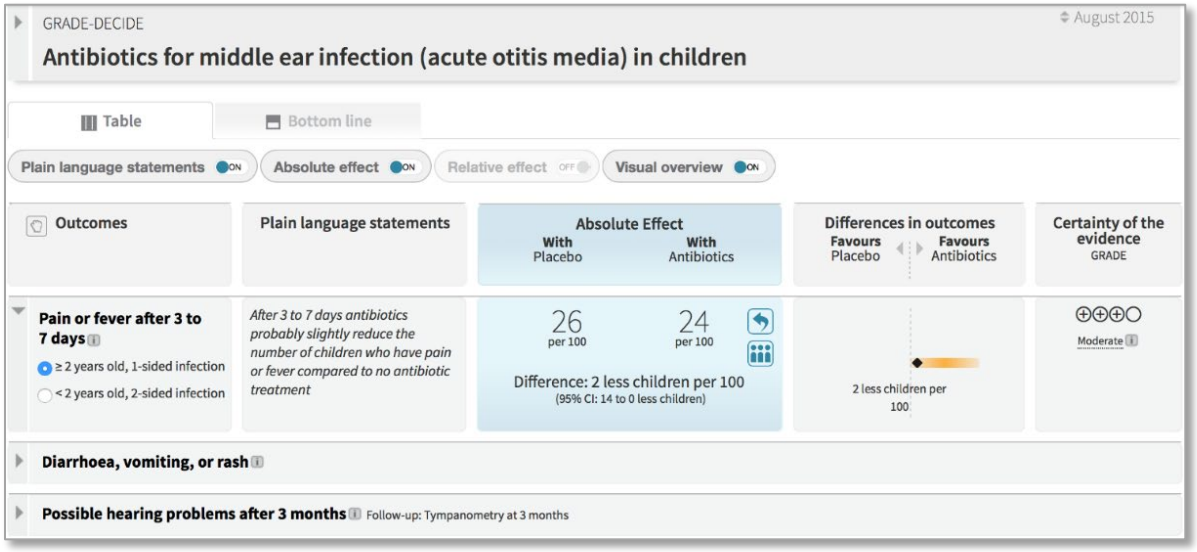
- Consider using tables, graphs, or figures to present findings in more than one way and provide structure to the numbers.
    - Remember that people often read tables, graphs, and figures separately from the body of the text. Make sure they can stand alone, with self-explanatory labels and text.

For infographics resources and examples, see the Cochrane Training website.

Examples

Example 1

In this Interactive Summary of Findings table, a reader can choose to view findings presented as words, numbers, or graphics. The graphics are automatically generated, based on the absolute effects. You can use the interactive Summary of Findings tool to generate static graphics by creating a table and taking screen shots.



Example 2

In this example, findings are presented in the text as bullet points, and also as words and numbers in a table that provides structure to that information.

Cochrane - Briefly summarised 2018

Can patients influence clinical practice?

This Cochrane review shows that patient-mediated strategies, such as patient information, patient education or when patients give information about themselves, can help improve clinical practice.

What does the research tell us?

In systematic reviews, available research is collected and critically appraised. The research question in this systematic Cochrane review was: What is the effect of patient-mediated strategies on clinical practice? Patient-mediated strageies were compared to no intervention or usual care. Findings from four types of patient-mediated strategies are presented below.

Results

- Patient-reported health information probably improves clinical practice
- Patient information may improve clinical practice
- Patient education probably improves clinical practice
- Patient decision aids may make little or no difference to clinical practice

Illustration: Marita S. Fønhus, Cochrane Norway

Effectiveness of different patient-medited strategies on clinical practice[2]

What happens?	WITHOUT patient-mediated strategies	WITH patient-mediated strategies	Certainty of evidence[1]
Patient-reported health information Patient-reported health information probably improves clinical practice[2]	17 per 100 patients	26 per 100 patients (23 to 30)*	⊕⊕⊕◯ Moderate
Patient information Patient information may improve clinical practice[2]	20 per 100 patients	32 per 100 patients (24 to 42)*	⊕⊕◯◯ Low
Patient education Patient education probably improves clinical practice[2]	35 per 100 patients	46 per 100 patients (39 to 54)*	⊕⊕⊕◯ Moderate
Patient decision aid Patient decision aids may make little or no difference to clinical practice[2]	37 per 100 patients	32 per 100 patients (24 to 43)*	⊕⊕◯◯ Low

* The confidence interval (95% CI) reflects the extent to which the play of chance may be responsible for an effect estimate from a study. [1] Indicates the extent to which one can be confident that an estimate of effect is correct. [2] Clinical practice is defined as healthcare professionals following recommended clinical practice (following clinical Guidlines and recommendations)

Cochrane Norway FHI

Example 3

This tweet illustrates an inventive way of contrasting the actual words and numbers from a review with what the media wrote.

Return to the checklist

Item 15

Where the topic or findings may be upsetting, controversial, or disappointing, have you handled this sensitively?

Description

Some presentations of Cochrane Reviews may be precise and easy to understand, but may ignore the emotional impact of the topic or the findings on the target audience. For instance:

- Some topics or outcomes, such as death or miscarriage, can be **upsetting** to read about.
- Other topics, such as abortion care or cochlear implants, may be **controversial** for some target audiences. This is likely to be context-specific, and will vary across target audiences and settings.
- Reviews that show that a treatment has little or no effect can be helpful for many people, as it can help them avoid treatments that do no good. But they can also be particularly **disappointing** for patient groups with few options open to them, and could make them lose hope:

"The thing is, I get quite depressed about the difference being so small....
I got quite preoccupied with all these types of treatment that didn't seem to be worth the bother. And I've tried loads of them!...It's been a really tiresome process, I've just got worse!… Actually, it makes me quite angry!…I wonder what the point of it is.
Why are all these treatments here if they don't work anyway?" [21]

At a minimum:

- Think about whether the review's topic or the findings are likely to be upsetting, controversial, or disappointing to people. Where this is the case, think critically about the language and images you use and make sure you are sensitive to these issues.

"Family therapy is a controversial treatment for anorexia because in the past the family was often blamed for the condition. So we tried to be sensitive to that when we made the infographic. For instance, we didn't want the image to look like the family was in therapy and we used an image where you couldn't tell who the person was who was in therapy." [Jess Hendon, Cochrane Common Mental Disorders Group]

Ideally, also:

- Where the topic or findings could be **upsetting**, **controversial,** or **disappointing**, acknowledge this.
- Explore this further through gathering feedback from your target audience.
    - Their reactions will probably vary. But their opinions are likely to be more relevant than your own.
    - Remember that it can be difficult to predict people's reactions if you are not familiar with the topic area. If you have worked professionally with a topic for several years, you may also have become 'immune' to its emotional impact.
- Where findings are likely to be **disappointing,** make sure that **"Further research is needed" is not your only conclusion**. It is important to let people know about evidence gaps. But it is also important to remember how disappointing and unhelpful this conclusion can be. Consider whether you can offer more constructive messages. Some strategies could include the following:
    - Think about whether it is possible to **highlight research in progress** that may inform the next update of the review.
    - Remind your target audience that decision makers also think about other factors, such as their **values and preferences and the cost and availability** of the treatment. When we don't know if a treatment is effective, people's decisions will rely even more on these factors.
    - Consider offering links to **sources of support**, such as patient organizations or support groups.

Be careful about:

- Linking to external sources of support uncritically. Check their sources of funding and any conflicts of interest. Make sure they are relevant to the geographical region that your target audience comes from. Make it clear to your target audience that you are not responsible for the content of their site.

Examples

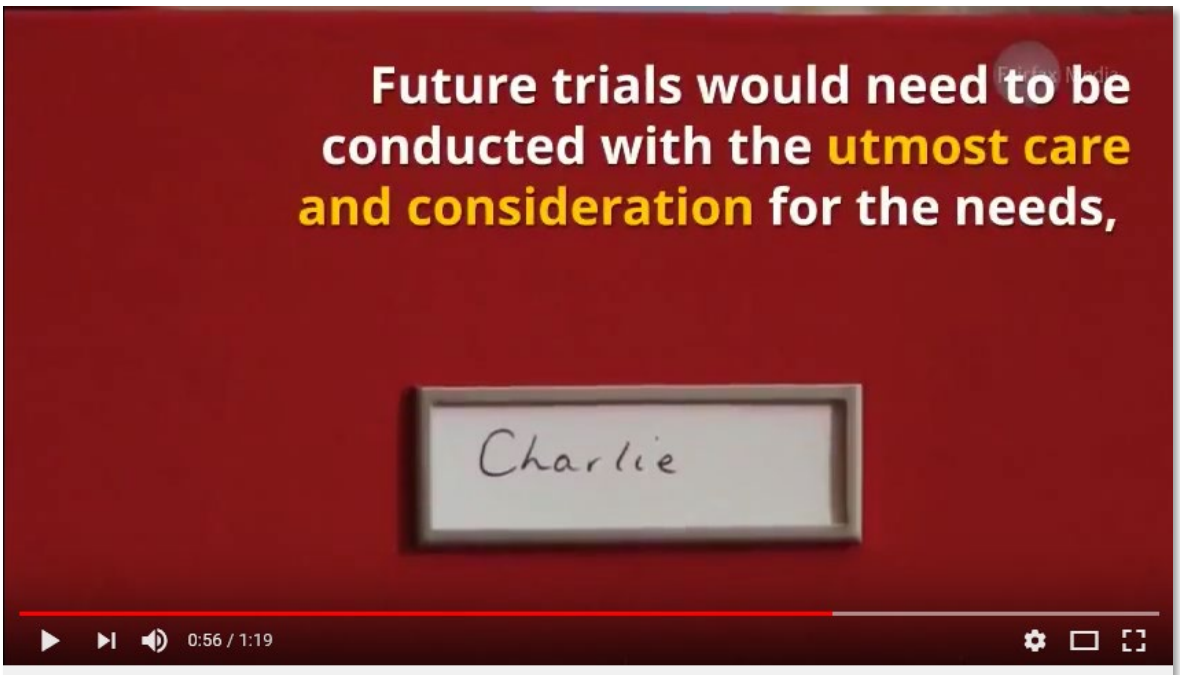
Example 1

In this example from a press release describing a Cochrane Review, the authors have acknowledged that the topic could be upsetting.

> "In adults, chronic pain lasting for three months or more is known to have a devastating effect. What is less well known is that one in five children also report chronic pain, which is both distressing and disabling for children and their parents."

Example 2

This video attempts to present a Cochrane Review on stillbirth in in a sensitive way. It may not work in all settings or for all people. When developing dissemination products, especially for sensitive topics, it is important to user test them with the people from your specific target audience:



Cochrane Review: Interventions for investigating and identifying the causes of stillbirth

Example 3

In this Evidently Cochrane example, the review authors describe "disappointing findings" in a review on reminiscence therapy, but highlight research in progress that may inform updates of the review.

> "…the digital revolution has yet to make its mark on reminiscence research, in terms of the randomized controlled trials that feed into Cochrane Reviews…. We are sure our next up-dated review will feature much development in this exciting area."

Example 4

In this example, based on a summary prepared for clinicians by the Cochrane Complementary Medicine Field, the summary authors have explained that further research is needed. But they have also then suggested how people might reach decisions when this research is lacking.

> "The authors suggest that further research, consisting of larger and better studies, is necessary before the effects of acupuncture on symptoms of carpal tunnel syndrome can be estimated with any certainty. In the absence of evidence on the effectiveness of acupuncture, the decision to use acupuncture may depend on availability, cost, and patient preference."

Return to the checklist

Item 16

Have you made it clear (a) that the review was prepared by Cochrane and (b) who prepared the dissemination product?

Description

People need to know that the **information is based on a Cochrane Review**. They also need to know **who prepared the dissemination product**, as you may have prepared the product with others from outside of Cochrane. Both pieces of information are important for reasons of transparency.

For some people, knowing that the information comes from a Cochrane Review can increase its trustworthiness [10, 30]. But not all people are familiar with Cochrane [17]. Some people may think that research organizations like Cochrane are commercial or an extension of the government [21]. It may therefore be important to emphasize that Cochrane is an independent, non-governmental, not-for-profit organization.

Even if you include these explanations, your target audience may still not see the information as credible or trustworthy. You may therefore need to collaborate with other individuals or organizations that are familiar and perceived as trustworthy to your target audience when presenting your dissemination product. Collaborating with relevant individuals and organizations can also increase the usefulness and relevance of your dissemination product. The most appropriate messenger of the information will vary according to your target audience [36].

At a minimum:

- Mention that the information is from a Cochrane Review [10, 22, 30, 49-51, 65].
- Consider using the Cochrane logo or the logo of your Cochrane group [10, 24, 66]. (See Cochrane Brand Guidelines and Cochrane logo and endorsement policy.)
- Make it easy to find out who prepared and funded the dissemination product (for instance, the name of the Cochrane group and any collaborating organization).

Ideally, also:

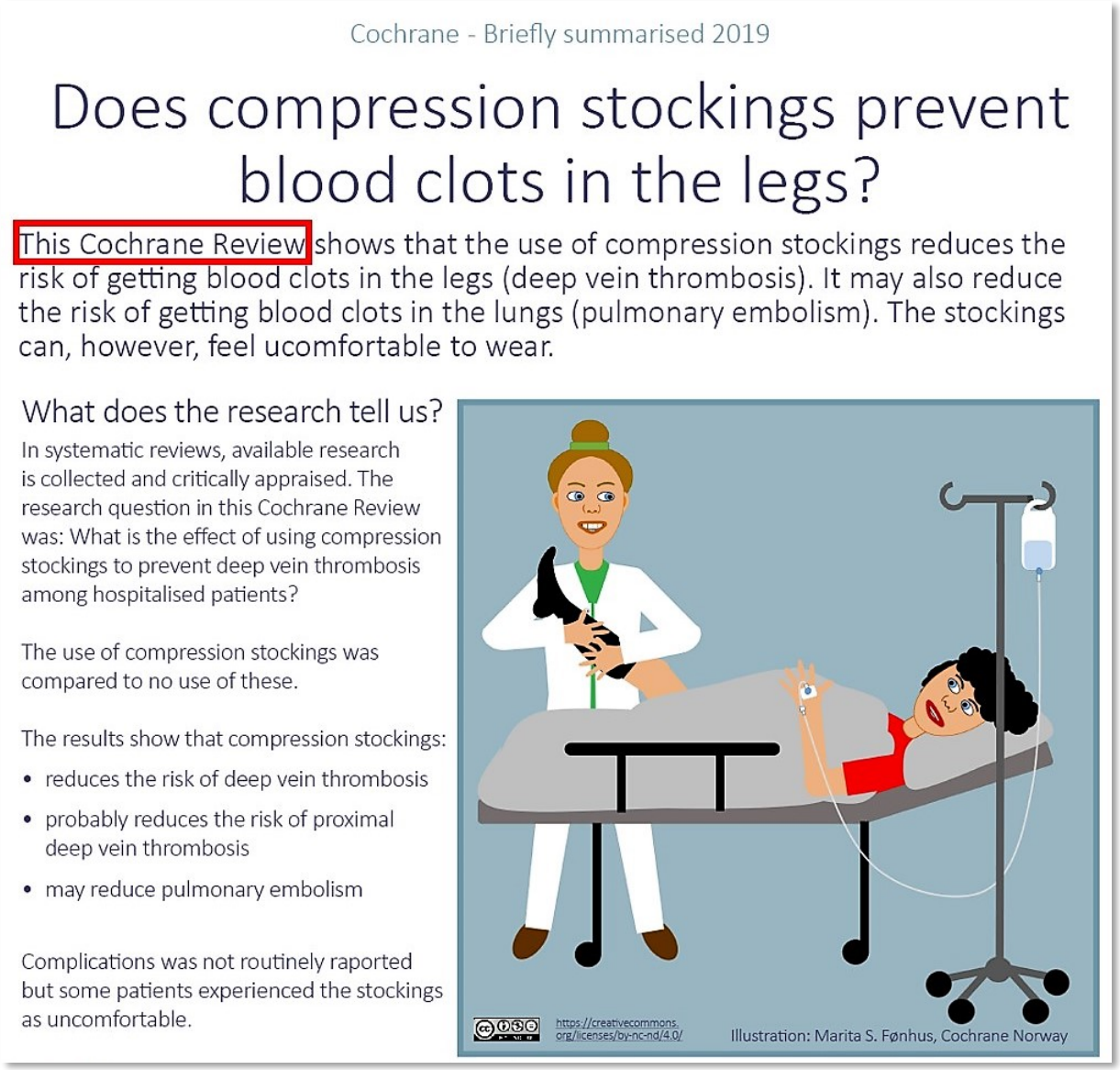
- Explain what sort of organization Cochrane is (i.e. an international, independent, non-governmental, not-for-profit organization). Do this either as part of your dissemination product, or through a link (for instance: https://www.cochrane.org/about-us).

- Explain what is good about Cochrane Reviews (i.e., high-quality methods, policies regarding conflict of interest, keeping reviews up to date, etc.). Do this either as part of your dissemination product, or through a link (for instance: https://youtu.be/WpY0ogAHNJY).

Examples

Example 1

The first paragraph of text in this two-page summary (written in Norwegian) identifies Cochrane as the publisher.



Cochrane - Briefly summarised 2019

Does compression stockings prevent blood clots in the legs?

This Cochrane Review shows that the use of compression stockings reduces the risk of getting blood clots in the legs (deep vein thrombosis). It may also reduce the risk of getting blood clots in the lungs (pulmonary embolism). The stockings can, however, feel ucomfortable to wear.

What does the research tell us?

In systematic reviews, available research is collected and critically appraised. The research question in this Cochrane Review was: What is the effect of using compression stockings to prevent deep vein thrombosis among hospitalised patients?

The use of compression stockings was compared to no use of these.

The results show that compression stockings:

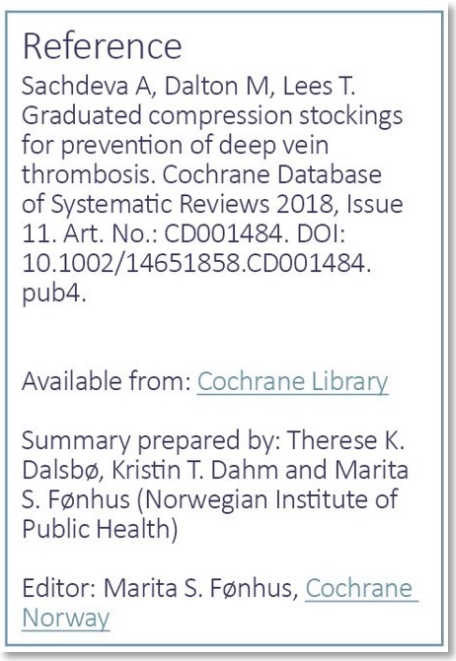
- reduces the risk of deep vein thrombosis
- probably reduces the risk of proximal deep vein thrombosis
- may reduce pulmonary embolism

Complications was not routinely raported but some patients experienced the stockings as uncomfortable.

Illustration: Marita S. Fønhus, Cochrane Norway

Example 2

In this example (written in Norwegian), the reader can find that Cochrane is the publisher of the review; that the Norwegian Institute of Health has created the dissemination product; and that there is a link to the full review.



Reference

Sachdeva A, Dalton M, Lees T. Graduated compression stockings for prevention of deep vein thrombosis. Cochrane Database of Systematic Reviews 2018, Issue 11. Art. No.: CD001484. DOI: 10.1002/14651858.CD001484.pub4.

Available from: Cochrane Library

Summary prepared by: Therese K. Dalsbø, Kristin T. Dahm and Marita S. Fønhus (Norwegian Institute of Public Health)

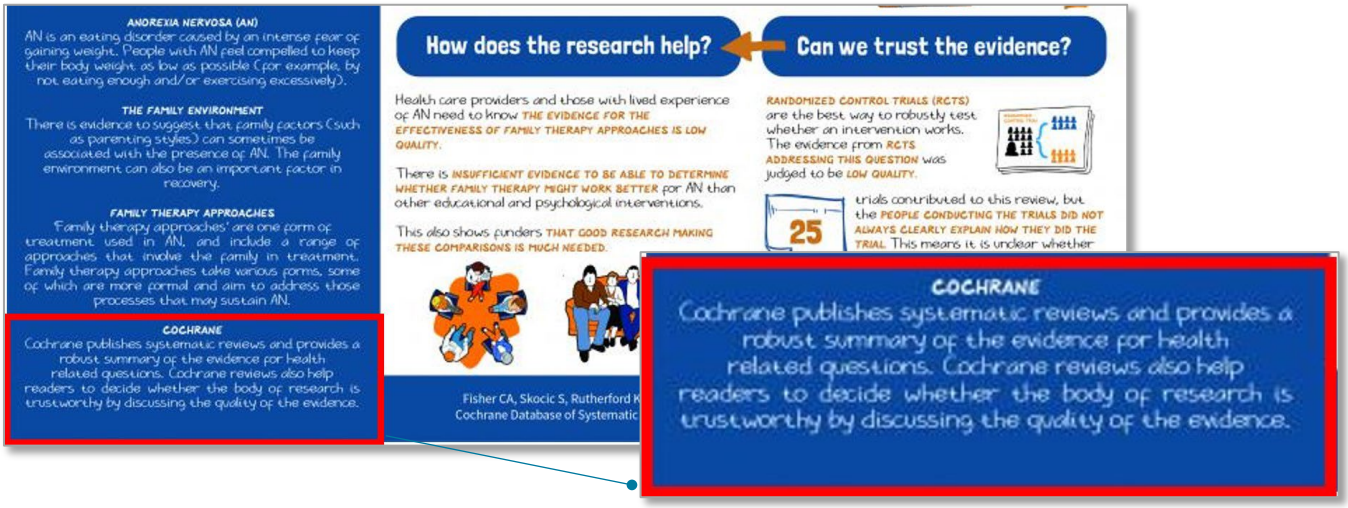
Editor: Marita S. Fønhus, Cochrane Norway

Example 3

The use of logos of both institutions helps signal that while the review is from Cochrane, the dissemination product is from Cochrane Norway and its host institution.

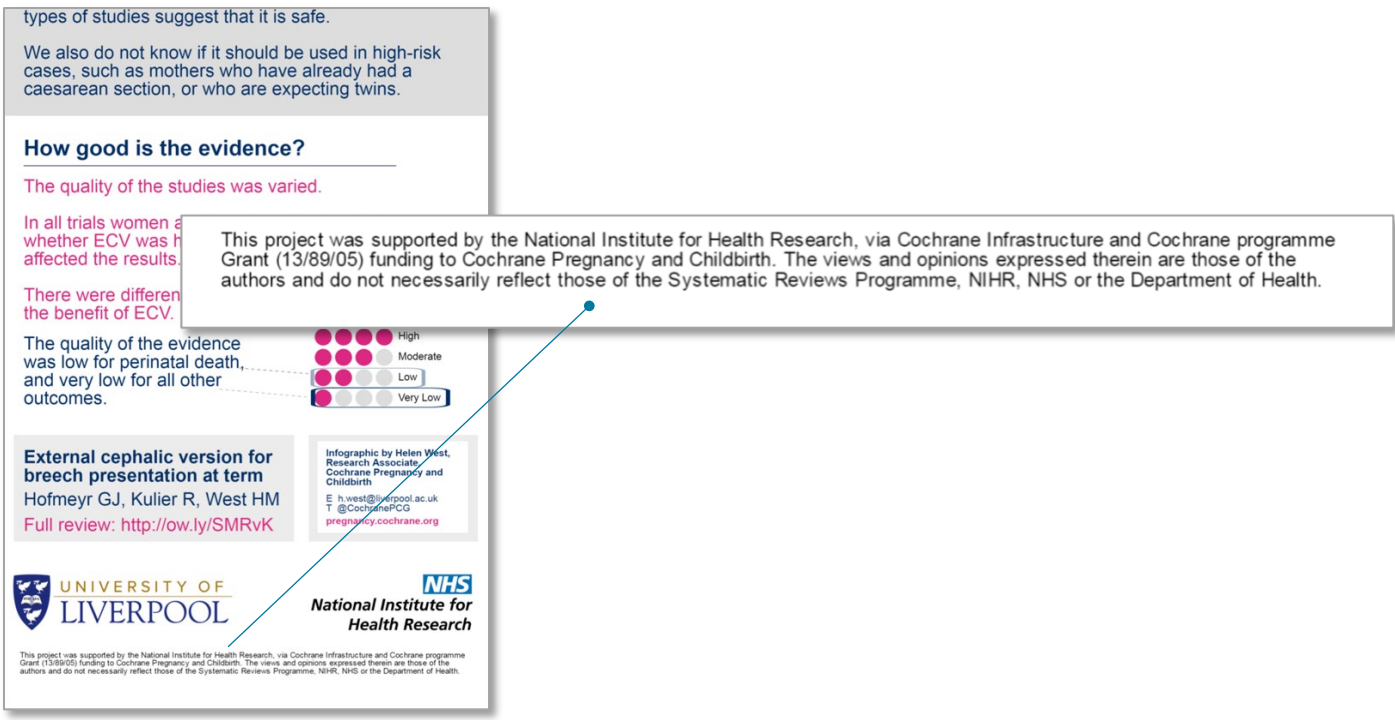
Example 4

In this infographic, the producers have included an explanation of what sort of organization Cochrane is.



Example 5

In this infographic, the producers have included the funding source for the dissemination product.



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Item 17

s it easy for people to find information about who the review authors are, how they were funded, and any conflicts of interest?

Description

For reasons of transparency, your target audience should be able to find information about who the review authors are [1, 10], how the review was funded [1, 56], and whether the review authors have any conflicts of interest [1, 56]. Not all people may want this level of detail [35]. But it should be easy to find for those who do.

At a minimum:

- Provide information about author names, review funders, and declarations of interest. This information is openly available to anyone using the Cochrane Library. The easiest way to provide this information is therefore by providing a link to the review.

Also consider:

- whether you also want to include general information about Cochrane's conflict of interest policy, for instance through a link.

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Item 18

Have you avoided giving recommendations?

Description

People's decisions about whether or not to use a healthcare intervention are not only guided by the intervention's effectiveness. People also think about factors such as how much the intervention will cost, whether it is available or acceptable to them, and whether it is practical or feasible to use. A lot of these factors are also likely to be context-specific.

For these reasons, Cochrane Reviews do not include recommendations [29]. The aim of a Cochrane Review is to **provide the best available evidence, and then let people make their own decisions**.

It can be difficult to avoid giving recommendations. People are used to seeing them in information products such as patient brochures or policy briefs. Your target audience may therefore expect to find them in your Cochrane product [10, 22, 26]. To avoid confusion and manage expectations, consider whether you need to explain to your target audience that recommendations are not included.

At a minimum:

- Do not give recommendations in your dissemination product.
- Also avoid statements such as "There is insufficient evidence to recommend the use of X", as this implies that Cochrane sometimes does give recommendations.

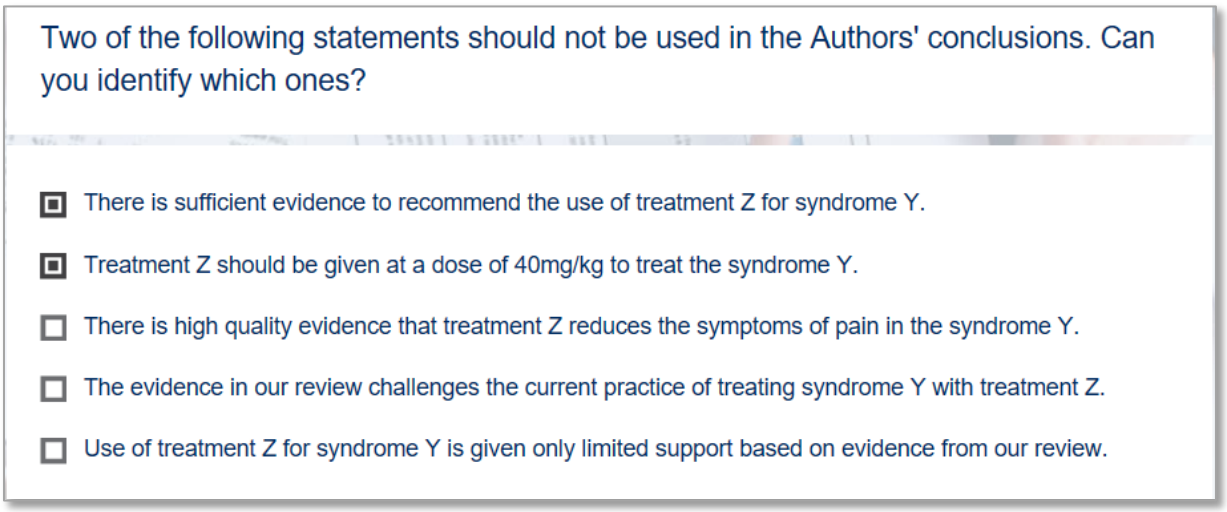
Ideally, also:

- State explicitly that Cochrane does not make recommendations [22], for instance, as has been done here in Cochrane in Everyday Life. Remember that people may overlook explanations if they are not placed close to the terms or concepts to which they are referring [17, 26].
- Think about how you can help people reach their own decisions. Strategies for doing this include:
    - Point out that decision makers often consider factors in addition to the effect of the treatment, such as their **values and preferences and the cost and availability** of the treatment.
    - Suggest questions that people may want to ask themselves or others, such as their healthcare provider, when making a decision.

Examples

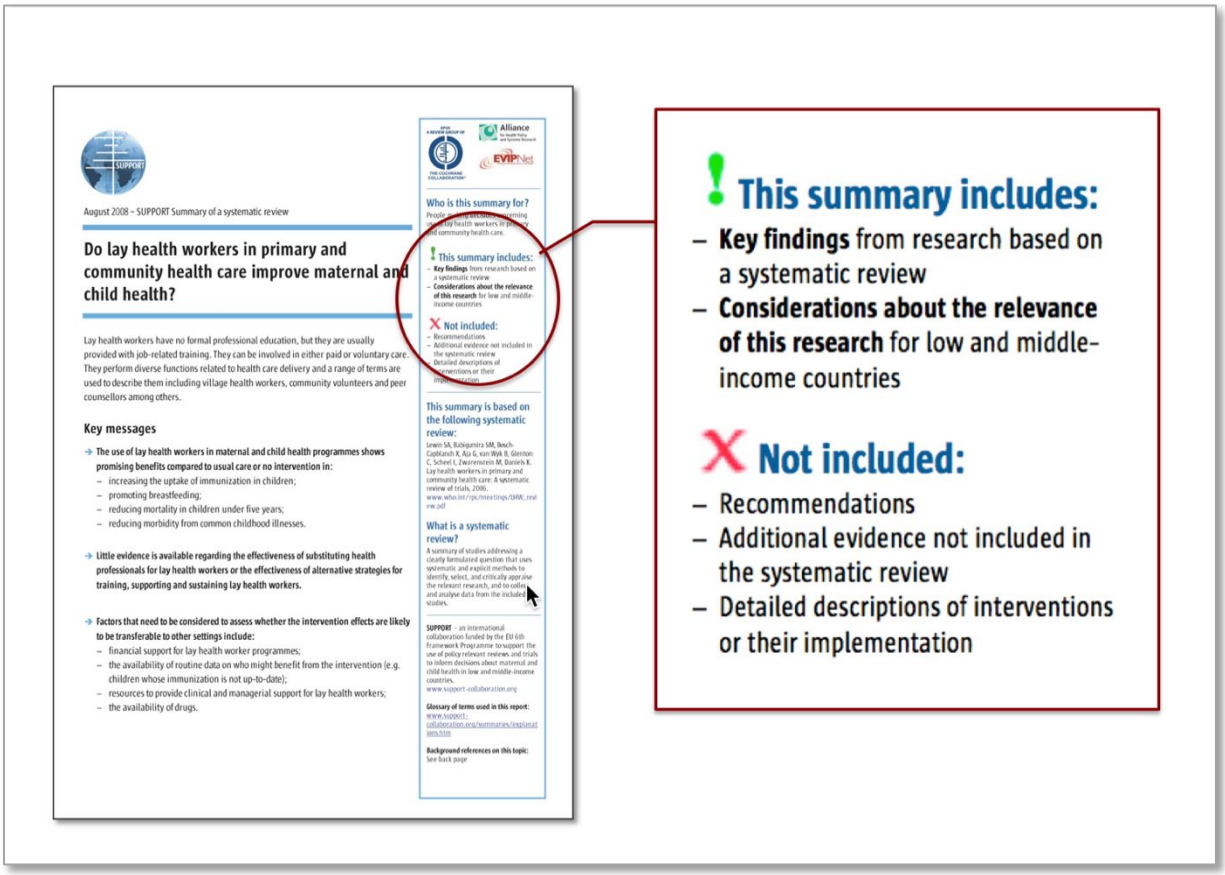
Example 1

Here is an example from Cochrane Training's module on "Common errors: GRADE and interpretation of findings". The first two statements in the list are examples of statements that should not be used because they are recommendations.



Example 2

In SUPPORT summaries, we explicitly state that recommendations are not provided.



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Appendix: presenting review findings in brief summaries such as tweets and blogshots

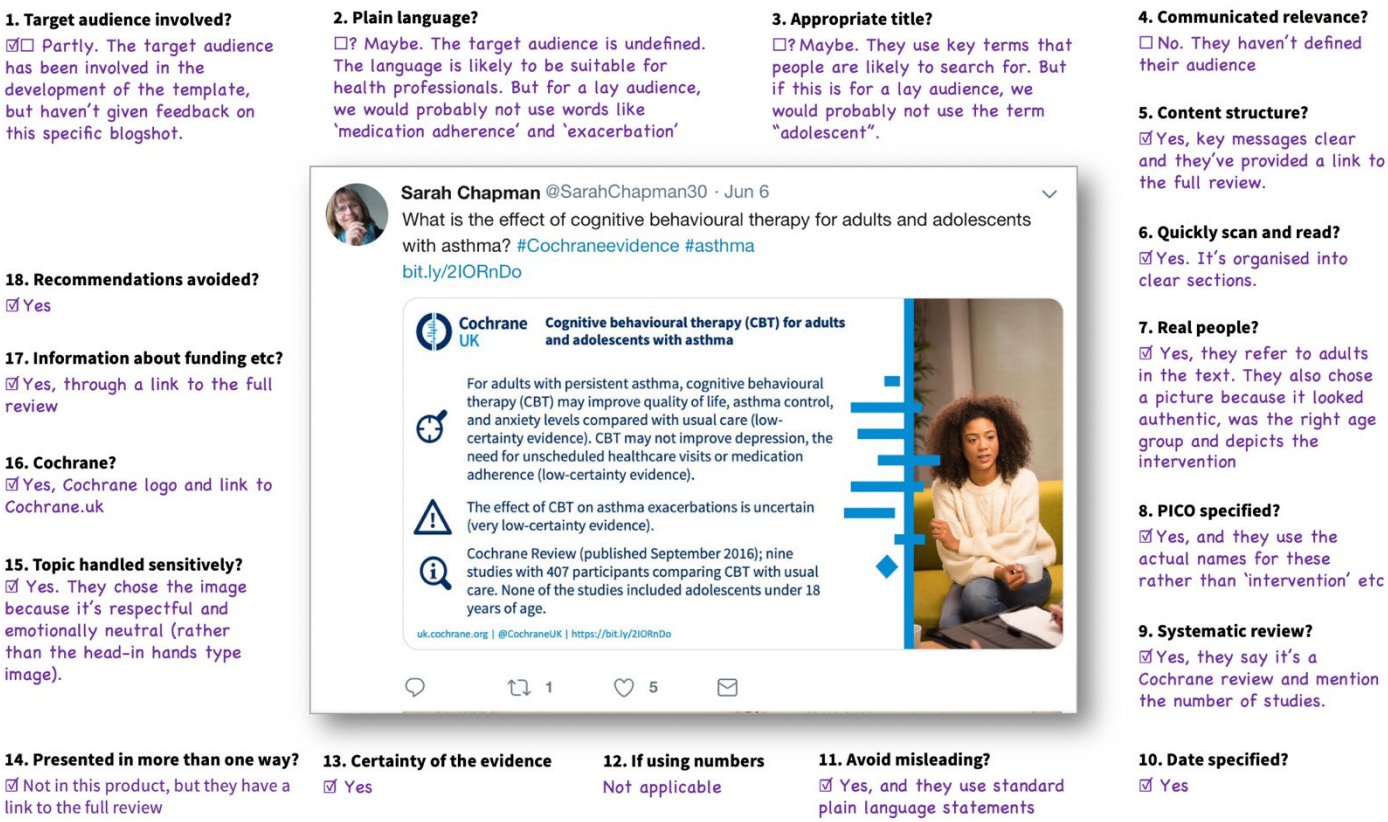
We often prepare brief dissemination products such as tweets to **raise awareness** of a Cochrane Review. In many tweets, and in other brief products such as blogshots, we also **present the review's main findings**.

It may be difficult to follow all of the suggestions in this Checklist in brief products. However, it should be possible to follow the Checklist's minimum requirements. This is particularly easy when the review has:

- only one comparison (or one comparison that is clearly more important than the others);
- findings that point in the same direction;
- findings with similar levels of certainty (i.e. similar GRADE assessments).

For more complex reviews, you should reconsider whether a tweet or a blogshot is the right type of product. (See also Cochrane UK's blogshot guidance, including their section on "Deciding when a Cochrane Review is appropriate for a blogshot".)

This annotated example of a blogshot demonstrates how the items of the checklist can be applied, even in a brief format such as a tweet.



When the findings are more complex than this, you are likely to need more space. In this case, you should assess whether it is possible to give a fair representation of the review findings within a tweet or a blogshot. It may be better to use social media channels such as Twitter to create **awareness** of the review, but without presenting its findings.

Even in situations where the review findings are simple and straightforward, your target audience is often likely to want more information than they can find in a tweet or blogshot. Providing them with a full citation or link to the full review can be enough for some target audiences. However, Cochrane Reviews are not written for a lay audience. In addition, not everyone has free access to Cochrane Reviews. If you have the resources, you should therefore also consider preparing a second dissemination product that includes more information about the findings, and that achieves more than the minimum requirements laid out in this guidance.

You can find more guidance about how to develop blogshots in Cochrane's Blogshot guidance.

About this checklist

What is the aim of the checklist?

The aim of this knowledge translation core principles checklist is to improve the quality and consistency of dissemination products that present the findings of a Cochrane intervention review.

Cochrane aims to make its evidence accessible to decision makers in any country, including consumers and the public, health practitioners and managers, policy makers, researchers and research funders. To meet the needs, skills, and interests of such a wide audience, we need different dissemination products, including products for use in social media, mainstream media, or policy briefs, presented in audio/video or visual formats. All of these products need to maintain sufficiently high-quality standards.

Our challenge when developing dissemination products is to give a reasonably complete, nuanced, and unbiased representation of the evidence while presenting it in a way that people with or without research experience find useful, can understand, and want to read. With this checklist, our primary objective has been to develop a set of principles that achieve a balance between these two goals.

Who is the checklist for?

The checklist is aimed at anyone preparing a dissemination product based on a Cochrane intervention review.

How was the checklist funded?

The checklist was funded through support from Cochrane.

How was the checklist prepared?

- We established a **Project Advisory Group** with Cochrane contributors with expertise and experience in systematic review methodology and/or knowledge translation of systematic reviews.
- We **identified relevant literature** through systematic searches and consultation with Cochrane networks. We searched for (a) reviews focusing on the reporting of systematic reviews of effectiveness to any target group; (b) guidance documents (both Cochrane and non-Cochrane) focusing on the reporting of evidence about intervention effectiveness; and (c) primary studies focusing on the reporting of Cochrane Reviews of effectiveness to any target group.
- We used a **framework analysis** approach to develop the checklist. We chose a checklist currently being developed by us and colleagues at the Centre for Informed

Health Choices as our *a priori* framework. We read each of the selected studies and extracted data that identified problems or described solutions, principles or recommendations when presenting findings from reviews or studies of effectiveness. We applied the *a priori* framework to these data, and adapted the framework in response to these data by adding checklist items or re-defining existing items.

- We carried out **example testing** by applying a first draft of the checklist to existing dissemination products, including Cochrane blogshots, plain language summaries and podcasts. We then revised the checklist in response to this testing.
- We described each checklist item in more detail in an **Annex** to the checklist, using the identified studies as our starting point. As far as possible, we described the issue or problem, how this issue could be addressed, and gave examples.
- We sent the checklist and Annex to the Project Advisory Group and asked for **structured feedback.**
- We **revised the checklist** and Annex in response to Advisory Group feedback.
- We carried out **user testing** among Cochrane contributors involved in knowledge translation activities. We asked them for feedback about the principles themselves and about the checklist and its usefulness and applicability. We carried out two rounds of user testing, and revised the checklist after each round.
- We re-submitted it to the Advisory Group for further feedback. We then carried out final revisions.

Acknowledgements

The checklist was developed by Claire Glenton, Sarah Rosenbaum and Marita Sporstøl Fønhus at Cochrane Norway, with support from Jo Anthony and Karen Head from the Knowledge Translation Department in Cochrane's Central Executive Team.

Thanks also to the following people for their help in the development of the checklist:

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Jo Anthony, Sarah Chapman, Moriam Chibuzor, Mike Clarke, Francesca Gimigliano, Shauna Hurley, Toby Lasserson, Xun Li, Joerg Meerpohl, Colleen Ovelman, Dario Sambunjak, and Nancy Santesso

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Andy Oxman, Atle Fretheim, Simon Lewin, and Signe Flottorp

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