

University of Avignon at the CLEF 2025

SimpleText Track : Guided Medical Abstract Simplification

Ygor Gallina, Tania Jiménez, Stéphane Huet

Avignon Université, LIA, France

10/09/2025

Task 1: Text Simplification

- Task 1: Text Simplification: Simplify scientific text
 - Task 1.1 - Sentence-level Scientific Text Simplification
 - **Task 1.2 - Document-level Scientific Text Simplification**
- Focus on document level because of **context availability**

Complex

This is an update of a Cochrane review from 2011, which included five trials. This update includes seven studies on treadmill intervention in 175 children: 104 were allocated to treadmill groups, and 71 were controls. The studies varied in population (children with Down syndrome, [...])

Simple

We included seven studies on treadmill intervention on 175 children with Down syndrome, cerebral palsy, general developmental delay or children with moderate risk for delay. Treadmill training versus no treadmill training was compared in five studies, including 117 children with one of the [...]

Cochrane Library Trusted evidence. Informed decisions. Better health. Open menu

Cochrane Database of Systematic reviews | Review - Intervention

Treadmill interventions in children under six years of age at risk of neuromotor delay

✉ Marta Valentín-Gudiol, Katrin Mattern-Baxter, Montserrat Girabent-Farrés, Caritat Bagur-Calafat, Mijna Hadders-Algra, Rosa Maria Angulo-Barroso Authors' declarations of interest

Version published: 29 July 2017 Version history
<https://doi.org/10.1002/14651858.CD009242.pub3>

Abstract
Available in English | Español | فارسی

PICOs¹

Plain language summary
Available in English | Deutsch | Español | فارسی | 日本語 | Polski

Authors' conclusions

Summary of findings

Background

Objectives

Methods

Results

Discussion

Cochrane Cochrane is a global, independent, not-for-profit network of health researchers and professionals, patients and carers who work together to produce and promote trusted, high-quality health information

Approaches

Approaches

- Baseline Input
 - Input text is not modified
- Baseline Prompt
- Keyword Simplification
- Cascade

	SARI	LENS	lr
Baseline Input	46.0	41.7	1.8
Baseline Prompt			
Gemma3 4B	35.4	60.7	0.9
Gemma2 9B	32.8	67.8	0.5
Mistral-small 24B	37.4	56.9	1.0
LLaMA3.3 70B	36.4	74.2	0.8

Approaches

- Baseline Input
- Baseline Prompt

Prompt

Please do NOT use a first introductory sentence, only the simplified text

Simplify this text in english

Here is the text : {text}

- Backtranslation
- Keyword Simplification
- Cascade

	SARI	LENS	lr
Baseline Input	46.0	41.7	1.8
Baseline Prompt			
Gemma3 4B	35.4	60.7	0.9
Gemma2 9B	32.8	67.8	0.5
Mistral-small 24B	37.4	56.9	1.0
LLaMA3.3 70B	36.4	74.2	0.8

Approaches

- Baseline Input
- Baseline Prompt
- Backtranslation
 - **Translate** back and forth via spanish (facebook/nllb-200-distilled-1.3B)
 - Hypothesis: translation **artefacts** will shrink and simplify the document
- Keyword Simplification
- Cascade

Approaches

- Baseline Input
- Baseline Prompt
- Backtranslation
- Keyword Simplification
 - Extract **keywords** using MultipartiteRank
 - Generate **simplified words** by prompting an LLM
 - **Search and replace** keywords by their simplification
 - 65% of keywords already simple : **children** → **kids**
 - **ambroxol** → **mucus thinner**
- Cascade

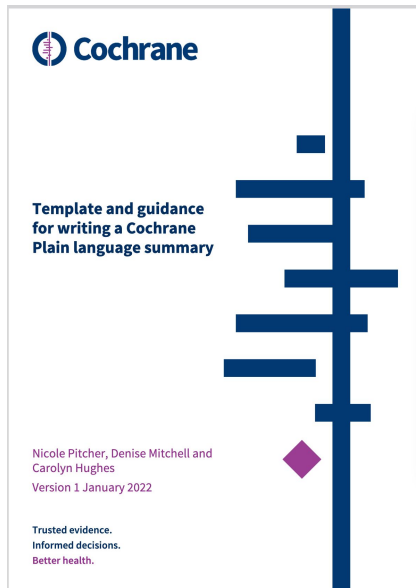
Approaches

- Baseline Input
- Baseline Prompt
- Backtranslation
- Keyword Simplification
- Cascade
 - **Summarize** using **TextRank**
 - **Simplify** by prompting an **LLM**

Cochrane guidance

Cochrane guidance

- Who are we simplifying for?
- What is the goal of plain language summaries?
- Cochrane's guide to plain language summary
- Use curated advice to simplify documents



Guidance for writing a Cochrane Plain language summary

Contents

Introduction	3
1. Template for Cochrane Plain language summaries	4
2. Guidance: the Cochrane Plain language summary, section by section	8
2.1 Plain language summary title	8
2.4 Brief mention of the methods	12
2.5 Summary of results	13
2.6 Main limitations of the evidence	17
2.7 Reporting how current the evidence is	20
3. About Cochrane Plain language summaries	21
4. How to approach writing a Cochrane Plain language summary	23
5. General advice on writing in plain language	25
References	28
Appendix 1 Plain language alternatives to and definitions of common terms	29
Appendix 2 Resources for writing in plain language	31
Appendix 3 Example of Plain language summary for intervention review	32
Appendix 4 Example of Plain language summary for review of diagnostic test accuracy (DTA review)	34

General advice

- 3 kinds of advice
 - Language
 - Style
 - Structure
 - Little structure in reference simple documents
 - Only 6/119 doc contain newline (validation)
- Experiment
 - Rewrite bullet points as sentences
 - Language : 8 sentences
 - Style: 7 sentences
 - Compare “Language”, “Style” and both in a prompt

Guidance for writing a Cochrane Plain language summary

5. General advice on writing in plain language

We encourage you to use this advice as a guide while you write [1, 2, 3]. When you have written your summary, check it against the advice to make sure you have followed all the points, and make any changes you need to.

5.1 Language

- **Use everyday language.** For example, refer to ‘people’ instead of ‘study participants’.
- **Avoid (or, when this is not possible or desirable, explain):**
 - **long words.** For example, use ‘blood thinners’ as an alternative to ‘anticoagulants’.
 - **research jargon.** Use ‘

5.2 Style

- **Keep paragraphs and sentences short,** but vary your sentence length occasionally to keep the readers’ attention. Aim for **an average of 20 words in a sentence**. Break up longer sentences into shorter ones. For example, instead of ‘Most people who smoke want to stop, however many find it difficult to do so, even though they may use medicines that are designed to help them stop’, you could write ‘Most people who smoke want to stop, but many find it difficult. Some who smoke want

5.3 Structure

- **Use subheadings** to guide the reader, break up the text and make it more readable. For example, ‘What is a cataract?’, ‘How are cataracts treated?’, ‘What happens after cataract surgery?’. Whenever possible, we suggest that you phrase subheadings as questions. This gives a more conversational tone to your summary and will help to engage your readers.

General advice

- 3 kinds of advice
 - Language
 - Style
 - Structure
 - Little structure in reference simple documents
 - Only 6/119 doc contain newline (validation)
- Experiment
 - Rewrite bullet points as sentences
 - Language : 8 sentences
 - Style: 7 sentences
 - Compare “Language”, “Style” and both in a prompt

Prompt

Given the following scientific abstract create a lay summary (500 words maximum) using the following guidelines.

{% for g in guidelines %}

- {{ g }}

{% endfor %}

Abstract:

{{ text }}

Few-shot

- 2 curated examples of Plain Language Summary
 - Extracted relevant parts to match cochrane-auto's simple version
- Experiment with few-shot prompting
 - Provide 2 **curated** examples
 - Provide 2 **random** examples (same for all experiments)

Guidance for writing a Cochrane Plain language summary

Appendix 3 Example of Plain language summary for intervention review

What are the advantages and problems of tube feeding people with severe dementia?

...

What did we find?

We included 14 studies that included 49,714 participants. Of these, 6203 were tube-fed and 43,511 were not. Participants with no feeding tube were given standard care or standard care with extra treatments to encourage eating and drinking.

Main results

In people with severe dementia, compared to no tube feeding:

- PEG may make no difference to how long people live (4 studies, 36,816 people), and leads to a small increase in the chance of developing pressure sores (1 study, 4421 people).
- we don't know if nasogastric tube feeding increases the length of time people live or increases their chance of developing pressure sores, because none of our included studies gave information about these points.
- Studies of people with either PEG or nasogastric tubes showed tube feeding may increase the length of time people live (4 studies, 1696 people), and may slightly increase the chance of developing pressure sores (3 studies, 351 people).

None of our included studies reported quality of life.

What are the limitations of the evidence?

We have moderate confidence in our finding that pressure ulcers were more common in people who were fed with a PEG tube. However, we have little to very little confidence for our other findings.

Few-shot

- 2 curated examples of Plain Language Summary
 - Extracted relevant parts to match cochrane-auto's simple version
- Experiment with few-shot prompting
 - Provide 2 **curated** examples
 - Provide 2 **random** examples (same for all experiments)

Prompt

Given the following scientific abstract create a lay summary (500 words maximum). Here are some examples of lay summaries.

{% for e in examples %}

Example:

{{e}}

{% endfor %}

Abstract:

{{ text }}

Results

Results

Approach	Gemma3 4B			Gemma2 9B			Mistral-Small 24B			LLaMA3.3 70B		
	SARI	LENS	lr	SARI	LENS	lr	SARI	LENS	lr	SARI	LENS	lr
Baseline Prompt	35.4	60.7	0.9	32.8	67.8	0.5	37.4	56.9	1.0	36.4	74.2	0.8
Cascade	33.4	68.4	0.5	32.2	60.5	0.4	34.4	50.9	0.5	32.4	65.0	0.4
Fewshot - coch rand	38.9	52.0	2.0	35.4	68.6	1.2	39.6	68.9	1.4		∅	
	39.7	55.0	1.9	35.3	70.3	1.1	39.2	69.9	1.3		∅	
Guidelines - all lang styl	38.6	53.0	2.0	35.7	74.3	1.3	39.7	75.7	1.5		∅	
	36.6	59.1	1.9	35.6	73.5	1.3	39.1	77.3	1.5		∅	
	39.8	51.6	1.9	37.3	77.1	1.1	40.0	71.4	1.3	36.7	79.4	1.2

Results

Approach	Gemma3 4B			Gemma2 9B			Mistral-Small 24B			LLaMA3.3 70B		
	SARI	LENS	lr	SARI	LENS	lr	SARI	LENS	lr	SARI	LENS	lr
Baseline Prompt	35.4	60.7	0.9	32.8	67.8	0.5	37.4	56.9	1.0	36.4	74.2	0.8
Cascade	33.4	68.4	0.5	32.2	60.5	0.4	34.4	50.9	0.5	32.4	65.0	0.4
Fewshot - coch rand	38.9	52.0	2.0	35.4	68.6	1.2	39.6	68.9	1.4		∅	
	39.7	55.0	1.9	35.3	70.3	1.1	39.2	69.9	1.3		∅	
Guidelines - all lang styl	38.6	53.0	2.0	35.7	74.3	1.3	39.7	75.7	1.5		∅	
	36.6	59.1	1.9	35.6	73.5	1.3	39.1	77.3	1.5		∅	
	39.8	51.6	1.9	37.3	77.1	1.1	40.0	71.4	1.3	36.7	79.4	1.2

- Gemma3 generates longer documents, except for baseline and cascade
- LLaMA3.3 never the best with SARI
- Mistral-Small better than Gemma2 with SARI
- More parameters does not imply best results
- Cascade does not improve Baseline Prompt
- Few-shot outperforms Baseline Prompt
 - Random examples better or similar to curated
- Guidelines-* is the best overall

Results

Approach	Gemma3 4B			Gemma2 9B			Mistral-Small 24B			LLaMA3.3 70B		
	SARI	LENS	lr	SARI	LENS	lr	SARI	LENS	lr	SARI	LENS	lr
Baseline Prompt	35.4	60.7	0.9	32.8	67.8	0.5	37.4	56.9	1.0	36.4	74.2	0.8
Cascade	33.4	68.4	0.5	32.2	60.5	0.4	34.4	50.9	0.5	32.4	65.0	0.4
Fewshot - coch rand	38.9	52.0	2.0	35.4	68.6	1.2	39.6	68.9	1.4		∅	
	39.7	55.0	1.9	35.3	70.3	1.1	39.2	69.9	1.3		∅	
Guidelines - all lang styl	38.6	53.0	2.0	35.7	74.3	1.3	39.7	75.7	1.5		∅	
	36.6	59.1	1.9	35.6	73.5	1.3	39.1	77.3	1.5		∅	
	39.8	51.6	1.9	37.3	77.1	1.1	40.0	71.4	1.3	36.7	79.4	1.2

- Gemma3 generates longer documents, except for baseline and cascade
- LLaMA3.3 never the best with SARI
- Mistral-Small better than Gemma2 with SARI
- More parameters does not imply best results
- Cascade does not improve Baseline Prompt
- Few-shot outperforms Baseline Prompt
 - Random examples better or similar to curated
- Guidelines-* is the best overall

Results

Approach	Gemma3 4B			Gemma2 9B			Mistral-Small 24B			LLaMA3.3 70B		
	SARI	LENS	lr	SARI	LENS	lr	SARI	LENS	lr	SARI	LENS	lr
Baseline Prompt	35.4	60.7	0.9	32.8	67.8	0.5	37.4	56.9	1.0	36.4	74.2	0.8
Cascade	33.4	68.4	0.5	32.2	60.5	0.4	34.4	50.9	0.5	32.4	65.0	0.4
Fewshot - coch rand	38.9	52.0	2.0	35.4	68.6	1.2	39.6	68.9	1.4		∅	
	39.7	55.0	1.9	35.3	70.3	1.1	39.2	69.9	1.3		∅	
Guidelines - all lang styl	38.6	53.0	2.0	35.7	74.3	1.3	39.7	75.7	1.5		∅	
	36.6	59.1	1.9	35.6	73.5	1.3	39.1	77.3	1.5		∅	
	39.8	51.6	1.9	37.3	77.1	1.1	40.0	71.4	1.3	36.7	79.4	1.2

- Gemma3 generates longer documents, except for baseline and cascade
- LLaMA3.3 never the best with SARI
- Mistral-Small better than Gemma2 with SARI
- More parameters does not imply best results
- Cascade does not improve Baseline Prompt
- Few-shot outperforms Baseline Prompt
 - Random examples better or similar to curated
- Guidelines-* is the best overall

Results

Approach	Gemma3 4B			Gemma2 9B			Mistral-Small 24B			LLaMA3.3 70B		
	SARI	LENS	lr	SARI	LENS	lr	SARI	LENS	lr	SARI	LENS	lr
Baseline Prompt	35.4	60.7	0.9	32.8	67.8	0.5	37.4	56.9	1.0	36.4	74.2	0.8
Cascade	33.4	68.4	0.5	32.2	60.5	0.4	34.4	50.9	0.5	32.4	65.0	0.4
Fewshot - coch rand	38.9	52.0	2.0	35.4	68.6	1.2	39.6	68.9	1.4		∅	
	39.7	55.0	1.9	35.3	70.3	1.1	39.2	69.9	1.3		∅	
Guidelines - all lang styl	38.6	53.0	2.0	35.7	74.3	1.3	39.7	75.7	1.5		∅	
	36.6	59.1	1.9	35.6	73.5	1.3	39.1	77.3	1.5		∅	
	39.8	51.6	1.9	37.3	77.1	1.1	40.0	71.4	1.3	36.7	79.4	1.2

- Gemma3 generates longer documents, except for baseline and cascade
- LLaMA3.3 never the best with SARI
- Mistral-Small better than Gemma2 with SARI
- More parameters does not imply best results

- Cascade does not improve Baseline Prompt
- Few-shot outperforms Baseline Prompt
 - Random examples better or similar to curated
- Guidelines-* is the best overall

Manual analysis

- Factuality

Correct reformulation Guidelines-styl, Gemma3

[...] children with Down syndrome benefited from treadmill training (**MD -4.00**, 95% CI -6.96 to -1.04), [...]

Complex



[...] children with Down syndrome who used a treadmill were able to walk independently about **four months earlier** than those who did not [...]

Simple

Hallucination Guidelines-all, Gemma3

[...] A vena cava filter is a **small, portable electronic device that counts the number of steps you take**. [...]

- Added context

Definition of condition Baseline prompting, LLaMA3.2

[...] prevent pulmonary embolism (PE), **a life-threatening condition where blood clots travel from the legs to the lungs** [...]

Definition of terms Guidelines-lang, Mistral-Small

[...] special supports called orthotics (**braces or splints**) [...]

Conclusion

- Who and why we simplify matters
- Using precise guidelines worked best (#1 place)
- Bigger models are not better than “smaller” LLMs
- Future works
 - Use Cochrane Guidance word alternatives
 - Use keywords to guide simplification
 - Are Cochrane Advice specific to this task or generic to simplification
 - Evaluation on test subsets
 - To which extent are advice followed by the LLMs

Conclusion

- Who and why we simplify matters
- Using precise guidelines worked best (#1 place)
- Bigger models are not better than “smaller” LLMs
- Future works
 - Use Cochrane Guidance word alternatives
 - Use keywords to guide simplification
 - Are Cochrane Advice specific to this task or generic to simplification
 - Evaluation on test subsets
 - To which extent are advice followed by the LLMs

Thanks for organizing
SimpleText 2025 !

Question ?

Appendix

Simple Text 2025 tasks

- Task 1: Text Simplification: Simplify scientific text
 - Task 1.1 - Sentence-level Scientific Text Simplification
 - **Task 1.2 - Document-level Scientific Text Simplification**
- Focus on document level because of context availability
- Evaluation using
 - Simplification metrics: SARI, **LENS** (semantic)
 - Sentence similarity metrics: BLEU, BertScore (semantic)
 - Length ratio metrics : $\text{len}(\text{prediction}) / \text{len}(\text{reference})$

dataset subset	#doc.	#word complex	#word simple	length ratio
cochrane-auto				
train	849	339	196	1.84
val [†]	119	350	203	1.83
test [†]	117	323	187	1.86
Cochrane [†]	217	535	n/a	
Medline [†]	110	207	n/a	
SimpleText2024 [†]	103	145	n/a	

SimpleText Test set

Cascade

- Summarize then simplify
 - Hypothesis : easier to simplify a small text
- Method
 1. Extractive **summarization** using **TextRank**
 2. **Simplification** by prompting an **LLM**

	SARI	LENS	lr
Baseline Input	46.0	41.7	1.8
Cascade			
Gemma3 4B	33.4	68.4	0.5
Gemma2 9B	32.2	60.5	0.4
Mistral-small 24B	34.4	50.9	0.5
LLaMA3.3 70B	32.4	65.0	0.4

Complex

This is an update of a Cochrane review from 2011, which included five trials. This update includes seven studies on treadmill intervention in 175 children: 104 were allocated to treadmill groups, and 71 were controls. The studies varied in population (children with Down syndrome, cerebral palsy, developmental delay or at moderate risk for neuromotor delay); [...]

Extractive
summarization



This update includes seven studies on treadmill intervention in 175 children: 104 were allocated to treadmill groups, and 71 were controls. [...]

Simplification
via LLM



Simple

This update examines seven studies involving 175 children using treadmill training. Here's what was found: [...]

Sample ID
CD009242

Keyword simplification

- Identify and replace **difficult words** by a simpler version
 - Hypothesis: keywords are difficult words
- Method
 - Keyword extraction using MultipartiteRank (pke library)
 - Word simplified by prompting an LLM
 - Search and replace keywords by simplification

	SARI	LENS	lr
Baseline Input	46.0	41.7	1.8
Keyword			
Gemma3 4B	35.8	21.3	2.0
Gemma2 9B	35.7	13.6	2.3
Mistral-small 24B	35.7	20.6	2.0

- 65% of identified words do not need simplification (in validation set)
 - **studies** → **research project**
 - **children** → **kids**
 - **high risk** → **more likely to**
- Sample of identified words worth explaining
 - Acronyms
 - **rcts** → **studies comparing treatments**
 - Jargon
 - **adverse events** → **side effects**
 - Medication
 - **ambroxol** → **mucus thinner**
 - Condition
 - **oedema** → **swelling**

Keyword simplification

- Identify and replace **difficult words** by a simpler version
 - Hypothesis: keywords are difficult words
- Method
 - Keyword extraction using MultipartiteRank (pke library)
 - Word simplified by prompting an LLM
 - Search and replace keywords by simplification

	SARI	LENS	lr
Baseline Input	46.0	41.7	1.8
Keyword			
Gemma3 4B	35.8	21.3	2.0
Gemma2 9B	35.7	13.6	2.3
Mistral-small 24B	35.7	20.6	2.0

Prompt

```
I'm a highschool student interested in healthcare. I want to understand some difficult words in a scientific abstract.
After the --- is an abstract and a list of {{ n }} words I find difficult to understand.
Define the words and give me a simpler version that I can understand (it's okay if some meaning is lost). The simpler version should be a direct replacement for the words in the abstract.
The answer should be formatted as a yaml list of objects with 3 attributes: the word, the definition and the simpler version of the word.
The answer should only contain yaml no other text or comment. The output must be readable by a yaml parser.

- word: "WORD 1"
  definition: "definition of WORD 1"
  simple: "simpler WORD 1"
- word: "WORD 2"
  definition: "definition of WORD 2"
  simple: "simpler WORD 2"
- ...

---
**Abstract** : {{ text }}
**Words to explain** :
{% for t in terms %}
- {{ t }}
{% endfor %}
```

Keyword simplification (example)

- This is an update of a Cochrane review from 2011, which included five trials. This update includes seven ~~studies~~ **research projects** on ~~treadmill intervention~~ **using a treadmill for treatment** in 175 ~~children~~ **kids or young people**: 104 were allocated to treadmill groups, and 71 were controls. [...] Due to the diversity of the ~~studies~~ **research projects**, only data from five ~~studies~~ **research projects** were used in meta-analyses for five outcomes: age of ~~independent walking onset~~ **when a child starts walking alone**, ~~overall gross motor function~~ **ability to do big body movements well**, gross motor function related to standing and walking, and gait velocity.
- **Redundant simplification**
- **Worth simplifying**

Sample ID
CD009242

Keyword simplification (prompt)

I'm a highschool student interested in healthcare. I want to understand some difficult words in a scientific abstract.

After the --- is an abstract and a list of `{{ n }}` words I find difficult to understand.

Define the words and give me a simpler version that I can understand (it's okay if some meaning is lost). The simpler version should be a direct replacement for the words in the abstract.

The answer should be formatted as a yaml list of objects with 3 attributes: the word, the definition and the simpler version of the word. The answer should only contain yaml no other text or comment. The output must be readable by a yaml parser.

```
- word: "WORD 1"
  definition: "definition of WORD 1"
  simple: "simpler WORD 1"
- word: "WORD 2"
  definition: "definition of WORD 2"
  simple: "simpler WORD 2"
- ...
```

```
---
**Abstract** : {{ text }}
**Words to explain** :
{% for t in terms %}
- {{ t }}
{% endfor %}
```

```
- word: "anticoagulation"
  definition: "the process of preventing blood from clotting, often using medication"
  simple: "blood thinning treatment"
- word: "death"
  definition: "the permanent end of life"
  simple: "dying"
- word: "evidence"
  definition: "information or proof used to support a particular conclusion or belief"
  simple: "proof"
- word: "filter"
  definition: "a device that removes unwanted substances from a mixture"
  simple: "blood clot catcher"
- word: "lower extremity deep vein thrombosis"
  definition: "the formation of blood clots in the deep veins of the legs"
  simple: "leg blood clots"
- word: "months"
  definition: "a unit of time equal to approximately four weeks"
  simple: "time periods"
- word: "multiple traumatic injuries"
  definition: "several serious injuries caused by a major event, such as an accident"
  simple: "many severe injuries from an incident"
- word: "new studies"
  definition: "recently conducted research investigations"
  simple: "new research"
- word: "participants"
  definition: "people who take part in a study or event"
  simple: "people involved"
- word: "studies"
  definition: "detailed investigations into a particular subject, especially in a scientific or academic context"
  simple: "research projects"
```

Rewritten advice

Language

- Use everyday language. For example, refer to 'people' instead of 'study participants'.
- Avoid (or explain) long words. For example, use 'blood thinners' as an alternative to 'anticoagulants'.
- Avoid (or explain) research jargon. For examples, use 'study' rather than 'trial'; 'people with [condition]', 'women', 'children' etc. rather than 'participants'; the name of the intervention instead of 'intervention'; the name of the control or comparison instead of 'control' or 'comparison'; the name of the outcome instead of 'outcome'.
- Avoid (or explain) words or phrases with dual or nuanced meanings. For example, use 'medicines' instead of 'drugs'. 'Significant' means 'important' for a lay reader.
- Explain 'common' medical words. For example: 'acute condition': a condition or state that develops suddenly and lasts a short time; 'chronic condition': a condition or state that lasts for a long time.
- Explain technical medical terms. Plain language does not always mean 'lay language'. Your reader may know the topic via the technical term – especially if they are a patient or carer, so it might be best to include the technical term and explain it. For example, to explain the action of anticoagulants, you could write: 'Anticoagulants are medicines that stop harmful blood clots forming. However, these medicines may cause unwanted effects such as bleeding.' Or you could write the term in plain language followed by the technical term in brackets. For example, 'blood thinners (anticoagulants)'.
- Avoid acronyms and abbreviations. If you cannot avoid them, make sure you define them when you first mention them. For example, 'nicotine replacement therapy (NRT)'. Use phrases like 'for example', 'such as', 'in other words', 'and so on' instead of 'e.g.', 'i.e.' or 'etc.', as they are not always understood if you are writing for a wide audience.
- Write for an international audience. Avoid regional words or terms; for example, use 'hospital emergency care' instead of 'Accident & Emergency (A&E)' (UK) or 'Emergency Room (ER)' (USA).

Style

- Keep paragraphs and sentences short, but vary your sentence length occasionally to keep the readers' attention. Aim for an average of 20 words in a sentence. Break up longer sentences into shorter ones. For example, instead of 'Most people who smoke want to stop, however many find it difficult to do so, even though they may use medicines that are designed to help them stop', you could write 'Most people who smoke want to stop, but many find it difficult. People who smoke may use medicines to help them stop.'.
- Use the active voice. For example, write 'We compared and summarized the results of the studies' instead of 'The results of the studies were compared and summarized'.
- Use pronouns. Write in the first-person plural. For example, use 'we assessed' instead of 'the review authors assessed'. Address your reader using the second-person pronoun 'you'. For example, write 'A pedometer is a small, portable electronic device that counts the number of steps you take.'.
- Use verbs. For example, say 'the students investigated' not 'the students conducted an investigation', or 'we analyzed the data' not 'we carried out an analysis of the data'.
- Write numbers as numerals (1, 2, 3...) rather than words. However, avoid starting a sentence with a numeral. If necessary, rewrite the sentence. For example, write 'The studies included 3260 people' instead of 'Three-thousand, two-hundred and sixty people took part in the studies'.
- Be concise. A Plain language summary can be up to 850 words long, but you do not have to fill the word limit. You should aim to keep it as short as possible while still including the most important information.
- Replace 'wordy' phrases with shorter alternatives: use 'during' instead of 'during the course of'; use 'often', instead of 'it was often the case that'; use 'some' or 'many', instead of 'a number of'; and use 'because' instead of 'due to the fact that'.

Alternative to common terms

- Untested approach
- Similar to Keyword simplification approach
- Rewrite plain language alternatives to single word
 - Resulting in 33 terms
- Coverage per document
 - ~32 occurrences in complex doc
 - ~18 in simple doc

Guidance for writing a Cochrane Plain language summary

Appendix 1 Plain language alternatives to and definitions of common terms

Term	Plain language alternatives and explanations
Acute	Serious or severe; swift or sudden onset
Adverse effects	Unwanted or harmful effects of a treatment
Adverse events	An unwanted event that causes harm to the patient.
Anaesthesia	Loss of feeling or sensation in a part or all of the body
Anaesthetic	A medicine that prevents you/[people] feeling pain
Analgesia/analgesic	A medicine to treat or lessen pain; pain relief; pain killer; pain-killing medicine
Antibiotic	A medicine that kills bacteria and fungi (or stops bacteria growing)
Anti-inflammatory	A medicine to treat or reduce inflammation (an over-response of the immune system)
Chemotherapy	A treatment used to kill cancer cells
Chronic	Long-lasting
Control	[Use the name of the control]
Cost-effective	The benefits are worth the money paid
Cost-effectiveness	The balance between the cost of a [treatment/medicine] and how well it works
Diagnosis	Identification of a health condition from its signs and symptoms or test results
Diagnostic test	A medical test carried out to find out if a person has a particular disease or condition

Submitted runs

RunId	SARI	Approach	
301392	44.9	Guidelines-all	(Mistral-Small)
301393	44.4	Guidelines-lang	(Mistral-Small)
302455	43.6	Guidelines-styl	(Gemma2)
303086	43.2	Guidelines-styl	(LLaMA3.3)
302653	42.3	Prompting (Naive prompt)	(LLaMA3.3)
302680	41.1	Prompting (Naive prompt)	(LLaMA4)
302682	38.4	Cascade	(LLaMA3.3)
302458	36.6	Backtranslation	(NLLB)