

Producing good medicines information

Why is good medicines information important?

Safe, effective, and appropriate use of medicines depends on the information given to medicines users. They need such information:

- At the time of prescribing or purchase (before choosing a medicine, or while discussing options for prescription) to allow them to take part in decision-making about whether a medicine is right for them
- After the medicine is dispensed – to allow them to keep taking the medicine safely and effectively

Spoken information from health professionals remains a priority, but limited time and memory capacity means that written information is an essential back up.

Patient information leaflets are supplied as detailed 'package inserts' in the UK, written and produced by the manufacturers according to European Union legislation and guidelines. This Quick Guide applies both to this information and other forms of written medicines information, such as those supplied by health or patient organisations, or by health professionals, to meet local need.

Research shows that many people in the past have not always valued written medicines information. This is often related to:

- wording (broadly, the readability) – often thought of as too complicated and technical. People often say that information is "more for doctors" or "not meant for me".
- The format or layout of the leaflet (broadly, the visual presentation) - print which is too small, large amounts of unbroken text, and no clear heading structure. People typically say of poorly designed materials that they are "daunting" or contain "too much information".

In an ideal world, you would work with expert information designers, but this is not always possible, and this Quick Guide gives specific principles that non-specialist producers can use. It is based on a paper published in the Annals of Pharmacotherapy in 2009 "Key principles to guide development of consumer medicines information"¹. This was part of a wider piece of work on the research evidence for consumer medicines information, funded by the UK Department of Health².

Safe, effective, and appropriate use of medicines depends on the information given to medicines users.

We searched key expert reference texts to produce the principles that are set out here. We have refined them into best practice in information writing and design as applied to medicines information. There are four themes, with a list of 10 ground rules for non-specialists at the end of the guide.

1. Raynor DK, Dickinson D. Key Principles to Guide Development of Consumer Medicine Information – Content Analysis of Information Design Texts Annals of Pharmacotherapy 2009; 43: 700-6.
2. DK Raynor, Blenkinsopp A, Knapp P, Grime J, Nicolson DJ, Pollock K, Dorer G, Gilbody S, Dickinson D, Maule AJ, Spoor P. A systematic review of quantitative and qualitative research on the role and effectiveness of written information available to patients about individual medicines. Health Technology Assessment 2007; 11: 1-178.

Authors: DK Theo Raynor and David Dickinson

Theme 1: Words

Choice of words

- Use easy-to-understand words, everyday language, and short familiar words.
- Aim for 1 or 2 syllables.
- Use concrete words rather than abstractions.
- Sometimes use 'it' rather than repeating the name of the medicine every time.

Minimising jargon

- Minimise jargon or technical language.
- Provide an explanation when jargon has to be used (either where it occurs or a glossary).

The right voice

- Use the active voice in most cases, to explain or warn.
- Use an imperative voice for instructions.
- Do not use the passive voice.

Short sentence length

- Use short sentences, averaging 15–20 words.
- Use simple grammar; 1 item of information per sentence is best. Do not go above three items of information per sentence.
- Use very short sentences to emphasise a point.

Attitude and meaning

- A relaxed and positive writing style is the most useful.
- Put yourself in the reader's position.
- Be straightforward, practical, and specific.
- Explain why something is important or should be done.

Positive phrasing

- State instructions in a positive way, unless telling people not to do something.

Appropriate tone

- Use a conversational voice.
- Use "we" and "you" rather than the name of the organisation or "the patient."



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Theme 2: Type

Type size

- Use 12- to 14-point type to maximise legibility.
- Larger type is particularly useful for older readers.

Colour

- Colour can attract readers to the text, but use it sparingly.
- Black type on a white (or yellow) background maximises contrast and legibility.
- Do not use red text alone to attract attention; it appears grey to some readers.

Typeface

- Use conventional, familiar typefaces, not fancy or special in some other way.
- Bold fonts are most legible, and bold type is best for emphasis.

Serif or sans serif font

- Some research supports the use of sans serif (eg, Arial, Helvetica, Gill Sans) for headings with serif (eg, Times, Palatino, Baskerville) for continuous text. However, there is no absolute consensus on this.

Theme 3: Lines

Left justification

- Left justification is preferred (also called ranged left or ragged right).
- Justified text (fully justified) changes the spacing between words to make lines end evenly at the right margin. This may hinder ease of reading.
- The straight edges of justified text columns may make a document look less approachable.

Suitable line length

- Aim for 40–70 characters (8–12 words).
- Long lines make reading harder.
- Too short a line also slows reading.

Appropriate line spacing

- Short paragraphs are easier to read.
- Paragraph spaces are useful to separate components of the text.
- The space between lines (leading) also needs attention; too little or too much space makes text hard to read.

Word wrapping

- Do not wrap words around a graphic or print over a graphic.

Theme 4: Layout

Bullet points

- Bullets help to organise text, breaking it up into a list of steps or points.
- Use bullets instead of a numbered list when the points are of equal value and not sequential.

Emphasis

- Bold text is effective for emphasis.
- Capital letters typically make reading harder (although capitals in headings may be satisfactory).
- Section headings in reverse type (for instance, white letters on a black background) stand out, at some cost in legibility.
- Italics and underlining are thought to make reading harder.

White space

- Document clarity is improved by including, ideally, 50% of managed white space on a page.

Headings

- Short, concrete headings improve accessibility.
- Clear, different levels of headings improve emphasis.

- Keep headings on a single line.
- Question headings may not be useful.
- Clear document structure is important in helping readers to find information.
- Following the wording sequence before, during, and after can be helpful.

Pictures and graphics

- Use with care. Have a clear idea of why the illustration is there.
- Pictures or diagrams may enhance procedural instructions, but their effect is not clear when simply added to text.
- Do not use unfamiliar symbols.
- Childish or comical illustrations may be patronising.

Numbered lists

- Numbered listings are useful for a sequence of section headings or for a list of instructions.

Page breaks

- If possible, do not let page or column breaks split up sections.

Table of contents

- A contents list is useful for long leaflets.

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Scope, draft, design and test your information

Good writing and design is much more than just a set of rules. First, an analysis of the needs of users is needed: what is it that the reader (or user) wants or needs to know? Involve information design experts if you can, before the drafting process, and consult the intended users of the information before any document is written.

Writers, remember this: easy-to-understand text is worthless if people cannot find the information. Sless and Wiseman note that “no known principles of good writing or design, nor any readability scores or measures of reading age have been found which can predict how successfully a document will be used. Information design experts would still acknowledge the primacy of the eventual user in judging fitness for purpose of medicines information. That is why consumer medicines information needs to be tested.”

Readability formulae are of limited use to medicine writers: they do not take into account most of the features of the language and layout used – largely only looking at word and sentence length. It is quite possible to write documents using short words and short sentences which are difficult to read. Also, if the formula is based only on word and sentence length, the same information written backwards will generate the same ‘readability score’. They will not reveal most of the problems identified by consultation with potential users.

It is an important message that pictures may not always improve documents; medicines pictograms may not be easily understood, and might be misleading. Again, user consultation will help you spot these problems. See the PiF Quick Guide on User Testing for more details.

Pay attention to layout and design as well as wording

Much of this guidance is about layout and design, rather than content. The way space is used can greatly affect understanding and retrieval of information, such as including white space and using ‘landscape’ (horizontal) layouts which result in shorter columns, and look less daunting. Document design can influence a person’s perception – notably choice of typeface, indents, bite-sized chunks of information, and bold headlines.

Health literacy continues to have a high profile, and implies its own opposite (health illiteracy), where communication failure can be blamed on the user. It is clear that to address true health literacy; a two-way process must be adopted. People who take medicines need help to access and understand information. However, equally, that information needs to be written using good practice in information writing and design – only then will accessibility and readability be maximised for all who take medicines.

Conclusion

We have identified key principles to guide professionals, health organisations, pharmaceutical companies and policy makers in producing or assessing medicines information. Keeping uppermost in our minds the range of abilities of people who take medicines, we recommend 10 ground rules (see next page). These should be incorporated into future patient information documents, including those written by people who are not information design specialists. This will assist in meeting the information needs of patients, and ultimately to help medicines users to take their medicines safely and effectively.

Ten Ground Rules for Good Document Practice

- 1** Use short, familiar words and short sentences.
- 2** Use short, informative headings that stand out from the text.
- 3** Do not fill the page with text; leave plenty of white space.
- 4** Use a type size as large as will fit in the available space, while retaining white space.
- 5** Use a conversational tone of voice, addressing the reader as **you**.
- 6** Use the active or imperative voice: **“Take this medicine,”** not **“This medicine is to be taken.”**
- 7** Use unjustified text (ragged right).
- 8** Use bullet points rather than continuous text to organise lists.
- 9** **Bold, lower-case text is good for emphasis (words in capitals or italics are harder to read).**
- 10** Pictures or graphics do not necessarily improve a document.