Online plain English and readability resources

Stephen Gilliver

Malmö, Sweden

Correspondence to:

Stephen Gilliver
Bertha Nordqvists gata 38
218 37 Bunkeflostrand
Sweden
stephen.gilliver@gmail.com

Abstract

To encourage individuals and businesses to write in simpler, more readable English, private and government-backed enterprises have created a number of freely available online resources. While most relate to general English use, some are devoted to writing about medical matters. In this summary article, I take a brief look at what is available and how good it is.

Keywords: Plain English, Plain language, Online, Medical dictionary, Medical thesaurus, Readability

'Plain Language – It's the Law' proclaims the homepage of the Plain Language Action and Information Network (PLAIN),[1] a group of US federal employees dedicated to promoting plain English in government communication. And it is indeed the law. In 2010, Barack Obama signed an act requiring federal agencies to write in a way that the public understands. Predating the new law, the Federal Plain Language Guidelines[2] are a set of tips from PLAIN on writing clearly, each with illustrative examples. The guidelines cover familiar topics such as using the active voice, avoiding jargon, and writing short sentences, as well as the specifics of writing for the web. They are extensive and excellent, and are supplemented by similarly excellent guidance on writing letters and using headings.

An even heftier resource is the so-called 'Toolkit for Making Written Material Clear and Effective' from CMS.gov (Centers for Medicare and Medicaid Services),[3] available as five ZIP archives with a combined size of some ~50 MB. Guidance on writing is just one of 11 chapters, with others covering topics as disparate as culturally appropriate translation, how to test written material, considerations when writing for older adults, and issues with readability tools (more on which later). A second toolkit, from the Program for Readability In Science and Medicine (PRISM),[4] gives advice on various aspects of readability and explains the principles and importance of plain English.

On this side of the Atlantic, two private plain English organisations – Plain English Campaign and Plain Language Commission – provide a bounty of resources. In addition to a general guide on how to write in plain English, Plain English Campaign[5] offers a generous list of simpler alternatives to what it describes as 'the pompous words and phrases that litter official writing'. It further provides glossaries of financial and legal terms, as well as guides on specific subjects such as how to create clear websites and business emails. Plain Language Commission[6] has a number of complementary resources, including a fascinating 2700-word lexicon that tells you how likely readers are to understand different words you might use and a checklist of 15 tips on writing plain English, my favourite being 'Apply common sense and scepticism to all guidance about writing'.

Medical resources

There are a number of resources to help us write about medicine in plain English, but how good are they? The Plain Language Thesaurus for Health Communications[7] from the US Centers for Disease Control and Prevention (CDC) contains approximately 1100 entries, but it doesn't seem to have been updated since 2009. Some of its plain English alternatives to medical terms are fine. *Fever* instead of *pyrexia*, for example – perfect. Others are baffling. *Hazard* comes back as *hazard*, *vomit* as *emesis,* and *serology* as '*study of blood strength*' (whatever that means). And does *x-ray* really need explaining as '*picture of your bones; picture of your insides*'? Thankfully, an insider assures me that a revision is in the pipeline.

Plain English is tied up with health literacy, defined in the 2010 Patient Protection and Affordable Care Act ('Obamacare')[8] as 'the degree to which an individual has the capacity to obtain, communicate, process, and understand health information and services in order to make appropriate

health decisions'. As part of a health literacy awareness project, the University of Michigan Taubman Health Sciences Library came up with the Plain Language Medical Dictionary.[9] It contains fewer entries than the abovementioned thesaurus – and similar flaws. While B cells are helpfully described as '*disease fighting cells; cells that are made inside your bones and help fight disease; white blood cells*', *lymphocytes* are defined as *lymph cells*. What does lymph cells mean to someone who doesn't know what lymphocytes are? Elsewhere, *virus* is defined as *virus* and *temperature* as '*heat, fever*', as if it were some obscure technical term. The Plain Language Medical Dictionary is now available as a free app.[10] The latest version supposedly contains 'updated dictionary content from the latest version of the Plain Language Thesaurus for Health Communications, with more accurate and proper definitions to more terms'. Sounds good until you remember that said thesaurus hasn't been updated or corrected in the last 6 years.

The PLAIN website – which incidentally is pretty hard to navigate – has a page on improving health literacy. It contains links to a number of resources (including the Plain Language Thesaurus). One link led me to a decent list of 'plain language alternatives […] for medical and other high-level difficult terms'.[11] The list's author, medical editor, and plain English consultant Sharon Nancekivell, writes: 'The list is not yet comprehensive, although I hope it will be some day'. And yet she doesn't seem to have updated it since 2008. Meanwhile, another link – to health literacy resources from the American Medical Association Foundation – is dead. One wonders whether this is symptomatic of a general lack of devotion to the health literacy component of the PLAIN project.

Nancekivell's list is available from healthcommunications.org, which collates a wide range of plain English, readability, and related resources, including a couple of useful, if very similar, plain English checklists. Depressingly, I was only the seventh visitor to the Toolkit (resources) page.[12]

One of the better online resources I found is Plain English Campaign's guide called 'How to write medical information in plain English'.[13] In addition to a modest but handy list of alternatives to medical terms, it provides brief but pertinent advice on a couple of critical topics: writing information to accompany over-the-counter medicines (with genuine examples of impenetrable language from medicine leaflets) and phrasing letters to patients.

Finally, the PRISM toolkit[4] boasts a superior but by no means comprehensive collection of plain English substitutes for scientific and medical words and a checklist to use when writing information for clinical trial participants. It also includes standard plain English texts that can be used in informed consent forms and instructive examples showing how to improve readability and formatting. PRISM complements the toolkit with a free 1-hour tutorial on improving the readability of consent forms and other participant-targeted information.[14]

Readability tools

How easy is your writing to read from a stylistic perspective? To help answer this question, there are several online tools for checking the readability of word processed documents.[15-17] ReadabilityFormulas.com[15] calculates scores for seven readability tests simultaneously. When I used it to check the first section of this article, it variously rated it as 'difficult to read', 'hard to read', and at the reading level of 'college students'. Good thing this isn't a children's book I've written. I should point out that all of the readability tests I found base their calculations on word and sentence length. Sophisticated they are not. Interpret their results judiciously (note: you can also check readability in Microsoft Word [Word 2013: File → Options → Proofing → When correcting spelling and grammar in Word → Show readability statistics]. The output includes 'Sentences per Paragraph', 'Words per Sentence', 'Characters per Word', and 'Passive Sentences' [%], as well as the scores for two readability tests).

Conclusion

While there are some splendid online resources on plain English, those specific to health and medicine are generally flawed and in desperate need of correction and completion. The impression I get from perusing them is that a number of plain English projects have been started with the best of intentions but that the people involved forgot about them, lost interest, or chose to focus on other things. What we urgently need is a concerted effort to create, manage, and publicise usable plain English resources for people who communicate health information to the public. But who should take the lead?

References

1. PlainLanguage.gov. Plain Language Action and Information Network [cited 2014 Jul 5]. Available from: http://www.plainlanguage.gov/index.cfm.
2. Federal Plain Language Guidelines. Plain Language Action and Information Network [cited 2014 Jul 7]. Available from: http://www.plainlanguage.gov/howto/guidelines/FederalPLGuidelines/TOC.cfm.

3. Toolkit for Making Written Material Clear and Effective. Centers for Medicare & Medicaid Services; 2012 Mar 16 [cited 2014 Jul 8]. Available from: http://www.cms.gov/Outreach-and-Education/Outreach/WrittenMaterialsToolkit/index.html?redirect=/Written MaterialsToolkit/.

4. PRISM Readability Toolkit. Program for Readability In Science & Medicine (PRISM); 2006 [cited 2014 Jul 8]. Available from: https://www.grouphealthresearch.org/files/1814/1062/9858/PRISM_readability_toolkit.pdf.

5. Free guides. Plain English Campaign [cited 2014 Jul 7]. Available from: http://www.plainenglish.co.uk/free-guides.html.

6. Free guides on plain language. Plain Language Commission [cited 2014 Jul 7]. Available from: http://www.clearest.co.uk/pages/publications/freeguides.

7. Plain Language Thesaurus for Health Communications. Centers for Disease Control and Prevention; 2009 Feb [cited 2014 Jul 4]. Available from: http://www.plainlanguage.gov/populartopics/health_literacy/Thesaurus_V-10.doc.

8. The Patient Protection and Affordable Care Act. U.S. Government Printing Office; 2010 Mar 23 [cited 2014 Aug 8]. Available from: http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/html/PLAW-111publ148.htm.

9. Plain Language Medical Dictionary. University of Michigan Library; 2011 Mar 1 [cited 2014 Jul 4]. Available from: http://www.lib.umich.edu/plain-language-dictionary.

10. Plain Language Medical Dictionary. iTunes; 2013 Mar 26 [cited 2014 Jul 5]. Available from: https://itunes.apple.com/us/app/plain-language-medical-dictionary/id443405990?mt=8.

11. Nancekivell S. Plain language alternatives for patient information and consent materials. 2008 Dec 5 [cited 2014 Jul 5]. Available from: http://www.healthcommunications.org/resources/Plain%20Language%20Alternatives%20for%20Patient%20Information%20and%20Consent%20Materials.pdf.

12. Seubert D. Health Communications [cited 2014 Nov 24]. Available from: http://www.healthcommunications.org/toolkit.php.

13. How to write medical information in plain English. Plain English Campaign [cited 2014 Jul 7]. Available from: http://www.plainenglish.co.uk/files/medicalguide.pdf.

14. PRISM Online Training. PRISM [cited 2014 Jul 8]. Available from: http://prism.grouphealthresearch.org/.

15. Free text readability consensus calculator. Readability Formulas.com [cited 2014 Jul 7]. Available from: http://www.readabilityformulas.com/free-readability-formula-tests.php.

16. Simpson D. Readability Test Tool; 2014 [cited 2014 Jul 7]. Available from: http://read-able.com/.

17. Readability-Score.com [cited 2014 Jul 7]. Available from: https://readability-score.com/.

Author information

Since completing a PhD in Cell Biology at the University of Manchester, **Stephen Gilliver** has worked as a postdoc, an associate lecturer, a music journalist, a science editor, and an AuthorAID mentor. Now based in Malmö, Sweden, he is a full-time medical writer and Co-Editor of *Medical Writing*.