

# The Prevalence and Characteristics of Lay Summaries of Published Journal Articles

Maria Haughton and Danielle Machin  
Costello Medical Consulting Ltd, Cambridge, UK

## Objectives

- To understand the current availability, characteristics and requirements of article lay summaries in published, peer reviewed, journals.

## Background

- The term 'lay summary' is currently used to describe short, non-technical summaries aimed at a general audience, including, but not limited to patients. Lay summaries of planned research now play an important part in the majority of research grant applications,<sup>1</sup> and lay summaries of results are also a requirement of clinical trials taking place in EU member states.<sup>2</sup>
- Some journals are now making lay summaries of journal articles available alongside standard article abstracts, aiming to improve access to the latest scientific research for both patients and the wider public.<sup>3</sup>
  - A recent study has demonstrated that patient access to research literature can be important in helping them manage their health conditions.<sup>3</sup>

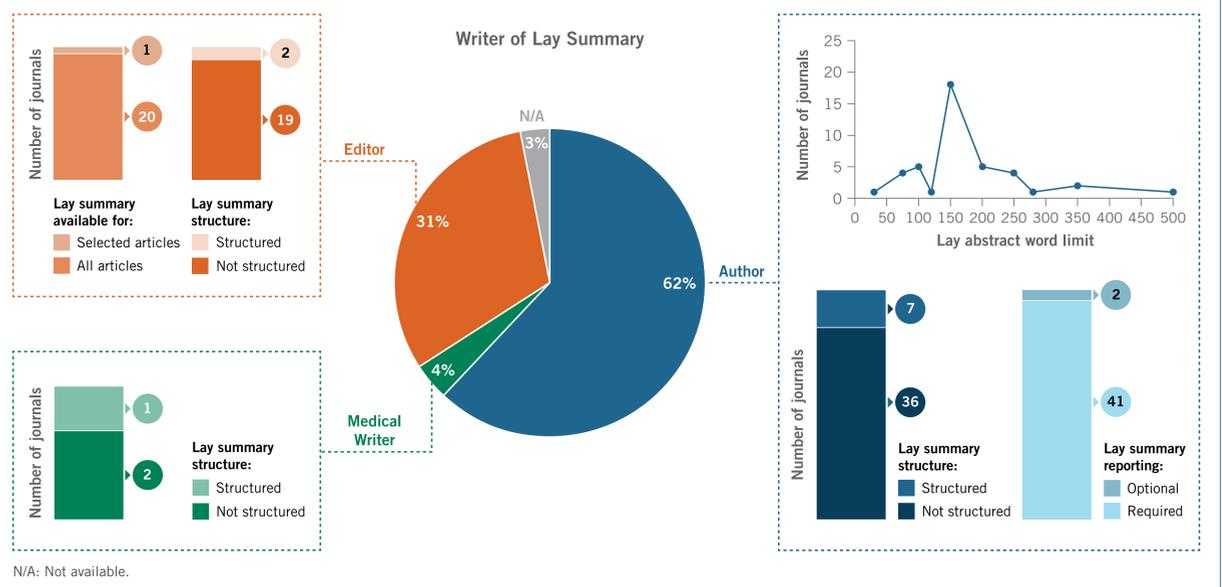
## Methods

- The websites of the publishers that produce the 100 most impactful medical journals (measured by the citation/article index) were systematically searched, using relevant terms, for journals publishing lay summaries (Box 1).
- The year established, year of first lay abstract, journal topic, and impact factor were collected from each journal's website.
- The instructions for authors of identified journals were reviewed to establish who was responsible for writing the lay summary, its purpose, and whether there were any specific guidelines for the summary content.

## Results

- Publishers' websites, representing ~7630 journals, were searched, and 69 (<1%) journals that published lay summaries alongside the main abstracts were identified. Overall, 13 of the 31 (41%) publishers produced a journal including at least 1 lay summary (Figure 1).
- Lay summaries are a comparatively new addition to the journal format, with the most established lay summaries dating from 1999 (Figure 2).
  - Many of the journals identified were launched after 2010 and have always included a lay summary in their format (Figure 2).
- Identified journals publishing lay summaries covered a wide range of topics, including biology, economics, and material science, with

Figure 5 | Characteristics of lay summaries



- medical journals making up about half (53%) of those identified. Available impact factors ranged between 18.2 (Gastroenterology) to 0.9 (Labour Economics), but 28 (40%) of journals were too recently established to be indexed.
- The majority (43, 62%) of journals were open access, and targeted lay abstracts at the general public (Figure 3).
  - Despite the stated target audience, 3 (11% of subscription journals) journals identified did not make lay summaries freely available (Figure 3).
- Summaries aimed at lay readers and patients were referred to using 13 different terms (Figure 4).
- The majority (62%) of journals required an author-composed summary to be submitted alongside the manuscript or following article acceptance (Figure 5).
  - Word limits varied between 30 and 500 words, but lay abstracts were typically around 150 words (Figure 5).

- Of the summaries written by the editors, the majority were unstructured, but available for all articles (Figure 5). Additionally, 3 journals commissioned summaries of selected articles, which were written by independent medical writers.

## Conclusions

- Relatively few journals currently publish summaries for lay readers.
- Over half of those identified were written by authors/writers as part of the manuscript submission or following manuscript acceptance.
- Lay summaries of journal articles are typically shorter than abstracts, and there is currently little consistency or guidance from journals as to their structure and content.

Figure 1 | Number and proportion of journals including a lay summary per publisher

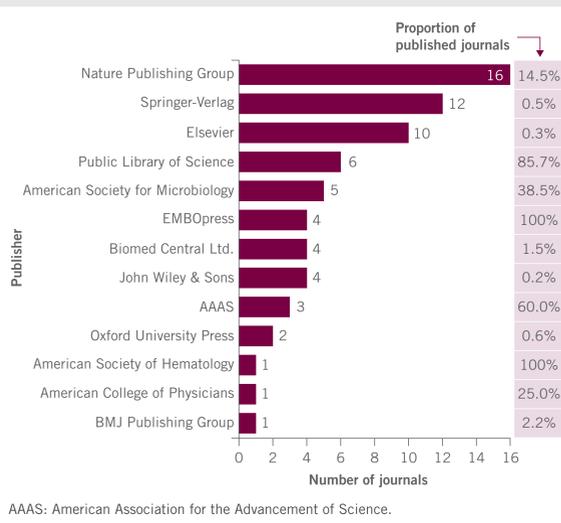


Figure 2 | Year of journal and lay summary establishment

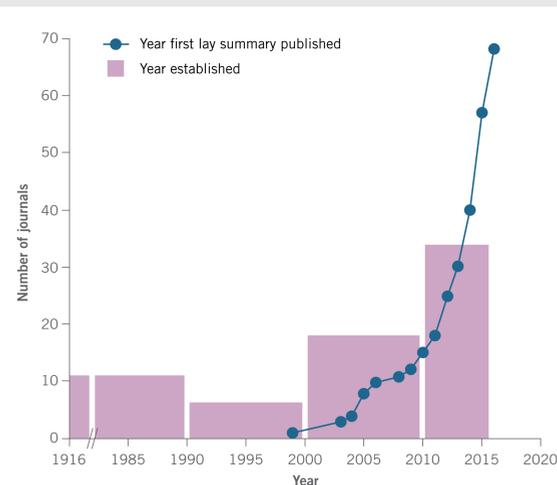
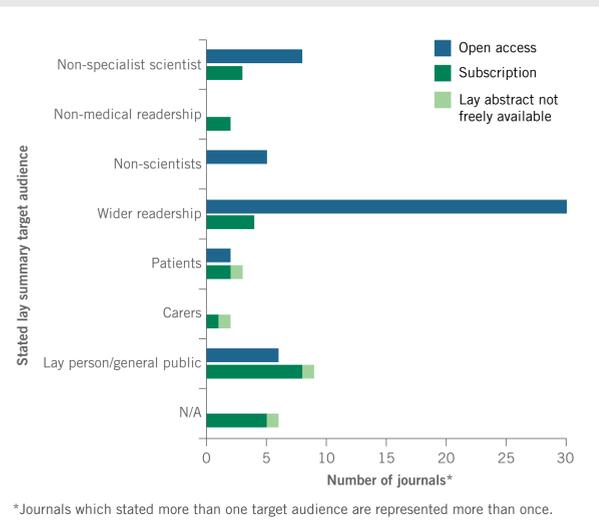


Figure 3 | Stated lay summary target audience and accessibility



Box 1 | Publishers included and search terms used

Publishers searched	Search terms
American Association for Cancer Research	"Lay summary"
American Association for the Advancement of Science (AAAS)	"Lay abstract"
American College of Physicians	"Patient summary"
American Diabetes Association	"Plain English summary"
American Heart Association	"Plain language summary"
American Medical Association	"Plain English abstract"
American Physiological Society	"Significance summary"
American Psychiatric Publishing	"Summary of significance"
American Society for Microbiology	"Author summary"
American Society of Clinical Oncology	"Key points"
American Society of Hematology	"Editor's summary"
American Thoracic Society	"Importance"
Annual Reviews	"Synopsis"
American Society for Clinical Investigation (ASCI)	
Biomed Central Ltd.	
BMJ Publishing Group	
Cold Spring Harbor Laboratory Press	
Elsevier	
EMBOpress	
Endocrine Society	
Ivyspring International Publisher	
Journal of the American College of Cardiology (JACC)	
John Wiley & Sons	
Massachusetts Medical Society	
Nature Publishing Group	
Oxford University Press (OUP)	
Public Library of Science (PLoS)	
Rockefeller University Press	
Springer-Verlag	
University of Chicago Press	
Wolters Kluwer - Lippincott Williams and Wilkins	

Figure 4 | Frequency of terms used to denote lay summaries



## References

- Duke M. DCC How-to Guides 2012; Edinburgh: Digital Curation Centre. Available online: <http://www.dcc.ac.uk/resources/how-guides>, last accessed: 15 Dec 2016;
- Regulation (EU) No. 536/2014 of the European Parliament and of the Council;
- Nunn E. and Pinfield S. Learned Publishing 2014;27:173-184.

## Abstract

### Objectives

- Journals can increase public understanding of the articles they publish through the use of summaries specifically targeted at a lay audience. The objective of this review is to understand the current availability, characteristics and requirements of lay summaries in journals.

### Research Design and Methods

- Journals publishing lay summaries were identified through website searches of the 31 publishers of the 100 most impactful medical journals (measured by citations/

article), using relevant terms (including "lay summary", "editor's summary", "synopsis"). The instructions for authors of identified journals were reviewed to understand the origin, purpose of, and requirements for the lay summary.

### Results

- Publishers' websites, representing ~7630 journals, were searched and 69 (<1%) journals which published lay summaries alongside the main abstracts were identified. Of these, the majority (62%) required an author-composed summary to be submitted alongside the manuscript (optional in 2 journals). The summaries were mainly unstructured, with word limits between 75 and 500 words, and were aimed at the

wider scientific community and general public. 24 journals published summaries written or commissioned by the editors, which were available for all research articles (20 journals) or selected research articles only (4 journals).

### Conclusions

- Relatively few journals currently publish summaries for lay readers. Over half of those identified were written by authors/writers as part of the manuscript submission. There is currently little consistency or guidance from journals as to the structure and content of lay summaries.