

Transforming Your Presentation Into a Publication

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Publication in scientific journals is required for academic promotion at universities. It is also the method by which most family medicine faculty members disseminate their scholarly work, establish a reputation in their field, and develop a clinical, teaching, or scholarly expertise. Publications are able to reach a broader audience than are presentations, which makes them the epitome of academic scholarship. Most academic family physicians give presentations to students, residents, or colleagues as part of their regular job duties and at regional and national meetings, but few write articles based on those presentations.

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A 1994 study found that only 48% of all presentations at the annual North American Primary Care Research Group (NAPCRG) and Society of Teachers of Family Medicine (STFM) meetings were published within 4–5 years after their presentation.¹ Similar studies in other disciplines also found that only about half of all presentations at national meetings were published.² Most of the presentations at NAPCRG are based on research, while presentations at STFM meetings are about research projects, teaching innovations, faculty development issues, and occasionally clinical topics. Publishing research articles differs significantly from publishing articles about innovative teaching approaches, faculty development, and clinical topics. Research faculty members have been more successful at publishing their work, but why many presenters don't publish articles based on the other types of presentations is unclear. Some may not publish their work because they do not feel there is enough material to support an entire publication. However, many others may not have the tools (knowledge, academic support, time) to take their presentation through the process of publication.

Reported barriers to publication include limited time, lack of mentorship, and unavailability of assistance with writing.⁵ While there has been some publication success for departments that provide faculty protected time and a research infrastructure,⁶ providing protected time requires a substantial financial commitment by a department. In addition, as clinical and teaching

responsibilities have increased in recent years, time for scholarly work has decreased. One barrier to publication by clinical faculty, in particular, is lack of knowledge about transforming information-rich presentations into publications.

This article focuses on a straightforward method to make the preparation time used in developing a lecture count twice by writing a manuscript on the same topic. This process works best with clinical review articles, teaching topics, and commentaries. The process can also be used for research publications, though that is not the focus of this article.

The General Approach

Writing an article for publication is intimidating for many new authors. In reality, however, the initial steps in writing an article are similar to those involved in developing a new lecture. Most people start with a general idea, write an outline, read relevant articles from primary and secondary literature, and then develop specific content.

The use of Microsoft PowerPoint in developing a lecture can facilitate the transformation of a presentation into a publication in several ways. The slides developed in PowerPoint can serve as a ready-made outline of a manuscript. In addition, you can use the notes pages feature of PowerPoint to keep track of references and provide a narrative of what you are going to say during the lecture; some of this material can be used in the initial draft of a paper on the same topic. By building on the time already spent in lecture preparation, the conversion to a written document is less onerous. The following steps may help you navigate the process more easily.

Step 1: Determine If the Topic Is Appropriate for Publication

The first step in the process is to determine whether the topic of the presentation is appropriate for publication in a medical journal. Key questions to ask include: Is the presentation about an important topic that has not been covered recently in the literature? Is the presentation focusing on a new or innovative approach to a common clinical, teaching, or research question? Is the presentation presenting a new or innovative way of combining literature on a specific topic? Is there new information available on a specific topic that would be valuable for colleagues to review? Does the presentation discuss a novel approach to a topic in different populations?

If the answer to the above questions is “no,” or if the presentation does not have substantial content, spending time converting the lecture into a paper is not likely to be fruitful. However, if the lecture topic does meet some of the above criteria, you should consider at the outset using the lecture as a basis for a clinical or evidence-based review article or a commentary.

Step 2: Identify a Journal for the Article

The second step in the process of converting a lecture into a written article is a practical one. Once a decision is made to transform a lecture into a written paper, you need to decide the journal to which you will submit it. The list of appropriate journals depends on the topic, the type of article, and the target audience. The process of generating a list of appropriate journals is critical for assuring that the content is appropriate for the journal and providing guidelines regarding format. If you cannot think of a journal that might want to publish your paper, it might not be worth writing the paper.

In general, evidence-based clinical reviews, systematic reviews, or meta-analyses are more likely to be

published than expert opinions (Table 1). If the intended paper is an evidence-based clinical review article, select a journal that publishes similar types of review articles but none on the same topic as your article. If there is uncertainty, consider contacting the editor of the journal to determine if there is interest in a paper on the topic about which you plan to write.

Determining where to publish a research article, on the other hand, may not be so straightforward. Many family medicine researchers publish in both family medicine journals and publications of other fields that deal with the topic area. Familiarity with a wider range of journals may be needed to make a good decision.

Most successful writers consider three to five potential journals before the manuscript is written and review similar articles and author instructions in those journals. It may be helpful to ask colleagues for suggestions on journals as well.

Choosing a journal will depend on several factors. The first is the content of the journal. A journal that has recently published articles related to the topic may be a good choice. The second is the intended audience for the paper. Are the readers of the journal the individuals that you would like to reach? A third consideration is the impact factor of the journal. Impact factor is a numerical rating provided by the Institute of Scientific Information that attempts to determine the importance of each journal in its field.⁷ Impact factor is computed with a formula that considers the frequency with which articles in a journal are cited in other articles and journals. The score is to show the “impact” each journal has on its field. Finally, if an author has successfully published in a particular journal before, the author may elect to submit another article to that same journal. Table 2 provides a list of some common family medicine and teaching journals and the types of articles that often appear in those journals.

Step 3: Developing the Article Content

The third step in the process requires setting aside time to develop the ideas that will become the backbone of both the lecture and the manuscript. While time is often difficult to find, small blocks of time may be adequate to prepare small increments of both a lecture and a paper. For instance, you only have 1 hour to work on the project each day, you may be able to develop three slides, which may become one page of a manuscript.

Table 1

Types of Review Articles

<i>Type of Review Article</i>	<i>Characteristics</i>
Narrative clinical review	A review of a clinical topic that draws on salient publications about that topic.
Evidence-based clinical review	A review of the medical literature on a particular topic that evaluates and rates the strength of evidence for various diagnostic and therapeutic strategies.
Systematic review	Author answers a specific clinical question by systematically searching the literature for research (that meets certain methodological criteria) that will answer the question.
Meta-analysis	Author identifies several research studies, each studying a similar clinical question and using similar methods. The results of these studies are then combined into a single pooled analysis that provides a quantitative answer to the question.

Table 2
Common Family Medicine and Medical Education Publications

NAME	PUBLISHER/SPONSOR	FOCUS
Family medicine publications (listed alphabetically)		
<i>American Family Physician</i>	American Academy of Family Physicians	Publishes clinical and evidence-based review articles about conditions seen in clinical family medicine, practice guidelines, point-of-care guides, policy papers, and medical humanities features.
<i>Annals of Family Medicine</i>	American Academy of Family Physicians, American Board of Family Medicine, Society of Teachers of Family Medicine, Association of Departments of Family Medicine, Association of Family Medicine Residency Directors, North American Primary Care Research Group, and College of Family Physicians of Canada	Publishes original research, methodology, theory, systematic reviews, and essays on clinical biomedical, social, and health services topics relevant to health and primary care.
<i>Family Medicine</i>	Society of Teachers of Family Medicine	Focuses on educational research (see below) but also publishes articles on health services research, faculty development, information technology, international family medicine, and commentaries.
<i>FP Essentials</i>	American Academy of Family Physicians	Each edition of this monthly subscription series provides an in-depth review of “what’s new” in a particular area of clinical practice.
<i>The Journal of Family Practice</i>	Dowden Health Media	Publishes evidence-based clinical reviews. Also publishes original research that is relevant to family medicine.
<i>Journal of the American Board of Family Medicine</i>	American Board of Family Medicine	Publishes clinically oriented research, clinical reviews, and world perspectives. Also features practice-based research, case reports, ethics papers, plus commentaries and personal reflections.
Medical education publications (listed alphabetically)		
<i>Academic Medicine</i>	Association of American Medical Colleges	Publishes research, reviews, and perspectives on topics relevant to medical schools and teaching hospitals. Focuses on education, training, policy, institutional issues, research, and clinical practice.
<i>Family Medicine</i>	Society of Teachers of Family Medicine	As noted above, main focus is on educational research.
<i>Medical Education</i>	Wiley-Blackwell Publishing and the Association for the Study of Medical Education	Publishes a variety of articles related to education, including original research, reviews, and commentaries.
<i>Medical Teacher</i>	Informa Healthcare/Association for Medical Education in Europe	Publishes articles about innovations in medical teaching, practice tips, and original research articles.
<i>Teaching and Learning in Medicine</i>	Taylor and Francis Publishing	Publishes original research related to medical education.

This third step involves a literature search and developing goals and objectives for the lecture and article. It involves deciding on the type of article you will write—clinical review, systematic review, or meta-analysis. It also involves generating a preliminary outline of the article. Generating content from evidence-based reviews and guidelines, as well as original research articles, is a skill that most academic family physicians already possess. Faculty who do not know how to obtain evidence-based material can find resources elsewhere.⁸

Clinical Review. When developing a clinical review, keep in mind that the content of overview lectures about a clinical topic are often too broad and superficial to

make a good paper in a journal, as journal articles often have a word limit in the range of 2,500 words. It is far better when creating a publishable paper to take a single question about a clinical topic and answer it well (like a clinical inquiry in the *Journal of Family Practice* or an evidence-based article for *American Family Physician*). If the purpose is to cover a complete topic thoroughly, it is better to consider writing a monograph, such as those produced by AAFP’s *FP Essentials* (typically 10,000 words with 100 references).

Systematic Reviews and Meta-analyses. Systematic reviews and meta-analyses require exhaustive literature searches, often with the assistance of a medical librarian. Meta-analyses require facility with statistics

Table 3

Moving Lecture Content in Slides to Manuscript Content in Text

Using PowerPoint Slides as an Outline

- Develop an overall outline of the article depending on type of publication, using the selected journal's instructions for authors
 - Research articles include introduction, methods, results, and conclusions
 - Clinical or teaching review articles' subheadings depend on the content but usually include an introduction and background to set the context, a review of the evidence, and clinical or teaching points related to the new content.
- Printing the slides using the outline function in PowerPoint may demonstrate to the author where there are gaps in content or thought processes.
- Use the content on the slide as bullet points in the outline. Fill in content with complete sentences written in a formal manner. Use the references documented when developing the slides as the main references for the text.

Using the Notes Page Function in PowerPoint

- After writing the bullet points for each slide, think about how you would explain each point in full sentences.
- Write a short paragraph (two to three sentences) about each bullet point on the slide.
- Copy and paste all of the text on the notes pages into a word-processing document.
- Read over and edit for readability and clarity.

Audiotape Lecture

- Use a tape recorder to audiotape yourself either practicing the talk or actually giving the talk.
- Get a transcript of your talk. This will provide some text to use as a starting point for a written document.
- The process of changing the spoken word to written word may take a lot of time in editing as we often do not talk in full sentences. However, it will be a start.
- This process may work for people who have a hard time starting the first draft of a paper.

to ensure that the identified articles are sufficiently homogenous to combine for analysis of data. Numerous resources have been published and are available on the Internet that explain the methods for performing systematic reviews and meta-analyses.^{9,10}

Step 4: Writing the Manuscript

The final step is actually transforming your presentation into a manuscript to submit for publication. You can decide whether to use detailed notes pages in PowerPoint, to audiotape and subsequently transcribe the lecture presentation, or use the slides themselves as an outline. Many people will continue updating the notes page on PowerPoint every time they give a presentation, including any new information or references. This process is detailed in Table 3.

A common problem with the aforementioned approaches, however, is the difference in level of formality between a presentation and a written manuscript. Most lectures are informal and in outline form. The content may not easily be transferred from PowerPoint slide to text or the writing style will sound too chatty or conversational. For beginners who are not comfortable writing, enlisting the help of an experienced colleague or editor will be the key to developing the style necessary for publication in the medical literature.

Throughout this final step, it is important to continually reassess whether the presentation contains enough material for an article. Keep an open mind as the process continues whether there should be a change in content, format, or target journal. A good time to evaluate comes after giving the lecture, after you have prepared a draft manuscript. Depending on audience

Table 4

Checklist for Converting a Presentation Into a Publication

1. Topic appropriate for an article?
 - Gap in the literature
 - Important topic for colleagues
 - New approach
 - Combination of literature
 - New research available
 - Different population
 - Innovative idea
2. Make a list of journals
 - In which journal would this topic be appropriate?
 - Who is your target audience?
 - First, second, and third choices of journals
 - Review similar articles
 - Review instructions for authors
3. Set aside some time to develop your ideas
 - When do you prepare lectures?
 - Literature review (document any references, Web sites, etc, on notes pages)
 - Goals and objectives of your lecture/article
 - Uninterrupted time versus small increments of time
4. What method are you going to use?
 - Audiotape
 - PowerPoint/notes pages
 - Detailed outline from your talk
 - Continue updating notes page every time you review your presentation
5. Continual reassessment
 - Do you have enough material for an article?
 - Should you change the format?
 - Reevaluate after giving the talk. How did it go?
 - Use questions and comments by audience to revise your article.

feedback, you may decide to revise the manuscript to improve clarity or address questions raised during the presentation. Following these suggestions and using the checklist in Table 4 will help some presenters increase productivity and develop a method for successful writing and publication.

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