Library News
News and information from the Research Medical Library
THE UNIVERSITY OF TEXAS MD Anderson Cancer Center
Making Cancer History®

Collaborating with Librarians to Develop Clinical Practice Guidelines

Clinical practice guidelines (CPGs) play a crucial role in informing evidence-based healthcare decision making and improving patient outcomes. Producing trustworthy CPGs involves a rigorous evidence-based approach to identifying and synthesizing literature that forms the evidence base for the guideline recommendations. CPGs are produced by different government agencies or professional organizations at the regional, national, or international level, and the quality of CPGs varies. The AGREE II is an international tool for the quality assessment of practice guidelines. There are also some other resources, such as the TRIP Database which introduced a guideline scoring system that can help the users understand how robust a guideline might be.

To enhance the rigorous methodology in guideline development, the Grading of Recommendations Assessment, Development and Evaluation (GRADE) working group has developed a common, sensible, and transparent approach to grading quality (or certainty) of evidence and strength of recommendations. The GRADE approach is now considered the standard in guideline development. More than 110 organizations from 19 countries have endorsed or are using GRADE, including reputable professional societies such as the American College of Chest Physicians and the American College of Physicians.

The value of information specialists in guideline development has been recognized by guideline producing organizations. The Council of Medical Specialty Societies (CMSS) Principles for Clinical Practice Guideline Development emphasize the inclusion of an information specialist, often a librarian, in the Guideline Development Group (GDG) or as a consultant to the

group. Librarians bring expertise in systematic search strategies and health information resources, enhancing the rigor and quality of guideline development. Societies are encouraged to recruit information specialists experienced in guideline development methodology to ensure that guidelines are based on the most up-to-date, credible, and relevant evidence.

At MD Anderson Cancer Center, our clinical experts have taken the lead in developing CPGs for their respective specialty societies. An analysis of Web of Science data from January 2020 to June 2023 shows that MD Anderson authors have consistently published national or international clinical practice guidelines across diverse clinical specialties. Our clinical experts are on the guideline panels of leading organizations such as the National Comprehensive Cancer Network (NCCN), American Society of Clinical Oncology (ASCO), American College of Radiology, American Society of Transplantation and Cellular Therapy (ASTCT), American Society for Radiation Oncology (ASTRO), Chicago Consensus Working group, Society for Immunotherapy of Cancer (SITC), Multinational Association of Supportive Care in Cancer (MASCC), American Radium Society (ARS), and European Society for Medical Oncology (ESMO). Each of these societies has its own guideline development process.

In an era of information overload and rapidly evolving medical literature, collaborating with librarians has become an essential component of CPG development. By utilizing the expertise of librarians, MD Anderson faculty members can maximize the quality, currency, and relevance of their guidelines. The partnership between faculty members and librarians leverages the unique skills and resources of both parties, resulting in the production of high-quality, evidence-based guidelines. Collaboration with librarians enhances the impact and relevance of guidelines, ultimately benefiting patients and healthcare providers alike. If you would like to know more about details of collaboration with librarians for a new guideline project or to look at some examples from our past projects, please contact the Research Medical Library and visit our SharePoint site Clinical Practice Guideline.

Next Steps After Grant Rejection

Getting bad news about a grant application is discouraging, but for most funding opportunities, applicants whose original application is rejected have the option to prepare and submit a resubmission. In an *All About Grants* podcast and a session of NIH's Virtual Seminar on Program Funding and Grants Administration, NIH program officers offered helpful advice for preparing a resubmission. The program officers' advice can be summarized into 10 steps to take to help improve your chances of getting your resubmission funded. Although the advice here is from NIH, much of it also applies to dealing with grant rejections from other funders.

1. Take a few days after receiving your summary statement to calm your emotions. Don't take criticism personally. As Dr. Kristine Willis, Program Officer at the National Cancer Institute, remarked, "It's not that [the reviewers] don't like you… It's not that they don't like your science. They just didn't like this particular arrangement of words on the page."

2. Make a plan. Read the summary statement carefully and start making a plan for resubmission. Think about what you could do fairly quickly to address reviewers' concerns—for example, rewriting unclear sections, reviewing additional literature, conducting additional statistical analyses, or performing some straightforward lab work—and what might take longer.

3. Reach out to your program officer. The panelists stressed that investigators planning a resubmission should always contact their program officer. According to Dr. Jennifer Troyer, Program Officer at the National Human Genome Research Institute, program officers see thousands of applications and understand what drives reviewers' scores. In addition, they attend study section meetings, so they may be able to give you a more nuanced account of the perceived strengths and weaknesses of your original application than the summary statement does.

Don't cold call your program officer; instead, email them to set up a time to meet virtually or by telephone. If you can, email them specific questions or concerns or an outline of your plans for revisions so that they can prepare for your conversation.

4. Keep up with your field. Revised grants usually must be submitted within 37 months of the original application. Keep in mind that, as noted by Dr. Shawn Gaillard, Program Officer at the National Institute of General Medical Sciences, "science moves at warp speed." Especially if a lot of time has passed since your original submission, your resubmission should demonstrate that you have read recent literature and kept up with new technology in your field.

5. Respond thoroughly and professionally. Dr. Sige Zou from the NIH Office of Research Infrastructure Programs stressed that "your resubmission should be highly responsive." Resubmitted applications are reviewed by the same study section as the original application; they may not have the same primary reviewers, but those reviewers may still be members of the study section. Reviewers of resubmitted applications have access to the summary statement for the original submission and do consider whether the previous reviewers' concerns have been adequately addressed.

In the introduction page to your resubmission, summarize the reviewers' criticisms and then address them all politely and constructively. (See "Tips for writing Introduction sections for NIH resubmission grant applications," *The Write Stuff,* Summer 2017.) Dr. Zou advised that if you can't address a concern or disagree with it, the introduction should provide the reasons why—don't simply ignore such criticisms. (See "How to disagree with an NIH research grant proposal review," *The Write Stuff,* Winter 2019.) The introduction should also clearly indicate what has changed in the resubmitted proposal. The NIH no longer requires you to mark changes in the Research Strategy document.

6. Seek advice from mentors and colleagues who have been through the resubmission process and those who have served on study sections. People outside your field can often help you review your application for clarity. The INTEREST program at MD Anderson holds mock study sections in which MD Anderson faculty review and provide feedback on grant proposals. Editors

in the Research Medical Library can also help improve the readability and organization of your proposal.

7. Work with your strengths. "I'm always telling people…to not just focus on what was said that was negative, but also remember to focus on what was said that was positive and build off of the positives," said Dr. Troyer. Dr. Amanda Melillo, Program Officer at the National Institute of Dental and Craniofacial Research, recommended revising the weaknesses identified by reviewers while being careful not to change elements the reviewers liked. It's also important not to remove important details from the original to save space. Highlight your ongoing work by including new findings or new preliminary data.

8. Reread the Funding Opportunity Announcement (FOA). Revising a grant proposal can take some time. Many NIH FOAs expire after 3 years, so make sure that the FOA still applies at the time of your resubmission and hasn't changed. (See "NIH tip: Check your funding opportunity announcement 30 days before submitting your grant application," *The Write Stuff*, Spring 2019.) Most FOAs allow resubmissions, but a few do not, so also check to make sure the FOA to which you are applying does so.

9. Avoid common errors. The panelists mentioned several common errors that reduce your chances of receiving a fundable score, among them not contacting your program officer and failing to respond thoroughly to the reviewers' comments. Dr. Willis also advised investigators preparing a resubmission not to miss "the forest for the trees"—that is, not to focus on technical details to the extent that the bigger picture of the reviewers' critiques of the project is not addressed. Finally, the panelists discussed the importance of clear communication, including visual communication. The text should be clearly written, be well organized, and use—but not overuse—bold text to highlight important points and review criteria. Paragraphs should be fairly short and tightly focused. Figures and legends should be clear and readable, and the page layout should make good use of white space.

10. Don't give up. All of the panelists emphasized that, in most cases, it's a good idea to revise and resubmit an unfunded proposal—even if it wasn't discussed. "All of us have seen an application go from not discussed on the A0

[original submission] to scored in the fundable range on the A1 [resubmission]," noted Dr. Willis. NIH data show that resubmitted applications have higher success rates than initial submissions do. Unless the reviewers had major problems with several of the review criteria, in which case you may need to reconceptualize the entire study, try again. "The only sure way to not get funded is not to apply," remarked Dr. Gaillard.

Sources

Not funded… Now what? Guidance from the experts. NIH Virtual Seminar on Program Funding and Grants Administration. November 2, 2021. Accessed July 13, 2022. https://www.youtube.com/watch?v=caAhjtzCwcs

To resubmit or not resubmit. *All About Grants* podcast. October 5, 2021. Accessed July 13, 2022. https://grants.nih.gov/news/virtual-learning/podcasts.htm?episode=2005

Risk Factor vs. Cause

Can the terms *risk factor* and *cause* be used interchangeably? Well, sometimes.

As defined in *Dorland's Illustrated Medical Dictionary*, a cause is anything that "brings about any condition or produces any effect."

Examples:

Viruses, bacteria, and fungi are all known to cause diseases.

Cancer can be caused by genetic, environmental, and/or immunological factors.

Her slip on the icy surface caused her to fall and break her hip.

In contrast with the definition of *cause*, *Dorland's* says that a risk factor is "a clearly defined occurrence or characteristic that has been associated with the increased rate of a subsequently occurring disease." This shows that a risk factor's relationship to a disease is less direct than that of a cause.

Examples:

Obesity is a risk factor for gynecological cancers.

Atherosclerosis is a risk factor for primary hypertension.

Exposure to secondhand smoke is a risk factor for chronic obstructive pulmonary disease.

However, *Dorland's* also adds this qualifying statement in the definition of *risk factor*: "causality may or may not be implied." Because a risk factor may both cause a disease and be associated with an increased incidence of it, the term *risk factor* is more widely applicable than *cause*.

Reference

1. *Dorland's Illustrated Medical Dictionary*, 29th edition. Philadelphia, PA: W.B. Saunders Co.; 2000.

New Resource: Sage Research Methods

For those looking to begin or improve their research journey, the Research Medical Library has access to Sage Research Methods (https://login.elibrary.mdanderson.org/login?url=https://methods.sagepub.com/). The collection includes books, reference works, and journal articles that guide users on the methods of conducting research. It also offers cases that provide examples of how research projects are conducted, datasets that give users tools to practice and learn data analysis, and videos that provide visual "tutorials, case study videos, expert interviews, and more."

Recent additions to Sage include:

- Cases: Medicine & Health for examples of clinical medical and public health research (https://login.elibrary.mdanderson.org/login?url=https://methods.sagepub.com/medicine-and-health/method)
- Sage Research Methods Foundations for introductions to concepts and methods (https://login.elibrary.mdanderson.org/login?url=https://methods.sagepub.com/foundations/foundations)
- Datasets 2 to add to the existing datasets available (https://login.elibrary.mdanderson.org/login?url=https://methods.sagepub.com/datasets/discipline).

More information can be found at https://methods.sagepub.com/about or by contacting the Research Medical Library at rml-help@mdanderson.org.

Generating a Manuscript Title Page

Can I automatically generate a title page for a manuscript written by multiple authors? Yes, you can!

The NCI AuthorArranger Tool lets authors of research manuscripts easily and quickly create a title page with author details formatted according to a given journal's submission rules. Authors can populate a spreadsheet template with author details and upload it to AuthorArranger for formatting. Formatted title pages can be copied and pasted from the tool's preview pane into an existing document or downloaded as a Microsoft Word document. Additionally, the tool allows authors to generate a list of author's email addresses for contacting collaborators about the manuscript.

This free online tool was developed at the National Cancer Institute by Mitchell Machiela and Geoffrey Tobias in collaboration with the Center for

Biomedical Informatics and Information. A step-by-step User Guide is available to help authors use this tool and "conquer journal title pages in seconds."

More information is available in the library's Autumn 2021 edition of *The Write Stuff*: https://openworks.mdanderson.org/writestuff_2021/5/

Subscribe to Library News.