New Scholarly Journal: Advances in Cancer Education & Quality Improvement

- Clara Fowler, Library Director

Leveraging the publishing expertise within the Research Medical Library, the Division of Education & Training is launching a new scholarly journal. *Advances in Cancer Education & Quality Improvement* (ACE-QI) will provide a platform for publishing research and professional perspectives on education, patient experience, safety, and quality improvement in cancer care. This journal, led by editor-in-chief Joshua Kuban, M.D., associate vice president for Education and Alumni Relations, is a collaborative effort among clinicians, educators, scientific editors, and librarians. The editorial board features representation from four institutions, an important step towards securing indexing in PubMed and other journal indexes.

The Research Medical Library, in partnership with faculty who have disciplinary expertise and a network of peers who can serve on editorial boards and as peer reviewers, will manage the ACE-QI workflows and provide expertise in information discovery, copyright management, open hosting, and digital preservation. This new journal is part of the library's long-term investment in scholarly communication that is based on a deep understanding of the evolving scholarly publishing landscape. We're seeking submissions for the first two issues of 2025 now, and you can submit your article online to the journal platform for consideration. ACE-QI will publish articles on:

- Creating and adapting training programs
- Delivering team-based education
- Assessing quality improvement initiatives

- Cultivating practices that support high reliability organizations and patient safety
- Improving the patient experience
- Meeting accreditation standards
- Adapting learner-centered education programs to new technologies

If you are an expert in one or more of these areas and would like to serve as a peer reviewer, please reach out to the journal at <u>aceqi@mdanderson.org</u>.

More information about the journal, including the author guidelines and a link to submit an article for consideration, is available here: <u>https://openworks.mdanderson.org/aceqi/</u>.

Lippincott, S. K. (2017). *Library as publisher: New models of scholarly communication for a new era*. University of Michigan Press. <u>http://dx.doi.org/10.3998/mpub.9944345</u>

Beyond Grammar: 10 Ways a Scientific Editor Can Substantively Improve a Manuscript

- Madison Semro

Some people think editors *just* fix grammar errors or improve word choice, but editors can also suggest more significant improvements. Below is a partial list of additional ways editors in <u>Editing Services</u> can improve a manuscript.

1. Assessing logical progression of ideas. Editors can help ensure a manuscript progresses logically. For example, editors might notice that the

interpretation of a set of results could come across as a "stretch" and ask the authors to provide more explanation or reconsider that interpretation.

2. Avoiding plagiarism and inappropriate <u>text recycling</u>. Most authors know plagiarism is wrong, but sometimes authors inadvertently include previously published text (others' or their own) in their manuscripts. To help authors avoid this issue, editors run all journal-article manuscripts through <u>iThenticate</u> plagiarism detection software. Editors review the iThenticate report and query potential areas of concern in the manuscript, if they see any.

3. Identifying information that belongs in another section. Journal articles have a well-defined structure and organization. Sometimes, an editor will notice that information appears in the wrong section of the manuscript. For example, in-depth background information might be provided in the Discussion instead of the Introduction section, or a result might be provided in the Methods section. Editors can determine that such information is better suited to another section and suggest where exactly that information should appear.

4. Identifying missing information (usually in the Methods and Results sections). The Methods and Results sections should be congruent (i.e., each method should have a corresponding result and vice versa). For example, if results from a gene expression analysis are reported in the Results section, information about how that analysis was conducted should also be reported in the Methods section. Editors can spot if information is missing from one of these sections and point to where such missing information should be added.

5. Pointing out contradictions. Editors can notice apparent contradictions when reading a manuscript. Perhaps the presentation of the data in the text contradicts a figure, or perhaps different parts of a review manuscript make opposing points. Editors can point out these contradictions, allowing for authors to address them before submitting the manuscript to a journal.

6. Redesigning tables. Editors can help authors redesign <u>tables</u> so that the comparisons of interest are easier to see. For example, editors might propose

restructuring the table on the left as the one on the right so that readers can easily compare the differences between groups, as well as to increase the overall readability of the table.

Characteristic	N (%)
Placebo group (N = 50)	
Sex (female)	24 (48)
Breast carcinoma	11 (22)
Leukemia	14 (28)
Lymphoma	16 (32)
Melanoma	9 (18)
Treatment group (N = 50)	
Sex (female)	27 (54)
Breast carcinoma	13 (26)
Leukemia	10 (20)
Lymphoma	18 (36)
Melanoma	9 (18)

Characteristic	Placebo group, N (%) (N = 50)	Treatment group, N (%) (N = 50)
Sex		
Female	24 (48)	27 (54)
Male	26 (52)	23 (46)
Cancer type		
Breast carcinoma	11 (22)	13 (26)
Leukemia	14 (28)	10 (20)
Lymphoma	16 (32)	18 (36)
Melanoma	9 (18)	9 (18)

7. Refining the purpose statement or hypothesis. The purpose statement or hypothesis is one of the most important sentences in a manuscript because it tells readers why the authors did their study. A strong purpose statement/hypothesis should also show how the current study seeks to address the gap in knowledge. Editors pay extra attention to these sentences (and will point out if they are missing!) to make sure that they are clear and accurately reflect the rest of the manuscript.

8. Reorganizing a paragraph—or even a whole section. Editors make sure information is presented in a cohesive and coherent manner and, if needed, will suggest changes on a paragraph or even section level to achieve the clearest structure. Sometimes such reorganization can also require new or revised topic and/or transition sentences—editors can help craft those too!

9. Significantly reducing a manuscript's word count. Editors always edit for conciseness—concise writing is more direct and easier for readers to understand—but if a manuscript is significantly over the target journal's word

maximum, editing for conciseness will not be enough to bring the manuscript within the word limit. In such cases, editors can suggest text omissions (e.g., less-relevant background information) so that the manuscript meets the journal's requirements. (However, if the manuscript is too far over the journal's word limit, editors may request that the authors make the first round of cuts before editing.)

10. Transforming a paper's structure from IMRAD to IRDAM (or vice versa). If authors have prepared a manuscript in IMRAD structure (Introduction, Methods, Results, and Discussion) but the journal that the authors plan to submit the manuscript to prefers IRDAM structure (Introduction, Results, Discussion, and Methods), the manuscript will likely need to be reorganized before submission. Editors can guide authors in restructuring the manuscript, ensuring it retains its flow and has all the necessary components.

One final note: Editing Services strives to provide customizable, comprehensive editing. Authors can ask an editor to focus on a specific part of the manuscript or review a particular issue. If you are in the early stages of crafting your manuscript and would prefer higher-level feedback, editors also offer writing coaching and consultations. To submit a manuscript for editing, email the document, along with any specific editing-related requests, to RML-Editing@mdanderson.org.

Promising AI Tools for Systematic Reviews

- Kate Krause

There are a couple of videos on YouTube that claim you can use ChatGPT to do an entire systematic review in an hour. They're obviously untrue, but how

much can artificial intelligence (AI) actually help you with systematic reviews? What can it do and how reliable is it?

There are currently dozens of companies trying to develop AI software products for systematic reviews. Most of them are only in the preliminary stages and need further development and extensive validation testing to ensure their accuracy, ability to handle complex data, transparency, and reproducibility.

There are, however, a few reliable companies that have already developed and vetted AI tools for a few of the steps in the systematic review process. All of them still require human supervision, but they can save you hours of time. One of the most notable is Covidence, a web-based tool recognized by the Cochrane Collaboration as their primary screening and data extraction tool. Covidence uses AI in several ways:

- Predictive screening: Covidence uses a predictive model to rank and re-rank citations needing to be screened based on the inclusion/exclusion decisions you make. This allows you to focus on the most promising studies earlier in the review process.
- Removal of duplicate citations
- Identification of randomized controlled trials with 99.5% accuracy
- Direct links to the articles: Covidence just implemented a unique new feature that allows it to determine which journals your library has subscriptions to and link you to the full-text articles.

Covidence is also developing additional AI features to help with quality assessment, data extraction, and removal of irrelevant references based on your PICO formatted research question.

The Research Medical Library has a subscription to the Covidence software. You can sign up with your @mdanderson.org email address at: https://app.covidence.org/organizations/7_9Da/signup.

There are two other reliable systematic review products that use some of these AI tools. Unfortunately, they're not free and the library does not have a subscription to them. The "freemium" versions offer limited capabilities.

> EPPI-Reviewer, also recognized by Cochrane, is used for a wide variety of systematic review topics such as Public Health, Social Science, and Education reviews. It uses some of the same AI tools as Covidence and includes text-mining to try to analyze large amounts of text in the articles, helping to identify patterns, key terms, and relevant studies. It cannot provide direct links to the article pdfs.

> DistillerSR also offers some of the same features as Covidence and has the ability to identify possible data points for the elements you want to extract. It cannot retrieve article pdfs.

Most of the other software available, such as Rayyan, ASReview, and RobotReviewer, offer very limited AI tools, mostly just to assist in the screening process. Their freemium versions are also very limited.

As AI technology continues to evolve, we can expect more robust tools in the future that will greatly improve how systematic reviews are conducted. For researchers, this means faster, easier, more accurate reviews, ultimately accelerating the translation of research findings into practice.

DynaMed, an Alternative to UpToDate

- Yimin Geng

Point-of-care tools provide evidence-based information for clinicians to find answers to clinical questions. They cover a wide range of topics, including diseases, conditions, and abnormal findings. You may have used the popular tool UpToDate from day one of your residency and still use it nearly daily. However, there is an alternative resource: DynaMed.

Recent studies have shown that DynaMed is comparable to UpToDate with respect to ability to achieve accurate answers, time required for answering clinical questions, ease of use, quality of information, and ability to assess level of evidence.[1, 2] The main differences lie in the interface and user preference.

DynaMed users will find:

- Synthesized topic reviews that cover medical specialties, symptoms, diagnoses, tests, and treatments.
- Drug Monographs.
- Drug Interactions.
- Synthesized graded recommendations.
- Clinical calculators, medication information, and lab references.
- Patient education information.
- Continuously updated content.
   *Note that you can earn and claim MOC points through DynaMed. <u>More details are available on their site.</u>

DynaMed includes the Micromedex Clinical Knowledge Suite Drug Content, which provides information on drug dosage, therapeutic use, and more. Another key feature of DynaMed is that users can quickly locate the relevant clinical practice guidelines in the "Guideline and Resources" section of individual articles. Some users say DynaMed is more focused on evidence-based medicine, with its content presented in a bullet point format that is more direct, while UpToDate often includes more expert opinion.

Regardless of which tool you prefer, you should use more than one database when looking for clinical evidence. If you are new to DynaMed, you may visit the <u>DynaMed Tutorial</u> for guidance.

The <u>DynaMed app</u> is free with a library subscription and is compatible with iOS and Android devices. You can use <u>Apps Research Guide</u> to learn more about how to install and authenticate the DynaMed app.

For more information, please contact the library at <u>RML-Help@mdanderson.org</u>, through the chat service available on our site, or by calling 713-792-2722 Monday through Friday, 8 am to 6 pm.

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Para-: A Paradigm of the Usefulness of Learning Greek Prefixes

- Laura Russell

Para-: A paradigm of the usefulness of learning Greek prefixes

This month's *Word for Word* column is the first of several you'll see over the next year that will address Latin and Greek prefixes and suffixes. Understanding the meaning of such prefixes and suffixes is helpful for anyone interested in learning medical terminology or enhancing their English vocabulary.

The Greek prefix *para-* has many meanings, the most common of which are listed below.[1]

1. Beside, alongside of, or beyond.

Examples:

- The <u>parotid</u> salivary gland is located beside the ear. [*para* (beside) + *ous* or *ot-* (ear)][2] (Note that, in some words, "*para-*" becomes "*par-*.")
- A <u>paradox</u> appears to be inconsistent with the known facts (although it is not actually inconsistent). [*para* (beyond) + *doxa* (belief)][3]
- <u>Parenteral</u> nutrition is given by a means other than the gastrointestinal tract. [*para* (beyond) + *enteron* (intestine)][4]
- A <u>paramedic</u> is a professional who assists a doctor. [*para* (alongside of) + *medicus* (physician)][5]
- A <u>paradigm</u> is an example or pattern. [*para* (beside) + *deiknynai* (to show)][6]
- A <u>parasite</u> is an organism that lives on, in, or with another organism and uses that organism to obtain nutrients, grow, or replicate, often causing harm to its host in the process. [*para* (beside) + *sitos* (grain)][7]
- A <u>parable</u> is a short story that illustrates a principle, such as a moral or religious principle. [*para* (beside) + *ballein* (to put)][8]
- To <u>paraphrase</u> text is to restate it another way. [*para* (beside) + *phrazein* (to point out)][9]

2. Closely related to.

Examples:

- A <u>parody</u> is musical or literary work that closely imitates another work to make fun of it. [*para* (closely related to) + *aidein* (to sing)][10]
- A <u>paramilitary</u> force is related to or characteristic of a force formed following a military pattern. [*para* (closely related to) + *miles* (soldier)][11,12]

3. Abnormal or faulty.

Examples:

- A <u>paresthesia</u> is an abnormal, but usually painless, sensation. [*para* (abnormal) + *aisthesis* (sensation)][13]
- <u>Paranoia</u> is a tendency toward irrational distrustfulness of other people. [*para*, (abnormal) + *nous* (mind)][14]

Not all words that start with *para-* are borrowed from Greek. For example, the word *parakeet* comes from the French *perroquet*, meaning *parrot*.[15] However, because most medical terms and many English words starting with *para-* are derived from Greek, knowing the Greek meaning of *para-* will help you guess or remember their meaning.

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