



Guide to writing and publishing a scientific manuscript: part 2—the process

Ian G. Stiell^{1,2} on behalf of Canadian E. M. Writing Group

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Introduction

This is Part 2 of a two-part series on how to successfully write and publish a medical scientific manuscript. While **Part 1** addressed the structure of a manuscript, **Part 2** addresses the process of writing and dealing with journals.

General tips

Mentor

- **Newer authors** should always seek the help of a senior colleague with substantial authorship experience or expertise in a specific methodology.
 - *Mentors may come from a different discipline.*

Authorship

- The International Committee of Medical Journal Editors (ICMJE) recommends that authorship be based upon **all four criteria**: [1]
 - substantial contributions to the **conception or design** of the work; or the acquisition, analysis, or interpretation of **data** for the work; AND

- **drafting** the work or revising it critically for important intellectual content; AND
- **final approval** of the version to be published; AND
- agreement to be **accountable for all aspects** of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

- Those who do not meet all four criteria should instead be **acknowledged**.
- Authorship inclusion and **first and senior** authors should be determined **early in the project** and before writing begins.
 - Order of **remaining authors** is based upon contributions to the study and the manuscript.
- The **corresponding author** is the one who takes primary responsibility for communication with the journal during the manuscript submission, review, and publication process; this may be a senior author and not the first author.
- Some **formal research groups** have writing group guidelines that must be followed.

Target journal

- Choose initial journal **after careful discussion** with co-authors, once the results are complete and tabulated.
- **Consider** impact factor, whether your article is a good fit with typical publications, target audience, co-author experience with reviews and timeliness, open access, and publication fees.
 - *Aim high but be realistic to avoid multiple rejections (which is quite common).*
 - *Definitely consider non-EM journals, e.g. education, geriatrics, general medicine.*
- Review **submission guidelines** for word count, abstract layout, summary, and other instructions, e.g. <https://www.springer.com/journal/43678/submission-guidelines>

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✉ Ian G. Stiell
istiell@ohri.ca

¹ Department of Emergency Medicine, University of Ottawa, Ottawa Hospital Research Institute, Ottawa, ON, Canada

² Clinical Epidemiology Unit, F657, The Ottawa Hospital, 1053 Carling Avenue, Ottawa, ON K1Y 4E9, Canada

Writing tips

- Writing a manuscript is an opportunity for many authors to improve their skills.
- Tips:
 - Avoid use of the **passive tense** [2].
 - Write **short and clear** sentences.
 - Consider taking a **writing course**.
 - If your co-authors cannot help you, consider enlisting a **professional editor**.

Co-author review and submission

Review by co-authors

- When you have a **complete draft** (excluding references), solicit feedback from your co-authors.
 - Do not send **incomplete** or bullet form sections.
 - Alternately, junior authors may send chunks of **one or two sections** at a time to their mentor for early feedback.
- We recommend you ask them to **reply within 2 weeks** and give the explicit date.
 - *Send a reminder a few days ahead.*
- We suggest that you ask the co-authors to **insert comments** into the draft to give ideas for improvements or to identify confusing text.
- We ask our co-authors, other than identifying typos, to **refrain from using tracked changes** as that can lead to unreadable text when there are many authors.
 - Some authors prefer **tracked changes**, especially when only a few authors.
- We believe that the **first author** has the responsibility for language and grammar and should do the writing.
 - *Some authors prefer multiple authors working together on a shared document, e.g. Google Docs.*
- Co-authors often **add their initials** to the file name of their version with the next person adding further comments.
- A good resource is the recent CAEP Academic Symposium **publication on collaboration** [3].
- Send authors the **revised draft**, tracked changes and clean versions, for final approval.

Submission

- This should be done by an **experienced member** of the team, ideally a dedicated administrative staff.
- Double-check **journal instructions** for abstract, word count, summary, etc.

- The **cover letter** should be brief as editors are more often influenced by the abstract.
- Generally, it is not necessary to submit all the individual **author declarations** until the journal invites you to revise and resubmit.
- Ensure all authors are **notified of the submission** and are given the final version.
- Ensure all authors are aware of the **decision and comments**.
- If the paper is **rejected**, quickly obtain consensus on the next target journal.
- **Do not laboriously revise** according to comments from the rejecting journal, as the next journal will have completely different comments.
 - Revise obvious errors or unclear text.
- **Revise formatting** according to the new journal and submit quickly.

Response to reviews and next steps

Response to reviews

- It is important that you **respond fully** to each and every comment from the editors and reviewers.
- We believe it is easier to **cut and paste** the comments in their entirety into a new response document.
 - *Some authors prefer to use a table format*
- Respond with **bold text** or in a different colour; see **online appendix**.
- Overcome the common **temptation** to respond angrily or sarcastically to comments you do not like; in fact, be almost solicitous in your tone.
- Make changes to the manuscript with **tracked changes** as you go along and assist the editor by quoting the changes, in italics, in your response.
 - If you have added text, quote it explicitly and do not just say “done”.

Next steps

- If “revise and resubmit”, circulate **draft revisions and responses** for comment and approval within 7 days.
- After acceptance, **circulate proofs** to all authors so they can review their names and affiliations.
- Ensure all authors are aware of **publication date** and any press releases prepared by your institution or the journal.
- Provide the PDF of the **final published version** to all authors as well as the citation for their CVs.
- Consider **social media** to let others know about your new publication.

- Consider personal online profiles (e.g. GoogleScholar or ResearchGate) to increase visibility.

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