ABSTRACT
Processing of a submitted manuscript is a complex and time-consuming process. Authors should be aware of items in the editorial office checklist. The journal editors and peer reviewers are an essential part of the manuscript processing system. Copy editors serve as a link between authors and the printer/publisher, and aim to adapt the accepted manuscript to the journal house style and to improve readability of the article.

Keywords: manuscript processing, manuscript submission, medical writing, scientific paper

INTRODUCTION
It is useful for authors to know how their submitted manuscript is processed by the journal editorial office. Organisation of this process varies among journals, but is similar in that the entire process is complex and time-consuming, and requires a team working under the direction of the editor. Knowing the process will help remind the author that the submitted manuscript should be prepared in exact accordance with a particular journal’s Instructions to Authors, and also manage the author’s expectations with regard to the processing of his manuscript.

If the journal requires submission of traditional hard copies of the manuscript, the exact number of identical copies of the manuscript and figures needed by the journal for review and editing should be complied with. An increasing number of journals are implementing electronic submission of manuscripts, as it saves time and money. Electronic submission may be via CDs, email attachments or uploaded directly onto a website. Web-based manuscript submission and peer review systems allow authors to submit their manuscripts online and track their progress at all stages; reviewers to view and download assigned manuscripts, and submit their reviews online; and editors to manage and keep track of the entire reviewing process.

Regardless of whether manuscript submission is via traditional hard copy or electronic, the editors, editorial office staff and reviewers spend much time and effort in dealing with and reading manuscripts. Therefore, receiving manuscripts that are meticulously prepared, well-organised and easy to read are appreciated. Authors are strongly advised to follow exactly the journal’s Introductions to Authors, as they are designed to help the author meet each journal’s specific editorial and processing requirements.

EDITORIAL OFFICE CHECKLIST ITEMS
On receipt of a manuscript, the editorial office checks the manuscript for completeness, creates a file and assigns it a manuscript number. Depending on the editorial office organisation, this may be done manually or using a manuscript tracking software. The unique manuscript number that is assigned is important as it serves as a reference point for all future communication between the author and the journal. Upon submission, author should receive an acknowledgement of receipt of the manuscript from the editorial office, and this should not take longer than one month for traditional hard copy submissions.

At the editorial office, the manuscript undergoes initial screening to ensure that it has been prepared in the standard journal format (e.g. IMRAD structure for original articles), fulfills the uniform requirements for manuscripts submitted to biomedical journals, has a written statement that the manuscript has been read and approved by all authors, a signed conflict-of-interest statement, especially of any financial interest, and that the contents of the manuscript are appropriate for the particular journal. Declaration of individual author contributions, and completed transfer of copyright form are required by some journals. The underlying principle is that authors must state explicitly whether or not there are potential conflicts of interest.
Individuals who have provided writing or other assistance should be clearly identified, and any funding source for this assistance disclosed. It is then up to the journal editor to decide whether or not to publish information disclosed by authors about potential conflicts, should the manuscript be eventually accepted.\(^1\)

Other checklist items include, where applicable, institutional review board approval for human and animal studies, and indication by authors that experimental procedures were in accordance with the Helsinki Declaration of 1975, as revised in 2008.\(^2\) Rights and permissions should always be given in writing, and these include identifiable individuals, previously-published figures or tables, personal communications, and acknowledgement of individuals for their contributions. Correspondence details, such as names and full postal address, telephone number, fax number and email address, should be provided. Only if all checklist items are satisfied, then is the manuscript sent for peer review. Many journals now provide a pre-submission checklist to help authors ensure that all the components of the manuscript submission are included.

**Box 1. Editorial office manuscript checklist:**

- Fulfils uniform requirements for manuscripts submitted to biomedical journals.
- Appropriate for journal.
- Manuscript read and approved by all authors.
- Conflict-of-interest statement.
- Institutional review board approval.
- Experiment complies with Helsinki Declaration.
- Rights and permissions in writing.
- Complete correspondence details.

**THE REVIEW PROCESS AND EDITORIAL DECISION**

The manuscript is then assigned to reviewers, usually ranging in number from one to three, that are appointed by the editor. Depending on the way a journal is organised, this may be done by the editor, his deputy, or assistant editors. The editorial office should ideally check the availability of reviewers prior to manuscript assignment. Both manuscript and reviewer information are logged onto a tracking database. The manuscripts are then sent to the reviewers, either by mail or electronically. Deadline for completion of the manuscript review varies among journals, but usually 2–6 weeks are given. The editorial office usually sends a reminder to late reviewers, and follows up on overdue reviews.

The editor or his deputy reviews the referees’ reports and takes one of two possible actions: the manuscript may be sent to an additional reviewer before a decision is made or a decision is made at this point. The editor is responsible for overseeing the entire peer-review process, assessing the quality of reviews, perusing and judging articles deemed to be acceptable by reviewers, and making the final editorial decision. When a decision is made, a letter indicating acceptance, rejection or need for revision is sent to the corresponding author.

**Box 2. Possible editorial decisions:**

- Accept
- Accept subject to minor revisions
- Revision
- Reject with opportunity to resubmit
- Reject (without further consideration)

Upon submission of the revised manuscript, it is usually initially vetted by the editor and ideally, the editor will be able to make a decision on the manuscript’s fate. If this is not possible, the manuscript is most often sent for another reassessment by the original reviewers, or occasionally, by additional reviewers for a fresh evaluation. The editor reads the second review and makes a final decision. Sometimes, a manuscript may need further rounds of revisions, before an acceptance or rejection judgment is finally passed.

**POST-ACCEPTANCE PROCESSING AND COPYEDITING**

After the accepted manuscript is edited by the editor or his deputy, it is passed to the copy editor. The copy editing staff may be part of the editorial office or may be employed by the publisher. The copy editor is a specially-trained professional who often does not have a medical background, although it is advantageous to have a science or biomedical background. The main role of a copy editor is to try to adapt the manuscript to the “house style” of the journal, with the aim of improving readability. The copy editor aims to facilitate clarity and conciseness in the articles to be published. Any substantive changes that must be made to conform to established journal guidelines are pointed out to authors. If the text appears ambiguous or requires clarification, the authors are queried. The copy editor edits the manuscript for spelling, capitalisation, grammar and punctuation. The copy editor also marks up the manuscript to guide the printer on how to typeset the manuscript. Illustrations may be rearranged, relabeled and redrawn, if needed, under the supervision of the copy editor. Sizing of illustrations and placement in relation to the text are done. The copy editor therefore acts as the main link between the author and the publisher/printer.
Box 3. Role of a copy editor

- Adapts manuscript to house style of journal.
- Improves readability, clarity and conciseness.
- Alerts author to substantive changes made.
- Queries and clarifies ambiguities.
- Marks up manuscript to guide the printer.
- Edits manuscript for spelling, punctuation and grammar.

The copy-edited manuscript may be sent electronically or by mail to the author for review. If further changes are made, the author should indicate them clearly. If not, the authors send the manuscript back, indicating that no change had been made. The editorial office or publisher, depending on the organisational structure of the journal, then sends the copy-edited manuscript to the designer or printer who generates the galley proofs. The proofs are sent to the publishers, or authors, or both (depending on the journal organisational structure) for proofreading. Authors should indicate changes made, if any. In many journals, the authors receive only the galley proofs, and not the copy-edited manuscript.

At this stage, only minor amendments are allowed. Substantial changes are discouraged and may lead to a delay in publication and cost to the author, unless absolutely necessary or proof errors have been found to be the fault of the editorial office, designer or printer. The copy editor collates and incorporates corrections, and sends the proofs to the printer for typesetting of changes and to create folio pages. The designer or printer then returns all the material, including all artwork and advertisements, to the publisher, and on to the editor and copy editor for the final confirmation of the issue contents. As the editor is responsible for the entire content of a journal, he does a final review of not only the scientific contents, but all items including the artwork, cover, advertisements and announcements (commercial and academic). An overview of the entire process is shown in Appendix 1.

SUMMARY

Processing a scientific manuscript is complex and time-consuming. Having an understanding of how the system works is useful not only for potential and current authors, but also for editorial board members, reviewers and readers.

Box 4. Take home points:
1. Processing a submitted manuscript is complex and time-consuming.
2. Authors should aim to submit the manuscript exactly according to the journal requirements.
3. The journal editors and reviewers are an essential part of the manuscript processing system.
4. The copy editor aims to adapt the manuscript to the journal house style and to improve readability.

REFERENCES

**Question 1.** Regarding manuscript submission to the journal:
(a) Processing of a submitted manuscript is complex and time-consuming. ☐ ☐
(b) Authors should not bother about how a manuscript is processed. ☐ ☐
(c) Most journals are now adopting hard copy submissions of the manuscript in triplicate. ☐ ☐
(d) Authors should pay due attention to the journal’s Instructions to Authors. ☐ ☐

**Question 2.** The journal editorial office manuscript checklist includes the following items:
(a) Conflict-of-interest statement. ☐ ☐
(b) Institutional review board approval. ☐ ☐
(c) Rights and permission in writing. ☐ ☐
(d) Letter to the editor explaining why submitted manuscripts should be published. ☐ ☐

**Question 3.** Regarding the peer review process:
(a) The copy editor selects peer reviewers. ☐ ☐
(b) Ideally, the editorial office staff checks reviewer availability prior to manuscript assignment. ☐ ☐
(c) Both manuscript and reviewer information are logged onto a tracking database. ☐ ☐
(d) The editorial office follows up on overdue reviews. ☐ ☐

**Question 4.** The following statements on the role of the copy editors are true:
(a) Adapt the accepted manuscript to the journal house style. ☐ ☐
(b) Improve readability of the manuscript. ☐ ☐
(c) Query and clarify any ambiguities with the author. ☐ ☐
(d) Make major changes to the manuscript without consulting the author. ☐ ☐

**Question 5.** Regarding processing of an accepted manuscript:
(a) Copy editors may be employed by the publisher. ☐ ☐
(b) Galley proofs are sent to authors for checking prior to publication. ☐ ☐
(c) Absolutely no changes are allowed at the galley proof stage. ☐ ☐
(d) The editor is responsible for the entire content of the journal, including advertisements. ☐ ☐

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**Doctor’s particulars:**
Name in full: ____________________________________________________________
MCR number: ___________________________ Specialty: ___________________________
Email address: ___________________________________________________________

**SUBMISSION INSTRUCTIONS:**
(1) Log on at the SMJ website: http://www.sma.org.sg/cme/smj and select the appropriate set of questions. (2) Select your answers and provide your name, email address and MCR number. Click on “Submit answers” to submit.

**RESULTS:**
(1) Answers will be published in the SMJ November 2009 issue. (2) The MCR numbers of successful candidates will be posted online at www.sma.org.sg/cme/smj by 15 November 2009. (3) All online submissions will receive an automatic email acknowledgment. (4) Passing mark is 60%. No mark will be deducted for incorrect answers. (5) The SMJ editorial office will submit the list of successful candidates to the Singapore Medical Council.

Deadline for submission: (September 2009 SMJ 3B CME programme): 12 noon, 1 November 2009.