

POLICY Peer-Review and Double Blinding

PEDIATRIC ETHICSCOPE uses a double-blinding system to ensure both authors and reviewers are unknown to one-another. While it has been shown systematically that unblinding has no important effect on the quality of the review, the recommendation regarding publication, or the time taken to perform the review, ¹ PEDIATRIC ETHICSCOPE does so anyway for three reasons:

- 1. To eliminate the potential for bias.
- 2. To avoid the appearance of the potential for bias.
- 3. To do otherwise significantly increases the propensity of reviewers to decline reviews.¹

It has also been demonstrated in at least one study that parallel reviewers of medical journal manuscripts agree on recommendations to accept/revise, or reject "at levels barely beyond chance,"² but the same study found that editors rely on those reviews in making their decisions.³ Some research into reviewer recommendation differences between small and large medical journals purport reviewers of larger journals are "stricter" than reviewers of smaller journals, and that the former prioritize methodological superiority, whereas the latter seek out novelty of information.⁴ Some argue that attempts to combat this effect in traditional ways are unlikely to be successful since improving the quality of peer-reviews through training or checklists have been shown to be ineffective.⁵ However, peer review has been shown to improve the author's work; the communication of results, the quality of discussion sections, and the legitimacy of conclusions⁶ have all been shown to benefit from peer review.^{7,8,9}

Since no journal can step outside of the shadows cast by issues of bias, fairness, or legitimacy, and it is the case that the 'traditional' peer-review process has been called into question by many, PEDIATRIC ETHICSCOPE makes every effort to ensure the articles we publish are deserving, and recognized as so. For this reason, PEDIATRIC ETHICSCOPE has two practices that improve the quality and consistency of the reviews done for the journal.

First, we do not ask reviewers to make recommendations regarding publishing; the purpose of the review is for the editors to make use of the reviewers' expertise so that the editors can make informed decisions regarding publishing.

Second, we use a peer-review worksheet designed to assess manuscripts in two ways. First, we ask reviewers to rate the specific merits of a manuscript in seven categories. We then ask for the reviewer's overall impression of the work. This two-part process provides both a more detailed and more general



sense of the work for the editors to assess. It provides feedback for the author on specific aspects of the work and the work taken as a whole.

However, more doubt is cast on the quality of published work by recent studies that have found 20% of researchers performed between 69% and 94% of all reviews, and of those who do reviews, 70% spend $\leq 1\%$ of their work time performing reviews while 5% apply $\geq 13\%$ of their work time to review work.¹⁰ While this could suggest substantial heterogeneity in accepted and approved work, it could also be interpreted as undermining the epistemic authority of published work as a reliable body of knowledge indicative of the field. It is for this reason that we underline our commitment to new authors and reviewers.

PEDIATRIC ETHICSCOPE does this through an iterative, internal technical review process that precedes our double-blinded external peer-review. The three-step process is as follows:

I.

Upon submission through our web portal or via electronic mail, PEDIATRIC ETHICSCOPE editors begin **initial screening** of the manuscript for its appropriateness given the aims and scope of the journal. This includes:

- Is the work relevant to pediatric bioethics or clinical ethics?
- Does the work address a topic of interest to our readership?
- Are the ideas or analysis presented sufficiently novel or interesting to merit inclusion in the literature at-large?

If the manuscript meets these criteria, it moves forward to the next step. If a manuscript does not meet these criteria, the authors are informed. If the manuscript has merit, but is a better fit with another publication, we will make that suggestion to the author.

II.

Once passed initial screening, the manuscript is assigned to an editor who will begin the **internal technical review**. Technical review includes analysis of the writing, the content, and the research. The purpose of the technical review is to confirm, where appropriate:

- The argument or narration is clear and concise
- Any cases presented are on-point and detailed
- Any research presented follows professional and scientific guidelines
- The ethical issues presented are fully articulated and explored
- Counter arguments or opposing positions are presented and analyzed
- The discussion is well-rounded and perceptive
- Sourcing is complete, accurate, and appropriate to use
- Conclusions are validly drawn based on the evidence and reasoning presented



The technical reviewers work with authors to help them present their ideas most effectively by pointing out shortcomings and areas to strengthen. The lead editor on the article may involve subject matter experts for specialized knowledge or research questions as needed.

Internal technical review results in one of three findings:

- 1. The work is top-quality and worthy of publication.
- 2. The work has the potential to become top-quality work worthy of publication.
- 3. While meeting the aims and scope, the work is not sufficiently strong to be published.

While manuscripts can fall into the second or third category at this stage, falling immediately into the first category is rather unusual. For work that falls into the third category, the manuscript is returned with an explanation of why it was not accepted. For work falling into the second category, a manuscript may be reviewed and returned to the author with comments once, or a number of times, depending on the merit of the idea, the shortcomings to overcome, and the resolve of the author. For some first-time authors, a number of iterations may be needed; for those attentive to comments, once may be sufficient.

III.

Technical review is a precursor to **double-blinded external peer-review**. We feel one reason so few publish is that the publication gauntlet favors those who can do all of the above steps without assistance. This excludes persons at smaller institutions and those with less experience writing. Our technical review makes it more possible for new voices with good ideas and insights to become a part of the conversation on a larger platform than is otherwise commonly possible.

That being said, our external peer-review is robust; only top-quality work is published. While our external reviewers do not make publication decisions, their recommendations carry weight in light of their experience and expertise. By combining the technical and blinded peer-review processes, the resulting output is broad, of high quality, and interest to our readers. Authors will receive feedback from the reviewers as mediated by the PEDIATRIC ETHICSCOPE editorial staff. Generally, work at this stage refines an already strong manuscript.

For purposes of consistency, reviewers use a reviewer worksheet developed to ascertain both specific and overall feedback on a manuscript. We have made the reviewer worksheet available online so authors may see how their work is evaluated and potential reviewers can consider their potential to perform reviews. While no algorithm exists for determining success, the data points on the worksheet suggest successful strategies, once one has a subject, analysis, or insight of merit.



² Kravitz RL. Editorial peer reviewers' recommendations at a general medical journal: are they reliable and do editors care? PLoS One Apr 8; 5(4): e10072 2010. *Contra*

³ Supra Kravitz RL. 2010.

⁴ Marusić A et al. Peer review in a small and a big medical journal: case study of the Croatian Medical Journal and the Lancet. *Croat Med J.* Jun 2002; 43(3): 286-9.

⁵ Bruce R. Impact of interventions to improve the quality of peer review of biomedical journals: a systematic review and meta-analysis. *BMC Med.* June 10; 14(1): 85. 2016

⁶ Goodman SN, Berlin J, Fletcher SW, Fletcher RH. Manuscript quality before and after peer review and editing at Annals of Internal Medicine. *Ann Intern Med.* 1994 Jul 1; 121(1):11-21.

⁷ Estrada C, et al. How to be an outstanding reviewer for the Journal of General Internal medicine... and other journals. *J. Gen Intern Med.* 2006 Mar; 21(3): 218-284

⁸ Wager E, Middleton P. Effects of technical editing in biomedical journals: a systematic review. *JAMA*. 2002 Jun 5; 287(21):2821-4.

⁹ Roberts JC, Fletcher RH, Fletcher SW. Effects of peer review and editing on the readability of articles published in Annals of Internal Medicine. *JAMA*. 1994 Jul 13; 272(2):119-21.

¹⁰ Kovanis M et al. The Global Burden of Journal Peer Review in the Biomedical Literature: Strong Imbalance in the Collective Enterprise. *PLoS One*. Nov 10; 11(11): e0166387. 2016.

¹ Van Rooyen, et al. Effect of open peer review on quality of reviews and on reviewers' recommendations: a randomized trial. *BMJ*. Jan 2; 318(7175): 23-7. 1999