Concerns have been raised about how journals maintain their standards during the current coronavirus disease 2019 (COVID-19) pandemic, given the rapid pace and unprecedented volume of research being conducted in such a short time, and the large number of reports submitted to journals. For example, at JAMA, from January 1 to June 1, 2020, more than 11,000 manuscripts were submitted, compared with approximately 4,000 manuscripts submitted during the same period in 2019. Virtually the entire increase has been related to manuscripts focused on COVID-19, with about one-third representing original research (full-length manuscripts, brief reports, and research letters) and two-thirds representing opinion (Viewpoints, A Piece of My Mind) and reviews.

Normally for research reports submitted to JAMA, initial evaluation is performed by an associate editor, by a member of the senior full-time editorial staff, or both, followed by external peer review for manuscripts of good quality that may be suitable for publication. For those manuscripts that, after external peer review, revision is requested for possible publication, full-time editorial staff conduct formal additional internal detailed review.

During the pandemic, this process has been modified for COVID-19-related research submissions. From the time of submission virtually all of these manuscripts have been handled by full-time JAMA editorial staff. For manuscripts that have been judged to have sufficient publication potential and were essentially descriptive, representing simple and straightforward epidemiology, review has primarily been internal, including peer review by JAMA editors with relevant subject matter expertise, including infectious diseases, critical care, cardiology, and epidemiology. However, for research manuscripts in which the results are likely to influence clinical practice or public health policy, or are likely to be of substantial interest and possible concern to the public, external peer review (including review by 1 or more statisticians) has always been conducted. For some manuscripts, peer reviewers and editors have asked for additional data and analyses, or confirmation of data accuracy prior to publication. In these cases, publication was delayed until those data and analyses were received, rereviewed, and deemed satisfactory. Although rapid publication of clinically actionable information during a pandemic is important, publishing results that are not valid can do harm. Rushing publication, if there are mistakes, will ultimately undermine public trust in science.

For the majority of medical journals, peer reviewers function as important consultants, with the final decision to publish a manuscript resting with the editor in chief, usually in consultation with senior editors. The final decision to publish a manuscript involves consideration of many factors, foremost of which is the validity of the results, as well as the importance and plausibility of the findings. Other factors include comments from peer reviewers (important concerns that must be addressed by the authors), relevance for journal readers, and consistency with the mission of that journal.

It is reasonable to question how quickly important research reports that could influence practice can be rigorously evaluated and published. Normally, the editorial evaluation and peer-review process is deliberate, taking weeks to months. On very select occasions, JAMA has the capacity to publish a research report in 10 to 12 days after submission, including external peer review and internal editorial evaluation, thorough revision by authors, and manuscript editing to JAMA standards. An essential factor with these expedited manuscripts has been that external peer reviewers were willing to provide rigorous reviews within 2 to 3 days, but rapid publication can only be done if authors, scientific editors, and manuscript editors are available to review and revise the manuscript every day during that period. It also requires a skilled and experienced publishing team that can process and disseminate manuscripts quickly and accurately. JAMA has employed this approach for a limited number of manuscripts since the pandemic began. However, it is important to recognize that JAMA has more editorial resources (human and technical) than many other journals; the resource-intense procedures JAMA has been able to implement during the pandemic are therefore likely not available for all medical journals.

Journals have many different approaches for addressing postpublication issues raised by readers. During the pandemic, JAMA has allowed rapid online commenting for all COVID-19-related articles. This allows readers to post comments in a matter of hours, rather than the more methodical process of submitting a letter to the editor and waiting for a response from authors prior to possible publication. Journals must also be responsive to concerns that might lead to clarifications, corrections, or possible retraction, and when these issues arise, especially for reports related to treatment of COVID-19, evaluation and corrective action must occur promptly. Journals always have a responsibility to ensure an accurate scientific record, and this is critically important during a pandemic. For instance, when an ambiguity was identified in a published research article, JAMA posted a clarification within 2 days after the article was published.
Peer review is essential in science. The substantive evaluation by and opinions from reviewers with subject matter knowledge and with methodological and statistical expertise are invaluable in assessing the scientific rigor and plausibility of study findings, and help to ensure that the presentation of results accurately reflects the data. But peer review is only one part of the process of ensuring that published research is of high quality. Authors must be honest; they cannot fabricate, falsify, or misrepresent data, all of which may not be detectable during review. Ultimately, though, editors, who are the final arbiters of what is published, must carefully assess the scientific and clinical aspects of the study, consider the opinions of peer reviewers and the responsiveness of authors, and exercise judgment in deciding what to publish.

REFERENCES