Editorial

# Publish (High-Quality Evidence For Clinical Practice) or (Patients May) Perish

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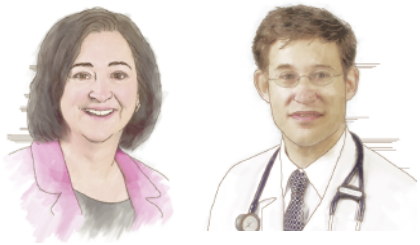

Improvements in patient outcomes depend on evidence about what works and what doesn't. The evidence found in peer-reviewed publications such as the *American Journal of Critical Care (AJCC)* forms the foundation of advances in clinical practice. Whereas publication is important for advancing individual career goals, conducting and disseminating clinically relevant research is imperative to improve care. Upholding ethical and editorial standards is crucial for maintaining the quality and relevance of the research literature.

The phrase *publish or perish* has long been a mantra for those who want to advance in academic positions. Publication is an easily quantified metric of scholarly productivity. *Publish or perish* reflects the importance accorded to publication in our professional lives. Assessing an individual's publication record is an integral part of the promotion and tenure process for academics.

Many academic institutions have complex mechanisms for determining the merit of an individual's publication record. These determinations attempt to account for the quantity and quality of an author's publications. Publication productivity is increasingly included as part of individual and unit evaluations in clinical settings, and is commonly used as an indication of accomplishment in the context of clinical ladders and institutional excellence.

The concept of *publish or perish* can be extended beyond the implications for individual authors. Publication of research provides vital contributions to critical care practice and to patient outcomes in acute and critical care. Advances in clinical care depend on wide dissemination of relevant, robust, and reliable knowledge. Without publication of high-quality research, patient outcomes suffer and patients may, in fact, even perish unnecessarily. Clearly, the *publish or perish* stakes are highest when published data are incorporated into clinical practice.

## Guidelines for Clinical Practice

Clinical practice guidelines distill the knowledge base for practice and, as disseminated in publications, into clinically relevant actions. Because new research continues to expand, refine, and redefine clinical understanding, the knowledge base for practice is dynamic.

Clinical guidelines must be revised periodically to accommodate newly published findings. Revisions of 2 guidelines important to the care of critically ill patients were completed in 2012 and published in early 2013. First, revisions to the American College of Critical Care Medicine guidelines for management


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of pain, agitation, and delirium (PAD) were published in January of 2013.[1] Second, revised guidelines from the Surviving Sepsis Campaign were published in February 2013.[2]

The PAD guidelines were originally developed in 2002, and the revision involved a 6-year multidisciplinary task force collaboration. Drs Richard Riker and Gilles Fraser, members of the PAD Task Force, highlighted selected recommendations and discussed challenges for bedside clinicians in the March 2013 issue of *AJCC*.[3] The new Surviving Sepsis guidelines also represent the work of a multidisciplinary expert committee. Nursing implications of the revised Surviving Sepsis guidelines are summarized in this issue of *AJCC* by Drs Ruth Kleinpell, Leanne Aitken, and Christa Schorr, who were members of the revision committee.[4]

Revisions to these 2 important guidelines illustrate how recent publications inform changes in clinical guidelines. Recommendations for practice continue to change as new research confirms, refutes, or modifies previous practices. Importantly, there are many areas of clinical practice in which evidence is lacking and high-quality research is urgently needed. This is true even in areas that have been the focus of intense scrutiny, as in the preceding guidelines. Both revised sets of guidelines indicate there are unresolved clinical questions remaining that can only be answered by additional research.

## Rating the Evidence

A crucial component in the development or revision of practice guidelines is appraisal of the available evidence and the strength of that evidence. Evidence grading systems enable guideline users to understand the levels of evidence supporting guideline recommendations. AACN pioneered the use of an evidence rating system in 1993 and updated the evidence-leveling system in 2009.[5]

Such systems recognize that not all evidence is equally robust; in the hierarchy of evidence, strong research designs (eg, meta-analyses and randomized controlled trails) are considered more valuable than case reports and expert opinion. The highest levels of evidence depend on peer-reviewed publications of credible research.

## Layers of Editorial Scrutiny

Research is central to informing the best clinical practices, and the integrity of the published research record is essential. There are several factors that can jeopardize the quality of publications. Issues such as duplicative publication, plagiarism, incorrect attribution of previous work, threats to data integrity, and bias in presentation can undermine incorporation of findings into clinical practice. Because the integrity of research published in *AJCC* is of paramount importance, several layers of scrutiny are employed during the consideration of manuscripts submitted to the journal.

First, *AJCC* requires authors to structure manuscripts in accordance with standardized reporting guidelines that facilitate clear, concise, and complete reporting.[6] The "Uniform Requirements for Manuscripts Submitted to Biomedical Journals"[7] provides specific recommendations on a wide range of ethical and editorial issues, including determination of authorship, conflict of interest, duplicate and redundant publications, and human subjects protection. We encourage authors to follow the Consolidated Standards of Reporting Trials (CONSORT)[8] recommendations in preparing research reports, and to adhere to the "Standards for Quality Improvement Reporting Excellence (SQUIRE)"[9] guidelines in reporting quality improvement studies.

At the time of submission, authors must verify that the manuscript has not been published elsewhere; however, publication of an abstract (eg, of a presentation or poster at a scientific meeting) does not preclude publication of a full manuscript on the same content. Authors must also verify that the manuscript has been submitted solely to *AJCC*. Whereas authors are free to send query letters about a potential submission to multiple journals simultaneously, publication ethics require that a manuscript be considered by only one journal at a time. Simultaneous submission of a manuscript to more than one journal is not permitted, and resubmission to a different journal is not permitted until after a final decision has been rendered by the journal considering the manuscript. At *AJCC*, we recently initiated use of plagiarism detection software, and every submitted manuscript is scanned prior to review.

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> The evidence we publish forms the basis of improvements in the care of critically ill patients.

Every paper submitted to *AJCC* undergoes an initial review by the editors in chief (Drs Savel and Munro) for quality and appropriateness. Although high-quality manuscripts can be rejected at this point if the content or audience is not a good match for the journal, manuscripts are more likely to be rejected before peer review for scientific reasons, including problems with study design that make results suspect.

Manuscripts that pass the initial screening process are sent to peer reviewers for evaluation. Three or more individuals with expertise related to the manuscript are selected by the editors to review the manuscript. *AJCC* uses a "double blinded" review system, in which the identities of authors are not revealed to reviewers and the identities of reviewers are not revealed to authors. Most importantly, peer reviewers help the editors determine the quality and significance of the submission. The selected reviewers are familiar with the body of literature related to the topic of the manuscript, and these reviewers' comments can assist authors in cases where attribution is incorrect or inadequate. Reviewers with specialized expertise in methodology or statistics are helpful in evaluating papers involving novel or complex designs.

*AJCC* strives to publish original work that will serve as the evidence base for interdisciplinary critical care practice. The evidence we publish forms the basis of improvements in the care of critically ill patients and directly affects patient outcomes, including mortality. Publication is important to individual authors, but patients, families, and clinical providers are more important stakeholders in the publication process than are authors and editors. We have a continued commitment to maintaining the quality of *AJCC* because we must publish high-quality evidence for clinical practice or patients may perish.

The statements and opinions contained in this editorial are solely those of the coeditors.

FINANCIAL DISCLOSURES
None reported.

**eLetters**
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