

Mayo Clinic Proceedings 2015: As We Move Forward



It is with great enthusiasm that the editorial board, staff, publisher, and I share with you new information on the current status of *Mayo Clinic Proceedings* and our plans for 2015. The *Proceedings* had a very good year in 2014, and as we enter into 2015, the Journal is well positioned among the world's most influential biomedical journals. Specifically, in the universe of scholarly journals, it is among the most widely circulated, most widely read, and most widely covered by the media. All of these changes are quite promising for a journal that, in the beginning issue in 1926, had a much more provincial focus and confined ambitions.¹ Today, the Journal has an international readership and an international complement of authors and reviewers. I will elaborate on each of these items and share with you how the Journal's leadership plans to use these foundations to further enhance service to authors, readers, and patients during 2015 and beyond.

Multimedia Dissemination of Information

In recent years, surveys of our readership have informed us that, if restricted to just one form of the *Proceedings*, readers would overwhelmingly choose print-only over electronic-only. Such data may surprise many who have predicted over the past decade that print publication is dying or dead, or will soon be so. In actual practice, however, most readers of the *Proceedings* or related journals do not want a single access point to a journal (as was the basis of the question we posed to readers) but instead want journal information in multiple forms that are readily (and in many instances instantaneously) accessible. The editorial board, staff, and publisher have studied and taken notice of readers' desires. We hold weekly meetings to identify opportunities, and we introduce Journal improvements weekly to ensure that the Journal will meet readers' needs and preferences today and in the future. Restated, as the needs and preferences of those we serve change with time, we will make every effort to respond responsibly and in a timely fashion.

Based on these premises, the print journal is a primary focus of the Journal's leadership, and we have been able to stabilize its circulation in an era when the print circulation of other journals is shrinking. As a result, the *Proceedings* is now recognized as the world's third-largest print-circulation, scholarly biomedical journal of any genre, reaching approximately 127,000 subscribers each month.

Added to this component of the Journal's reach, *Proceedings* content is also accessed by thousands each day through our website, YouTube, Facebook, and Twitter activities, and media coverage of our stories is now reaching, on average, millions of readers, viewers, and listeners each day. As a result, when quantified by the best available metrics, the *Proceedings* content (in its original form or a derivative, eg, in a media report) was accessed by, or made available to, an audience of more than 1 billion in 2014, and the growth rate is such that we anticipate a meaningfully greater number in 2015.

Authors are taking note of the *Proceedings'* ability to disseminate its valuable content worldwide. The Journal's leadership believes this is an important reason why authors—when attempting to have their important articles reach an immense audience—are seeking out the *Proceedings* at a historic rate. Advances in journal quality and influence are becoming increasingly quantifiable using established metrics. As such, we project with some confidence that metrics such as the *Proceedings'* impact factor—which has increased in 13 of the past 14 years, a rare experience for any journal—will meaningfully increase in 2015 and beyond.

Determining the Disposition of Submitted Manuscripts: The Role of Peer Review

When the Journal's leadership began its "evolution of *Mayo Clinic Proceedings*" initiative a decade and a half ago,² the Journal at the time consisted largely of articles by Mayo Clinic authors, and the baseline acceptance rate for manuscripts was approximately 60%. In the

ensuing years, not only has the number of manuscripts submitted each year dramatically increased but so too has the diversity of authors and topics. The breakdown of authorship during the first 9 months of 2014 is shown in Table 1. During these 9 months, authors from 45 countries submitted manuscripts, with the 10 countries submitting the most manuscripts listed in Table 2. Working with Elsevier, the *Proceedings* is now publishing more editorial (ie, nonadvertising) content than ever before, and this increase is requiring not only more peer reviewers but oftentimes more input from peer reviewers on a given manuscript.

The simple average of the interval between manuscript receipt and first decision to authors has declined over the “evolution” period, from approximately 74 days at baseline to 17 days in 2013. A major reason for this decline is that the editorial board now triages more than half of the submitted manuscripts, with authors receiving a relatively rapid assessment of a manuscript’s disposition and the factors behind the decision. If the editor-in-chief disagrees with the triage decision or if the editorial board and editor-in-chief agree that the manuscript warrants further evaluation, the manuscript is engaged in formal peer review. That peer review includes input from a sampling of referees (typically 2 to 4 per manuscript) that now includes more than 550 reviewers per annum. During 12 months from mid-October 2013 to mid-October 2014, 233 (41%) of those reviewers were affiliated with Mayo Clinic (representing multiple campuses), 253 (45%) were from the United States but not Mayo Clinic, and 80 (14%) were international.

Another reason our turnaround times have declined during the “evolution” years is that the Journal has more clearly codified and acted upon the standards required for publication in

TABLE 1. Author Demographics^{a,b}

Mayo Clinic-affiliated (all campuses)	18%
US non-Mayo Clinic-affiliated	32%
International	50%

^aIncludes submissions between January 1 and September 30, 2014. Entities ranked in order of lifetime (ie, 1926-present) contributions to journal operations.

^bIncludes case reports, original articles, and reviews.

TABLE 2. Ten Countries Submitting the Most Manuscripts to *Mayo Clinic Proceedings*^{a,b}

United States
Taiwan
China
Spain
Italy
India
Japan
Korea
Canada
Poland

^aIncludes submissions between January 1 and September 30, 2014. Countries are ranked in order, beginning with the highest (United States). Taken from a list of 45 contributing countries.

^bIncludes case reports, original articles, and reviews.

the *Proceedings*. Our actions are focused around the Journal’s mission statement: “To promote the best interests of patients by advancing the knowledge and professionalism of the physician community.”³ Further, when adjudicating manuscripts, we base decisions on 3 major factors: (1) relevance (is the material appropriate for our audience?), (2) importance (will the material have an influence on the present and future of medicine? Are the results generalizable?), and—only after the first 2 criteria are met— (3) visibility (will the material attract attention in our Journal and in secondary forms of dissemination?). Ironically, by enacting this path for manuscript review and decision making, the editorial board’s work initially became easier as the number of submissions increased and competition for journal space intensified. However, this trend has more recently reversed because the increasing number of manuscripts submitted means that we must no longer just assign reviewed manuscripts to “good” and “not so good” categories but also prioritize them for journal space.

Added to this challenge, we are now processing more multidisciplinary manuscripts and manuscripts on more novel topics in which there are fewer paradigms and templates for exactly how to best communicate the valuable information. As a result, many of our highest-profile manuscripts are requiring more reviewer, editorial board, and staff input than ever before, and this may make the turnaround time for those manuscripts increase slightly when compared with our 2013 average. Consonant with this

impression, the simple average of our time from manuscript registration to first response to authors increased by 1 day in 2014, and this increase will likely remain in 2015.

We project a 2015 aggregate acceptance rate for full-length manuscripts (eg, original articles, review articles) of approximately 15%. The editorial board, staff, and I greatly appreciate the past and future peer reviewers who volunteer their time and energy to make this selection process possible. The high-quality peer review input has not escaped the notice of our authors, many of whom send us notes of appreciation to share with the reviewers. Memorable among those notes in 2014 was one from an author who has hundreds of indexed publications, but his reference submission to the *Proceedings* did not pass peer review: "Please thank the reviewers for their careful reviews and helpful comments. These were the most thoughtful reviews I've ever received on a rejected paper" (reproduced with the author's permission). We thank this author for his feedback and validation that the *Proceedings'* peer review process attempts (as much as resources allow) to benefit all authors, regardless of the final disposition of an individual submission.

The legitimate demands on reviewers and others for the processing of manuscripts, including the aforementioned multidisciplinary, multiauthored elite manuscripts, should in no way be confused with the demands on reviewers associated with another group of manuscripts we are encountering more often: multidisciplinary, multiauthored manuscripts that often include a multiplicity of highly accomplished academicians listed as coauthors but in which it is readily apparent that not all listed authors have contributed. Examples might include the listing of a coauthor who has a lofty reputation and highly refined expertise in cardiology, infectious diseases, biostatistics, or some other major medical discipline in a submitted manuscript that clearly has not benefitted from that author's input—whether of content or style—related to these disciplines. Increasingly, the Journal is being forced to simply reject these flawed manuscripts out of hand, in some measure to respect and preserve the precious time and energy provided by our volunteer reviewers.

To reiterate, this concept is *not* about normal peer review of manuscripts in which authors have shown due diligence and discipline but that do not immediately meet the Journal's high standards. Instead, it is about manuscripts in which authors have *not* shown due diligence and discipline, nor have they conformed to the standards of author contributions, as described in many reference books (eg, *The AMA Manual of Style*⁴).

For those manuscripts that have earned formal peer review, the Journal will continue to evolve its editorial board to include the proper complement of experts required to address the volume and specifics of the manuscript submission workload. We will, accordingly, expand the complement of expert referees to serve as peer reviewers. As such, in 2015, the *Proceedings* will add additional experts in pulmonary medicine, evolving infectious diseases and infection control, men's health, and other topics. We also will begin adding, for the first time, international members to the editorial board. In all instances, the Journal will use needs-assessment exercises to identify and vet not only the areas of growth but also the individuals assigned to those areas of growth. To assist all board members, we have recently introduced to our manuscript processing website a Reviewer Locator feature for identifying relevant reviewers for a given manuscript, and we are able to cross-reference those names against our past experience with reviewers to make sure we offer authors consistently high-quality critiques.

In all its deliberations, the editorial board attempts to make its decisions with fairness and respect for all authors. Although we might add *dispassion* to the list, the fact is that our editorial board is composed throughout of talented individuals who are not only good board members but also continue to function as exemplary investigators, clinicians, educators, and authors, in varying proportions. These members get great enjoyment when creative, hardworking authors "win" (ie, pass peer review). In contrast, there is no joy when rejecting a manuscript that barely misses the priority standards for publication in today's *Proceedings* when it is apparent that the same manuscript would have passed peer review and been published by the Journal 3 or 4 years ago.

To help remediate this problem, the *Proceedings* editorial board, and its business oversight group and publisher, are actively seeking new opportunities for authors to publish with the *Proceedings* while simultaneously continuing the pursuit of excellence for the parent journal. We will inform readers of any future changes, perhaps taking the form of journal expansion, as soon as all options have been properly vetted and new plans initiated.

Core Journal Content

As the contemporary *Proceedings* has evolved, readers have relied on the Journal to update them on topics that are critical to the core of medical practice, introduce them to new subject matter, help clarify and place into perspective controversial issues, and employ a mixture of science, humanities, economics, health care delivery, and other topics to provide a balanced representation of the challenges and solutions that confront contemporary physicians. The Journal also uses its resources to introduce new guidelines—or to critique and interpret the guidelines or important studies published in other journals. The editorial board recognizes that many of these articles address highly dynamic issues, and we are fully prepared to offer updates as soon as important new information becomes available. Our recent publications on the Ebola outbreak^{5,6} and on evolving standards for the prevention and treatment of cardiovascular diseases⁷⁻⁹ are fine examples of topics that are almost certain to be revisited soon.

Through its use of electronic data management systems, the Journal has increased its ability to sample from the best contributions from around the world, and authors' spontaneous submission of manuscripts has been supplemented by the editorial board's recruitment of additional manuscripts. These recruitments may be as simple as inviting editorials to help place into perspective other journal content or recruiting or encouraging the timing of author submissions to provide within a single journal issue complementary manuscripts on a single topic or independent manuscripts on complementary topics. These topics are often highlighted in the short titles on the print journal cover, with each short title regularly referring to more than one article.

The editorial board members and other advocates also engage in the de novo

recruitment of manuscripts, with those eventually published representing no more than one-third to one-half of each monthly issue. For example, the editorial board works from a recruitment grid to address important topics to be addressed by Review, My Treatment Approach, and Concise Review articles. These grids are meant to address not only the high-priority topics that are continually of importance to our readership—eg, the treatment of major cardiovascular, neurologic, and neoplastic diseases—but also evolving time-sensitive, poorly understood, or controversial clinical topics such as the Ebola outbreak,^{5,6} male circumcision,¹⁰ and the origins and consequences of widespread drug shortages.^{11,12} These organized recruitment efforts also address topics in medical economics, bioethics, health care delivery, and yes, medical history.

Although most core journal content appears in the print journal and is duplicated on our website, this is not always the case. The electronic version of the Journal currently contains Path to Patient image quizzes, supernumerary Residents' Clinic articles, and Medical Images not contained in the print journal. However, in 2015, we will move a portion of the Medical Images content to both the print and electronic versions, with the electronic version also carrying supplemental images or other complementary content whose volume cannot be accommodated in the print journal alone.

The *Proceedings* is also receptive to receiving dynamic video content in 2015 and beyond. This material may be supplementary to another full-length article, Medical Image, Letter to the Editor, or other journal element. Examples might include cineangiograms, videos of patient activity, the introduction of new procedures, or other creative content. In all uses of this technology, authors should focus on information transfer that would be deficient without dynamic images.

Special Collections

In 2014, Mayo Clinic celebrated the 150th year of Mayo medical practice in Rochester, Minnesota, and beyond. The *Proceedings* participated in this celebration by publishing an introductory editorial¹ and 4 *Mayo Sesquicentennial Commentary* articles¹³⁻¹⁶ and additional journal content. In October 2014, the *Proceedings* published a book that contains the

forementioned Sesquicentennial articles. The book additionally features (1) quotes from the Mayo brothers, with each quote written in a calligraphy style created just for the Sesquicentennial projects (Figure), (2) biographical sketches of the calligraphy artists, (3) a fact sheet on Mayo Clinic's size and scope of operations for the years 2009 through 2013, which provides a snapshot of Mayo Clinic activities and personnel, and (4) archival photos of key personnel or key events in the history of Mayo Clinic, with brief narratives for each photograph. Copies of this book, entitled *Mayo Clinic Sesquicentennial Commemorative: 150 Years of Serving Humanity—Through Hope and Healing*,¹⁷ are available for purchase on the *Mayo Clinic Proceedings* website: www.mayoclinicproceedings.org.

As a part of the celebration of the Mayo Clinic Sesquicentennial, the *Proceedings* also published several Historical Vignettes to commemorate important programs or events at Mayo Clinic. These contributions were well received by our readership, and we will continue this class of article during 2015 and beyond. For example, in 2015, the *Proceedings* will publish an article on the 100-year history and mission of the Mayo School of Graduate Medical Education (ie, the home of Mayo Clinic's residency and fellowship training programs) and another on the 100-year history of specialty cardiology practice at Mayo Clinic.

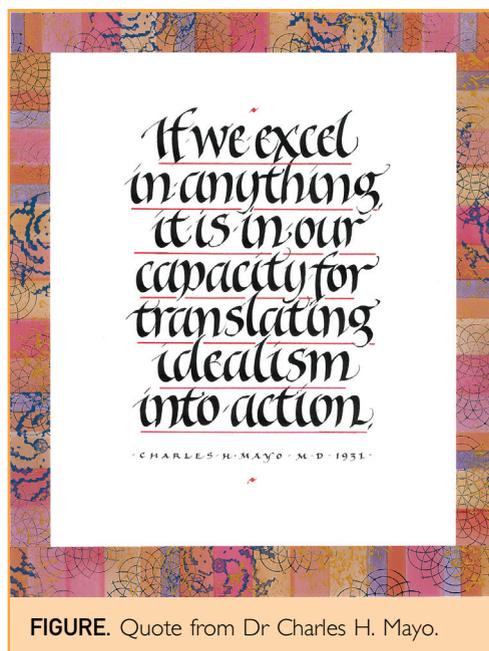


FIGURE. Quote from Dr Charles H. Mayo.

The Symposium on Regenerative Medicine,¹⁸ begun in July 2013, will be completed in mid-2015. At completion, this Symposium will contain more than 18 component articles.

In this January 2015 issue of the *Proceedings*, Hooten, Cohen, and Rathmell introduce a new Symposium on Pain Medicine¹⁹ that begins with an article on pain epidemiology and the economic consequences authored by Henschke, Kamper, and Maher.²⁰ Additional articles will follow monthly until the series is completed in mid-2016.

Further, in mid-2015, the *Proceedings* will introduce a new Symposium on Neoplastic Hematology and Medical Oncology that will run for approximately 18 months, through all of 2016 and perhaps beyond.

While these Symposium articles are being published (ie, on regenerative medicine, pain medicine, and neoplastic hematology and medical oncology), the staff will electronically collate the articles on a designated page within the *Proceedings* website: www.mayoclinicproceedings.com. The Journal will also explore binding the individual collections into books that will be available for purchase through our bookstore. The final decision to create books will depend on our assessment of demand and fiscal factors.

Cross-referencing Journal Content

The *Proceedings* has long used traditional methods to identify instances in which an article's content is accompanied by other introductory, complementary, supplemental, or appendix material. Techniques used have been as simple as written memos, notes, or icons identifying the relationship between editorials and articles or other materials (eg, audiovisual materials). However, in this electronic age, the Journal is increasingly using electronic means to notify readers of these relationships. One example is the identification of reference articles and article URLs within our YouTube presentations. In 2015, the *Proceedings* will begin using QR (Quick Reference) codes to direct readers to additional information sources and journal content. These sources can be accessed by simply scanning the codes with a smartphone or related scanning device.

Writing and Publishing Education Outreach

Over the past few years, members of the *Proceedings*' Executive Committee have formulated

a group of topics, speakers, and presentations to assist authors, reviewers, and editors in preparing manuscripts, interacting with scientific journals, introducing new scientific journals or revivifying older ones, and developing a journal's use of electronic and social media. These presentations have been given (1) on the 3 major Mayo Clinic campuses, (2) at other major academic institutions (whether affiliated with a medical school or not), (3) at national and international meetings of physicians, scientists, or editors, (4) to national governmental agencies, and (5) elsewhere. When hosts have conducted postpresentation surveys, these presentations have always scored highly. As such, the Executive Committee believes these exchanges of information serve the audience and the Journal well.

It is our intent to expand this program to include more presentations and—perhaps with time—more topics. The Executive Committee will gladly entertain invitations to present on the aforementioned topics at the aforementioned venues. The Journal will work with sponsors to process requests and provide speakers as available, with priority given to those venues, audiences, and activities offering the most potential benefit (for all parties) from the exchanges.

Conclusion

Mayo Clinic Proceedings is currently in a period of accelerated growth in terms of the quality and reach of its published material. We members of the editorial board, along with the staff and publisher, recognize that success (in reference to our mission statement) is dependent on creative, enthusiastic authors who send us increasingly impressive manuscripts, reviewers to help us evaluate the suitability of those manuscripts for publication, and readers and practitioners to read, assimilate, and operationalize the information contained within the published articles. Although the Journal will use established and new methodologies to receive, recruit, and select the best materials possible, we are always eager to hear your input regarding important topics, creative authors, and related opportunities to improve the Journal.

Those of us who lead the *Proceedings* thank you for your ongoing support and loyalty, and we look forward to continuing to work with

you to make *Mayo Clinic Proceedings* the best biomedical journal possible. We hope you will share with us an excitement focused not on what has been accomplished to date but instead on the unlimited possibilities as we move forward.

William L. Lanier, MD
Editor-in-Chief

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