DESCRIPTION

One of the premier peer-reviewed clinical journals in general and internal medicine, *Mayo Clinic Proceedings* is among the most widely read and highly cited scientific publications for physicians, with a circulation of approximately 127,000. While the *Proceedings* is sponsored by Mayo Clinic, it welcomes submissions from authors worldwide, publishing articles that focus on clinical medicine and support the professional and educational needs of its readers.

Continuously published since 1926, the *Mayo Clinic Proceedings*’ content includes Nobel-prize-winning research. The *Proceedings* has an impact factor of 7.091, ranking it #12 out of 160 journals in the Medicine, General and Internal category, placing it among the best 8%. The *Proceedings* has experienced numerical increases in its Impact Factor for 17 of the past 21 years.

*Mayo Clinic Proceedings* welcomes manuscripts that focus on clinical and laboratory medicine, health care policy and economics, medical education and ethics, and related topics: Each monthly issue presents approximately 15 individual articles and features, consisting of original research, reviews, clinical content, editorials, commentaries, brief reports, special articles, and other short items. Among unique articles are Concise Review for Clinicians, Residents’ Clinics, and specially commissioned Thematic Reviews. My Treatment Approach articles present expert opinion on difficult clinical situations. Consensus Recommendations provide answers to questions not resolved in other published guidelines. The journal carries articles that offer free CME credit from Mayo Clinic. The *Proceedings* also offers substantial online-only content as well as supplemental material and videos directly related to individual articles.

For authors, the time from receipt of submission to first decision is usually 3 weeks and from acceptance to publication is about 12 weeks. *Mayo Clinic Proceedings*’ acceptance rate is approximately 20%, with more than 80% of manuscripts submitted by non-Mayo authors. For novel, time-sensitive research, an expedited review is available upon request and at the discretion of the Editorial Board.

Authors are also welcome to submit to the journal’s open access companion title, *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*.

IMPACT FACTOR

2019: 6.942 © Clarivate Analytics Journal Citation Reports 2020
ABSTRACTING AND INDEXING

Embase
PubMed/Medline
Reactions Weekly
PharmacoEconomics and Outcomes News
Abstracts on Hygiene and Communicable Diseases
AgBiotech News and Information
CAB International
Dairy Science Abstracts
Global Health
Horticultural Science Abstracts
Leisure, Recreation and Tourism Abstracts
Poultry Abstracts
Protozoological Abstracts
Review of Medical and Veterinary Entomology
Review of Plant Pathology
Tropical Diseases Bulletin
Pascal Francis
Academic Search (EBSCO)
Academic Search Premier (EBSCO)
Biological Abstracts
EBSCOhost
CINAHL
Current Abstracts
Current Abstracts (EBSCO)
TOC Premier
Scopus
Expanded Academic Index
PubMed/Medline
Health Reference Center
OCLC ArticleFirst
Arts & Humanities Search
Personal Alert
ProQuest
BIOSIS Citation Index
Current Contents
Science Citation Index Expanded
Web of Science
Iowa Drug Information Service (IDIS)
Embase
Index to Scientific Reviews
Kidney
Nutrition Research Newsletter
Review of Aromatic and Medicinal Plants
Abridged Index Medicus
Abstracts of Mycology
AIDS Abstracts
Chemical Abstracts
Child Development Abstracts and Bibliography
PubMed/Medline
Inpharma Weekly
Rehabilitation Literature
Tobacco Abstracts
Medical and Surgical Dermatology
Chemical Abstracts
EDITORIAL BOARD

Editor-in-Chief
Karl A. Nath, Mayo Clinic Rochester, Rochester, Minnesota

Section Editors
James C. Andrews, Mayo Clinic Minnesota Department of Radiology, Rochester, Minnesota
Radiology
Samuel J. Asirvatham, Mayo Clinic Rochester, Rochester, Minnesota
Cardiovascular Diseases, Innovations in Medicine and Surgery
David J. Ballard, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
Health Care Policy
J. Michael Bostwick, Mayo Clinic Rochester, Rochester, Minnesota
Psychiatry
Timothy B. Curry, Mayo Clinic Rochester, Rochester, Minnesota
Anesthesiology and Perioperative Medicine
Mark Denis P. Davis, Mayo Clinic Rochester, Rochester, Minnesota
Dermatology
John M. Davis, III, Mayo Clinic Rochester, Rochester, Minnesota
Rheumatology
Jennifer (Jen) E. DeVoe, Oregon Health & Science University, Portland, Oregon
Family Medicine
Matthew T. Drake, Mayo Clinic Rochester, Rochester, Minnesota
Endocrinology
Matthew Gettman, Mayo Clinic Rochester, Rochester, Minnesota
Urology, Men's Health
Matthew Griffin, National University of Ireland Galway, Galway
Nephrology and Transplantation
Elizabeth B. Habermann, Mayo Clinic Rochester, Rochester, Minnesota
Health Care Policy and Research
Daniel K. Hall-Flavin, Mayo Clinic Rochester, Rochester, Minnesota
Addiction Medicine, Humanities
W. Michael Hooten, Mayo Clinic Rochester, Rochester, Minnesota
Pain Medicine
Paul B. Klaas, Paul Klaas, Minneapolis, Minnesota
Legal
Manish Kohli, The University of Utah, Salt Lake City, Utah
Medical Oncology
Alexander H. Krist, Virginia Commonwealth University, Richmond, Virginia
Family Medicine
Jay Mandrekar, Mayo Clinic Rochester, Rochester, Minnesota
Biomedical Statistics and Informatics
Michelle L. Mauermann, Mayo Clinic Rochester, Rochester, Minnesota
Neurology
James F. Meschia, Mayo Clinic's Campus in Florida, Jacksonville, Florida
Neurologic Diseases (Stroke)
M. Hassan Murad, Mayo Clinic Rochester, Rochester, Minnesota
Guidelines, Systematic Reviews, and Meta-analysis
Joseph A. Murray, Mayo Clinic Rochester, Rochester, Minnesota
Gastroenterology and Hepatology
Robert J. Pignolo, Mayo Clinic Rochester, Rochester, Minnesota
Aging and Geriatric Medicine
Kannan Ramar, Mayo Clinic Rochester, Rochester, Minnesota
Pulmonary Medicine
Andrew D. Rule, Mayo Clinic Rochester, Rochester, Minnesota
Nephrology and Hypertension
Tait D. Shanafelt, Stanford University School of Medicine, Stanford, California
Physician and Health Care Professional Engagement and Fulfillment
Richard Sharp, Mayo Clinic Rochester, Rochester, Minnesota
Medical Ethics
Robert J. Spinner, Mayo Clinic Department of Neurosurgery, Rochester, Minnesota
Neurologic Surgery, Orthopedics
Thomas D. Thacher, Mayo Clinic Rochester, Rochester, Minnesota
Byron C. Jaeger, The University of Alabama at Birmingham, Birmingham, Alabama
Heidi E. Kosiorek, Mayo Clinic Scottsdale, Scottsdale, Arizona
Dirk R. Larson, Mayo Clinic Rochester, Rochester, Minnesota
Fazlur Rahman, The University of Alabama at Birmingham, Birmingham, Alabama
Nan Zhang, Mayo Clinic Scottsdale, Scottsdale, Arizona

Proceedings Staff

Managing Editor
Terry Jopke

Editorial Processing Specialist
Kimberly D. Sankey

Editorial Assistant
Margaret Wentz

Business Manager
Debra M. Eagle

Digital Editor
Lisa Muenkel

Editorial Offices
Mayo Clinic Proceedings, Room 770 Siebens Building, Rochester, MN 55905 Telephone: (507) 284-2094; Fax: (507) 284-0252; E-mail: proceedin
GUIDE FOR AUTHORS

GENERAL INFORMATION
One of the premier peer-reviewed clinical journals in general medicine, Mayo Clinic Proceedings is among the most widely read and highly cited scientific publications for physicians, with a circulation of approximately 127,000. While the Proceedings is sponsored by Mayo Clinic (Mayo Foundation for Medical Education and Research), it welcomes submissions from authors worldwide, publishing articles that focus on clinical medicine and support the professional and educational needs of its readers.

Continuously published since 1926, Mayo Clinic Proceedings' content includes Nobel-prize-winning research. The Proceedings has an impact factor of 6.942 and is ranked #13 of 165 journals in the Medicine, General and Internal category.

Mayo Clinic Proceedings welcomes manuscripts that focus on clinical and laboratory medicine, health care policy and economics, medical education and ethics, and related topics.

All inquiries regarding journal policy should be directed to the Editorial Office at (507) 284-2094, Monday through Friday from 8:00 AM to 5:00 PM Central time.

PUBLISH AHEAD OF PRINT - ONLINE FIRST ARTICLES
Mayo Clinic Proceedings publishes select articles ahead of print publication. This program is entitled Online First. All articles published are in final format and have been approved by the author(s) and editors prior to release to the website. Online First articles receive a unique DOI (Digital Object Identifier) number that facilitates searches of electronic databases. The official publication date is the date of electronic publication. These articles are print published in a subsequent issue of the Proceedings.

RAPID REVIEW PATHWAY
Mayo Clinic Proceedings offers a rapid review pathway for papers that have been peer reviewed at a high impact medical journal, were not accepted for publication at such journals, and the authors of these papers regard the essential concerns delineated in the critiques as addressable. The authors should attach the peer reviewed comments and a point-by-point rebuttal as supplementary material in the submission, and clearly indicate in the cover letter the following: 1) the original journal that the article was submitted to; 2) a statement that the manuscript has been adequately revised according to the reviewers' comments and in accord with Mayo Clinic Proceedings' journal style; and 3) a request that the paper be processed through the rapid review pathway at Mayo Clinic Proceedings. The authors should submit both a clean version of the manuscript and a track changes version showing the changes made to address the reviewers' comments. The Editors will review the request and the attached material to determine the suitability of the paper for rapid review. The Editors reserve the right to submit the manuscript for additional reviews and for processing according to the normal review procedures at Mayo Clinic Proceedings. However, if on editorial review the paper is regarded as having high impact and the reviewers' comments from the original journal of submission are fully addressed, the Editors will make an expeditious decision based on the prior review. This provides the authors with the possibility of rapid publication of their manuscript without attendant delay incurred by additional reviews.

MANUSCRIPT SUBMISSION
Submit all manuscripts to Karl A. Nath, MBChB, Editor-in-Chief, at http://mc.manuscriptcentral.com/mayoclinproc. Paper submissions cannot be accepted. Please send editorial questions to proceedings@mayo.edu.

ScholarOne Login. If you are unsure about whether you have an account or have forgotten your password, enter your e-mail address into the "Password Help" section of the login screen. If an account has already been established, you will receive an e-mail with your account information. If you do not have an account, click on the "Create Account" link.

Submission Metadata. Once you have successfully logged in, click on "Author Center," then on "Click here to submit a new manuscript." Follow the steps and instructions provided. If you are interrupted during the submission process, your work will automatically be saved and you can return to your Author Center at a later time to finish the submission process. Required metadata pertaining to the manuscript include the name, address, telephone number, and e-mail address of the corresponding author and all contributing authors; affiliated institutions; title of the manuscript; abstract; and key
words. Please ensure the accuracy of all e-mail addresses. Authors are required to provide at least 2 preferred reviewers, and have the option of providing nonpreferred reviewer names. Mayo Clinic Proceedings reserves the right of final reviewer selection. Once your manuscript has been completely submitted, a manuscript number will be assigned and used in all correspondence. The Editorial Office is automatically notified of the submission and sends an e-mail confirming the submission of the manuscript to the author(s).

Mayo Clinic Proceedings accepts no responsibility for manuscripts that are lost or destroyed through electronic or computer problems. Authors are encouraged to keep copies of submitted manuscripts, including figures. If an author does not receive confirmation of submission within 48 hours, he or she should contact the Editorial Office at (507) 284-2094. If notice has not been received, the manuscript has not been completely submitted.

Author Required Forms. All authors are required to complete and submit an Authorship Contribution form and an ICMJE Conflict of Interest form. For manuscripts that contain CME (Concise Reviews and Thematic Reviews), authors should also complete the Mayo Clinic School of Continuous Professional Development (MSCPD) Faculty and Disclosure Form. Each author will receive an e-mail after submission with a link to each required form and instructions on how to access the forms in their Author Center. Manuscripts cannot be accepted for publication until all forms are received from all authors. It is the responsibility of the corresponding author to ensure that all authors complete and submit their forms.

Peer Review Process. This journal operates a single blind review process. All contributions will be initially assessed by the Editorial Board for suitability for the journal. Initial editorial reviews usually are completed within 1 to 2 weeks of manuscript submission. Once the Editorial Board review is complete, manuscripts are either forwarded on to peer review or rejected. Before a manuscript is sent for peer review, it is processed through CrossCheck, a text-matching software service. Papers deemed suitable for peer review are then sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final.

Authorship
Mayo Clinic Proceedings follows the International Committee of Medical Journal Editors (ICMJE) recommendations on authorship. According to the ICMJE, all authors should have participated sufficiently in the work to take public responsibility for the content, either all of the work or an important part of it. To take public responsibility, an authors must be able to defend the content (all or an important part) and conclusions of the article if publicly challenged. Sufficient participation means that substantial contributions have been made in each of the following areas:
1. Conception and design of the work; or acquisition, analysis, or interpretation of the data for the work; and
2. Drafting the work or revising it critically for important intellectual content; and
3. Approval of the version to be published; and 4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.
All those designated as authors should meet all four criteria for authorship, and all who meet the four criteria should be identified as authors. Those who do not meet all four criteria should be acknowledged. These authorship criteria are intended to reserve the status of authorship for those who deserve credit and can take responsibility for the work. The criteria are not intended for use as a means to disqualify colleagues from authorship who otherwise meet authorship criteria by denying them the opportunity to meet criterion #s 2 or 3. Therefore, all individuals who meet the first criterion should have the opportunity to participate in the review, drafting, and final approval of the manuscript. For more information, please see www.icmje.org.
Each manuscript should have 1 author designated as the primary contact and corresponding author for all communications about the submission, and, if it is accepted for publication, the published article. The corresponding author assumes primary responsibility for communication with the journal during the manuscript submission, peer review, and publication process, and typically ensures that all the journal's administrative requirements are properly completed.
Requests for removal or addition of an author after manuscript submission should be explained in writing, with a signed statement of agreement for the requested change, from all listed authors and from the author to be removed or added.
Confidentiality

*Mayo Clinic Proceedings* uses a single-blinded review process. Reviewer identities are not, and should not be, disclosed to the authors or other reviewers. In addition, authors should not contact those whom they presume to be reviewers of their manuscript.

Copyright

Upon acceptance of an article, authors will be asked to complete a ‘Journal Publishing Agreement’ (for more information on this and copyright see [https://www.elsevier.com/copyright](https://www.elsevier.com/copyright)). Acceptance of the agreement will ensure the widest possible dissemination of information. An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a ‘Journal Publishing Agreement’ form or a link to the online version of this agreement.

For information about using your published material, please see Author Rights & Responsibilities.

Conflicts of Interest and Financial Disclosure Policy

Authors. All authors are required to complete his or her own ICMJE Form for Disclosure of Potential Conflicts of Interest statement. Each author will be asked to complete this form after manuscript submission. Authors should also include all financial support of the research and conflict of interest disclosures on the Title page of the manuscript. In addition, all authors are required to complete his or her own Mayo School of Continuous Professional Development (MSCPD) Faculty and Disclosure Form for article types containing CME (i.e., Concise Review for Clinicians and Thematic Reviews).

Reviewers. Reviewers are required to disclose (on the reviewer score sheet) whether they have any financial or professional affiliations that may be perceived as a conflict of interest in reviewing a specific manuscript. Reviewers should decline to review any manuscript with which they have any conflict of interest issues regarding the topic, authors, or related affiliations that may hinder providing a fair and balanced review. If unsure, reviewers should contact the Editorial Office for clarification.

Editors and Journal Staff. Editors who make final decisions about manuscripts should recuse themselves from editorial decisions if they have conflicts of interest or relationships that pose potential conflicts related to articles under consideration. Other editorial staff members who participate in editorial decisions must provide editors with a current description of their financial interests or other conflicts (as they might relate to editorial judgments) and recuse themselves from any decisions in which a conflict of interest exists. Editorial staff must not use information gained through working with manuscripts for private gain.

Editorial Board members and journal staff are required to sign a conflict of interest and financial disclosure statement annually, which is kept confidential in the editorial office.

Role of the Funding Source

You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated. Please see [https://www.elsevier.com/funding](https://www.elsevier.com/funding).

Funding Body Agreements and Policies

Elsevier has established agreements and developed policies to allow authors whose articles appear in journals published by Elsevier, to comply with potential manuscript archiving requirements as specified as conditions of their grant awards. To learn more about existing agreements and policies please visit [https://www.elsevier.com/fundingbodies](https://www.elsevier.com/fundingbodies).

Ethics in Publishing

Please see our information pages on [Ethics in publishing](https://www.elsevier.com/locate/jmcp) and [Ethical guidelines for journal publication](https://www.elsevier.com/locate/jmcp).

Open Access (OA)

This journal offers authors a choice in publishing their research:

- **Open Access**
  - Articles are freely available to both subscribers and the wider public with permitted reuse
  - An open access publication fee is payable by authors or their research funder

Subscription
• Articles are made available to subscribers as well as developing countries and patient groups through our access programs
• No open access publication fee

All articles published open access will be immediately and permanently free for everyone to read and download. Permitted reuse is defined by the following Creative Commons user license:

**Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND):** for non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

Elsevier has established agreements with funding bodies, [https://www.elsevier.com/fundingbodies](https://www.elsevier.com/fundingbodies). This ensures authors can comply with funding body open access requirements, including specific user licenses, such as CC BY. Some authors may also be reimbursed for associated publication fees. If you need to comply with your funding body policy, you can apply for the CC BY license after your manuscript is accepted for publication.

To provide open access, this journal has a publication fee which needs to be met by the authors or their research funders for each article published open access.

Your publication choice will have no effect on the peer review process or acceptance of submitted articles.

**Human and Animal Research**

All human studies must contain a statement within the Patients and Methods section indicating that the study has been approved by an institutional review board and that participants have signed written informed consent or that the institutional review board has waived the need for informed consent. *Mayo Clinic Proceedings* does not publish manuscripts on animal research.

**Registration of Clinical Trials**

*Mayo Clinic Proceedings* requires registration for all clinical trials submitted for publication. Trials that start enrollment after July 1, 2008, should be registered before starting patient enrollment. Clinical trials will need to be registered in 1 of the 5 registries accepted by the International Committee of Medical Journal Editors (ICJME) or in any of the primary registries that participate in the WHO International Clinical Trial Registry Platform. For additional information, please see [http://www.icmje.org/recommendations/browse/publishing-and-editorial-issues/clinical-trial-registration.html](http://www.icmje.org/recommendations/browse/publishing-and-editorial-issues/clinical-trial-registration.html).

**PubMed Central Repository Requirement for NIH-Funded Research**

The National Institutes of Health requires all articles stemming from NIH-funded research to be submitted to the PubMed Central repository 12 months after publication. Without the PubMed Central ID (PMCID) number, the article will not be counted as evidence of progress on progress reports for NIH grants. For more information on this policy, see [http://publicaccess.nih.gov](http://publicaccess.nih.gov). Please also see the [https://www.elsevier.com/about/publishing-guidelines/policies/open-access-policies/funding-body-agreements](https://www.elsevier.com/about/publishing-guidelines/policies/open-access-policies/funding-body-agreements).

As a service to our NIH-funded authors and in compliance with this requirement, manuscripts are deposited on a rolling basis to the PubMed Central repository once they have been received by Elsevier, our publisher. However, the manuscript does not appear online until 12 months after publication per Elsevier’s agreement with PubMed Central.

**MANUSCRIPT PREPARATION**

Authors should prepare manuscripts in accordance with the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals," developed by the ICMJE ([www.icmje.org](http://www.icmje.org)). Reports of randomized controlled trials should include the CONSORT flow diagram. For other reporting guidelines, please visit the [Equator Network](https://www.equator-network.org). Specific requirements for *Mayo Clinic Proceedings* follow.

The manuscript should be typed in 12-point type and double-spaced throughout, and should be arranged as follows: (1) title page, (2) abstract, (3) alphabetical list of abbreviations used at least 3 times in the body of the manuscript (exclusive of abstract, figures, and tables) and their expansions, (4) text with appropriate headings and conclusion, (5) acknowledgments, (6) references, (7) legends, (8) tables (with alphabetical list of all abbreviations and their expansions as a footnote),
and (9) illustrations (with separate alphabetical list of abbreviations and their expansion in legend). Manuscript pages should be numbered consecutively and labeled with the last name of the first author. The text portion of the manuscript should be saved using a word-processing program, such as a .doc or .rtf file format.

Tables should be created using your word processor's table function. Tables can be placed at the end of your manuscript document or saved as separate files.

Line art, including graphs and algorithms (flow charts), should be created and submitted in PowerPoint. Halftone and color images should be saved in Photoshop in .jpg, .gif, or .tiff format at 300 dpi. Figures should not be inserted or embedded into the manuscript document; rather, they should be saved and uploaded as separate files.

**Title Page**

*Title:* Formulate a title that reflects the content of the article. No more than 100 characters in length. Avoid questions and subtitles, and titles that tantalize but do not inform readers.

*Authors:* Include first names and middle initials, academic degrees, departmental affiliations and institutions, and current departmental and institutional affiliations for authors who have relocated since completion of the study.

*Financial support and conflict of interest disclosure:* List all financial and material support for the research and work described in the manuscript (eg, grant number and funding agency for the project, an individual author, or both). Each author must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. If there are no conflicts of interest, please provide a statement to that effect.

*Reprints and correspondence:* Include name, address, and e-mail address of author to whom postpublication correspondence and reprint requests should be addressed.

**Abstract**

Abstracts should be no more than 250 words.

For **Original Articles:**

--Organize abstract in a structured format, with the following headings: Objective, Patients and Methods, Results, and Conclusion.
--Ensure that information in each section of the abstract is in the corresponding section of the text.
--Begin the "Objective" section of the Abstract with the word "To" and then state why you performed the study. Objective should not exceed one sentence.
--In the Patients and Methods section of the Abstract and of the text, please provide the complete dates of the study, eg, January 1, 2000, through December 31, 2002.
--Please provide the Clinical Trials registration number at the end of the Abstract, if applicable.

For **other contributions**, abstracts should not be structured.

**Text**

--Express measurements in conventional units, giving conversion factor to SI units on first mention.
--Give exact P values, even if they are nonsignificant. Style as P=.02 (italic letter, closed up, no initial zero). The lowest P value we report is P<.001. Round P values to 2 digits, except for the values in which the first 2 or 3 numbers after the decimal point are zeroes, then round to 3 or 4 digits, respectively. For P values that are less than .001 use P<.001.
--Avoid specialized jargon and abbreviations; abbreviate a term only if it is used at least 3 times in text (exclusive of abstract, tables, and figures) and define at first mention.
--Use generic names for drugs and equipment.
--Do not use footnotes within the text.
--For genetic nomenclature, please follow the recommendations of the Human Genome Organisation. Approved gene symbols, descriptions, and older aliases can be searched at www.genenames.org.
--For gene mutations, please see the HGVS website (at www.hgvs.org [use the Recommendations Including Nomenclature Guidelines link] or http://www.hgvs.org/content/guidelines.

**CME**

--To fulfill criteria of the Accreditation Council for CME, each article offering CME credit (ie, Concise Review for Clinicians and Thematic Reviews [formerly Symposium]) must adhere to the following standards of practice.
--Safeguards Against Bias: CME must give a **balanced view of therapeutic options**. Use of generic drug names is preferred. If educational material or content includes trade names, then trade names from several companies should be used where available, not just trade names from a single company.

--Content Validation: All recommendations involving clinical medicine must be **based on evidence** that is accepted within the profession of medicine as adequate justification for their indications and contraindications in the care of patients. All scientific research referred to, reported or used in support or justification of a patient care recommendation must conform to the generally accepted standards of experimental design, data collection and analysis.

--Educational Materials: Educational materials **cannot contain any advertising, trade names, or product-group messages**.

Specific requirements: In a separate document, provide the following components:

--3 learning objectives.

--5 brief CME-type questions on the subject reviewed that fall within the parameters of the defined objectives.

--For each question, there should be only one correct answer. Avoid negatively-worded questions such as "all except." Avoid "all of the above" and "none of the above." Case-based questions are preferred. Do not use True/False or Yes/No questions. Each question should have five (5) response options. Each question should be supported by at least one reference. Each question should include an explanation for the correct answer.

--Please read and follow the **CME Requirements** before submitting your manuscript.

Authors are required to complete his or her own Mayo Clinic School of Continuous Professional Development (MSCPD) Faculty and Disclosure Form. Each author will be asked to complete this form after manuscript submission, along with the ICMJE and Author Contribution forms.

**Acknowledgments**

The corresponding author must provide assurance in writing that permission has been obtained from those acknowledged.

**References**

--Authors are responsible for the accuracy and completeness of their references and for their complete and accurate citation in the text.

--Cite references, figures, and tables consecutively as they appear in the text; use superscript numerals for text citations. **Tables and Figures are considered part of text and so citations are numbered consecutively with those in text.** Example: If Table 1 contains references, and the reference number in the text before citation of Table 1 is 5, a reference in Table 1 would become reference 6; the next reference cited in manuscript after table call-out would be cited as reference 7.

--Cite personal communications (specify oral or written) and unpublished data parenthetically in the text and include date (do not list in references). The corresponding author must provide assurance in writing that permission has been obtained from those acknowledged.

--In the reference list, include names and initials of all authors (if more than 6, list 3 followed by "et al"), the title, source (journal abbreviations should conform to those in *Index Medicus*), year, volume, issue, and expanded page ranges. For appropriate reference style, refer to a recent issue of the journal [www.mayoclinicproceedings.org](http://www.mayoclinicproceedings.org) or the *American Medical Association Manual of Style: A Guide for Authors and Editors*, 10th ed. New York, NY; Oxford University Press; 2007:39-79.

--Data references. This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. This identifier will not appear in your published article.

**Reference Style**

**Journals (Print)**


**Journals (Online)**


Permissions
--Use of previously published graphic and tabular material is strongly discouraged.
--Authors are responsible for obtaining permission for reuse of material (illustrations, tables, or lengthy quotes) from other sources, including adaptations. The preferred and quickest method for obtaining permission is via the Copyright Clearance Center.
--Permission letters from the copyright holder of the original source (along with complete bibliographic information) must be submitted with the manuscript. Failure to provide all appropriate permissions will delay publication or may necessitate the omission of a figure or table for which permission has not been received.

Appendix Material
On rare occasions, an appendix may be used for data that cannot easily be presented as a table or a figure and are too central to the article to be deposited elsewhere. At the discretion of the Editorial Board, an appendix may be published at the end of an article. In these cases, appendices are cited in the text as a table or figure would be cited (eg, Appendix 1) and the appendix would appear before the references. If the appendix cites references, the references would be numbered consecutively, following the last reference number in the text, and included in the article’s reference list.

Online-Only Supplemental Materials
Publication of online supporting material is at the discretion of the Editorial Board. Online supplemental material will not be edited by the journal office, and it is the author’s responsibility to ensure the accuracy of the data and the clarity of the format. Once accepted for publication, authors will not be provided an opportunity to review or modify online supplemental material.

Use the headings Supplemental Table or Supplemental Figure for your online supporting material and save and upload a PDF version of this material.

The following disclaimer is listed on the Journal's website: Supplemental material attached to journal articles has not been edited, and the authors take responsibility for the accuracy of all data.

Authors are responsible for ensuring the following:
--Data (including percentages) are accurate and consistent with those cited in the manuscript.
--Borrowed material should not be included as supplemental material.
--Supplemental figures and tables meet the same formatting specifications as those for the print journal. For example, three-dimensional figures are not acceptable, hatching should be avoided on bar graphs, and pie charts are not acceptable.
--All online supplemental material is correctly called out in the body of the manuscript in the appropriate location (eg, Supplemental Table 1, Supplemental Figure 1).
--References in supplemental material should be numbered consecutively beginning with 1.
--A title for each table and a legend for each figure are provided and all abbreviations are expanded in the table footnote or figure legend.
--Table footnotes should be superscripted lowercase letters (a-z).

MANUSCRIPT CATEGORIES
Guidelines for the most frequent types of articles submitted to the journal are summarized below. Specific limits for word count, references, tables, and figures are provided in table format for quick reference. Authors are required to include the word count of the text, and the number of references, tables, and figures, on the Title page of the manuscript.

https://www.elsevier.com/__data/promis_images/JMCP_Article Type Table 6-18-2018.jpg

The Compass
The Compass will feature scholarly work in biomedical ethics and the health humanities. Its goal is to promote critical analysis of foundational questions that are central to the values of medicine and public health. We invite authors to explore emerging issues and under-examined topics in health care, particularly topics that have broad social impact or potential to transform the practice of medicine. Consistent with its name, The Compass will seek to move medicine forward, by clarifying professional commitments and considering creative problem-solving strategies. Authors are encouraged to contact one of the Section Editors prior to submitting an article for The Compass.
Manuscript categories included in *The Compass* section include: Original Articles, Review Articles, Special Articles, Concise Reviews for Clinicians, Commentaries, and Perspectives and Controversies. Authors should refer to the Instructions for Authors for specific requirements pertaining to the manuscript category of their choice. In addition, please provide a cover letter stating which Section Editor (Drs Richard Sharp or Daniel Hall-Flavin) you have consulted with in regard to your submission, and specifically state that you are submitting it for consideration in *The Compass* section of the journal.

**Original Articles**
These include prospective clinical trials, laboratory research, retrospective clinical analyses (e.g., case series), meta-analyses, and related research. Priority for publication is given to those manuscripts with original and novel findings, particularly related to the clinical care of patients. In addition to peer review, original manuscripts will undergo statistical review by either a master's or doctorate degree statistician.

A meta-analysis is defined as a study that includes statistical pooling (combining) of data from individual studies. Meta-analyses require submission of the PRISMA checklist and the PRISMA flow chart depicting the process of study selection. These documents are required for submission but do not have to necessarily be published. Meta-analyses require a structured abstract that follows the standard MCP headings.

**Review Articles**
These consist of a critical assessment of literature and existing data. Priority for publication is given to topics with relevance to the clinical care of patients, the advancement of medical science, or improvements in health care delivery and economics. Authors are strongly encouraged to describe within the abstract and manuscript text the methods used to focus their search of the literature (e.g., PubMed, MEDLINE), the search terms used, and the date limitations of the search. Also, please indicate how studies were selected for inclusion in the review. Provide 3-5 article highlights. These points should emphasize why our audience should read your article, describe what is new or cutting edge, and how it is of interest to your colleagues. The manuscripts most competitive for publication will introduce novel ideas or refreshing speculative syntheses and will address topics of importance to large numbers of patients, evolving medical issues, or mechanistically important topics. *Mayo Clinic Proceedings* is not interested in publishing material that can be readily obtained from existing book chapters or topics that have recently been published in other large-circulation medical journals.

A systematic review is defined as a review that followed an explicit a priori inclusion and exclusion criteria and comprehensive database search. Systematic reviews require submission of the PRISMA checklist and the PRISMA flow chart depicting the process of study selection. These documents are required for submission but do not have to necessarily be published. Systematic reviews require a structured abstract that follows the standard MCP headings.

Reviews that do not fit the criteria of systematic reviews and meta-analyses do not require PRISMA checklist or figure and require only a nonstructured abstract, along with the 3 to 5 article highlights

**Solicited Review**
The Editorial Board can solicit a review on any topic, and in any format, deemed appropriate, as determined by a needs-assessment analysis. In general, topics are solicited for their importance and timeliness, and authors are invited based on their expertise. Even after manuscripts are solicited, acceptance for publication is at the discretion of the Editorial Board. Hence, even though the acceptance rate for a solicited review would be expected to be greater than for unsolicited material, acceptance of solicited reviews is neither guaranteed nor universal.

**Concise Review for Clinicians**
This section presents brief but informative updates on common subjects of relevance to practicing physicians. Specifically, although the topics are chosen for relevance to the journal's entire readership, they are targeted particularly to primary care physicians. A busy practitioner should be able to read the article in less than 15 minutes and obtain several good clinical tips; hence, authors should avoid describing technical details. The goals of this section are to provide practical material and to encourage application of the information by presenting questions that highlight important facts from each review. A maximum of 3 authors are allowed for a Concise Review manuscript, provided that all of the authors played a major role in the writing of the manuscript.
Continuing medical education (CME) credit is offered with the Concise Review for Clinicians section. Please see the section entitled **CME Requirements** for specific details.

**Understanding Disease**
This type of article provides a succinct and timely discussion of the pathophysiology and pathobiology underlying a specific, important human disease. It is intended to afford the practicing clinician with an up-to-date, readily understood, accurate discussion of the scientific underpinnings of diseases commonly encountered in clinical practice; scientific terms and concepts are to be used and discussed in ways that are widely understood by the clinical community. These articles are 3500-4000 words in length, include an unstructured abstract, cite no more than 100 references, and include 1 or 2 figures depicting key pathophysiologic/pathobiologic findings and concepts; 1 to 2 tables are recommended as ways of summarizing relevant information. Authors of this type of article should have relevant knowledge and understanding of the field and would be limited to 5 authors. Studies and findings that are based on animal models should be referred as "experimental" or "preclinical", while studies and findings based on cell culture should be referred to as "in vitro". Authors of this type of article are either invited by *Mayo Clinic Proceedings* to provide such a contribution or may contact *Mayo Clinic Proceedings* if they wish to submit such a contribution to *Mayo Clinic Proceedings*. All articles in this category would undergo peer-review and editorial-review prior to acceptance.

**My Treatment Approach**
This contribution is written by one or more recognized experts in the field. If there is more than one author, all authors should be recognized experts with similar stature in the field. The article should offer a step-by-step guide on how they would approach a patient with a given condition, based on their clinical experience and expertise.

**Consensus Recommendations**
This contribution will be written by a large group of investigators who are specialists in a given treatment area and who base their recommendations on a thorough survey of the existing literature and on their collective clinical expertise in cutting-edge approaches to contemporary medical care. This type of article will be most valuable if it addresses evolving or controversial topics and if authored by recognized authorities or authoritative groups.

**Clinical Practice Guidelines**
This contribution will be written by established reputable medical societies and associations, or by a large group of investigators who are specialists in a given treatment area and who base their recommendations on a thorough survey of the existing literature and on their collective clinical expertise. This type of article is most useful if it addresses approach to diagnosis and management of common disorders, and areas in which substantial progress, variations in care, or controversies exist. For the **My Treatment Approach, Consensus Recommendations, and Clinical Practice Guidelines** contributions, the Editorial Board will recruit these articles and authors on the basis of a needs assessment survey. Potential authors who wish to have their ideas vetted for this series should petition the Editorial Board before they begin writing. Manuscripts will be considered for publication only after they have passed the journal's rigorous peer-review process and Editorial Board oversight. Involvement of medical writers and editors supported by the pharmaceutical industry, or researchers with significant financial conflict of interest is not acceptable for these types of articles.

**Special Articles**
Designation as a Special Article is at the discretion of the Editorial Board. In general, Special Articles address important, evolving, highly visible, and often controversial topics (eg, the 2000 article on Gulf War illnesses). Individual articles may contain an amalgam of literature review, new original data, and speculative synthesis, with some opportunity for injecting the authors' opinions. As such, the article content may be more closely aligned with the Original Articles or Reviews, but with some features of Editorials or Commentaries.

**Commentary**
Commentaries are intended to offer expert insights into important or controversial topics related to clinical medicine, medical economics, governmental policy, ethics, or related issues. When appropriate, the Editorial Board expects authors to acknowledge a limited amount of supporting or opposing literature. Priority is given to novel thought, clear and creative writing, and the relevance of the manuscript to the interests of *Proceedings*’ readers.
**Perspectives and Controversies**

This type of article provides a succinct and appealing discussion of a topic that is either important, timely, or controversial. A *Perspective* is intended to highlight and stimulate thinking and discourse on such a topic, and may do so either by: discussing and elucidating it; challenging and refuting widely accepted views pertaining to it; or by combining both approaches. The topic may involve any aspect of current understanding of disease; biomedical and clinical research; medical treatment, care, and practice; medical education and professionalism; and health care and public policy. These articles are less than 1500 words in length, and include no more than 10 references. Authors of this type of article should have relevant knowledge and understanding of the field and would be generally limited to 3 authors. Authors of this type of article are either invited by *Mayo Clinic Proceedings* to provide such a contribution or may contact *Mayo Clinic Proceedings* if they wish to submit such a contribution to *Mayo Clinic Proceedings*. All articles in this category would undergo editorial review prior to acceptance.

**Brief Report**

A Brief Report will typically address an early report or observation of relevance to clinical medicine or medical science. This category is not intended to present preliminary data on structured, ongoing research but instead is intended to present unanticipated or extremely novel observations that may encourage others to perform related research or reassess their clinical practice.

**Editorials**

Submission of Editorials is by invitation from, or prior arrangement with, the Editorial Board. Most Editorials will comment on other material (eg, an innovative original article) appearing in the same issue of the journal or on changes in journal activities or policies. "Freestanding" editorials that comment on other topics, such as major changes in clinical medicine or health care policy, not originally introduced within the pages of the *Proceedings*, are also published. Final acceptance of any Editorial, even an invited Editorial, is at the discretion of the Editorial Board.

**Letters to the Editor**

The Editor welcomes letters and comments, particularly pertaining to recently published articles in *Mayo Clinic Proceedings*, as well as letters reporting original observations and research. Letters pertaining to a recently published *Proceedings* article should be received no later than 1 month after the article’s publication. It is assumed that appropriate letters submitted to the Editor will be published, at the Editor's discretion, unless the writer indicates otherwise. Priority is given for the importance of the message, novelty of thought, and clarity of presentation. The Editor reserves the right to edit letters in accordance with *Proceedings* style and to abridge them if necessary.

**Medical Images**

A Medical Image consists of a publication-appropriate photograph, photomicrograph, radiograph, or other type image, accompanied by a paragraph or 2 of descriptive text. Priority is given to importance of the topic, clarity of the images and message, and aesthetics. Authorship is limited to 2 authors. Medical Images are limited to 1 page in the print publication. A minimum of 1 image with a maximum of 8 images may be submitted. Each image must have its own legend (60 characters or less). Authors should clearly indicate 1 or 2 images to be included in the print version, and which images (if any) should be assigned as supplemental online only material.

**Thematic Reviews (formerly Symposium)**

Thematic Reviews are a collection of manuscripts addressing a common topic (eg, geriatrics, antimicrobial agents, cerebrovascular disease), and typically 1 or 2 manuscripts of the series are published per month, sequentially over many months, until the series is completed. Topics are determined well in advance of publication by the Editorial Board, and submission of Thematic Review articles is by invitation only. Individuals interested in identifying topics or specific Thematic Review manuscripts are encouraged to contact the editorial office. CME credit is offered with selected Thematic Review articles. Please see the section entitled CME Requirements for specific details.

**Case Reports**

Case Reports should be approximately 800 to 1800 words (up to 7 typed, double-spaced pages). Case reports must include an unstructured abstract. The number of references, tables, and figures should be appropriate for the overall length of the paper. In general, no more than 2 tables or 2 figures are necessary. To better select the highest-quality case reports, the editorial board of *Mayo Clinic Proceedings* has revised and codified our policies for case report review and the standards for acceptance. Manuscripts of the "case report and review of the literature" genre will not be accepted. Other case reports must first demonstrate relevance to the interest of the *Mayo Clinic Proceedings* readership and importance of the message before they are sent for further review.
Publication priority will be given to case reports that identify: A first-of-its-kind, unexpected, or unusual observation of a disease process that is relevant to a meaningful number of patients, such as: a new disease or syndrome a previously unknown or important manifestation of a common disease a new understanding of the pathophysiology of a common disease A new or first observation of an important adverse effect of a commonly used drug New therapeutic activity of a new treatment, including drug and non-drug therapies.

A small fraction of manuscripts rejected for publication as case reports, but offering some incremental advances in knowledge, may, if appropriately novel, be given priority for conversion to a letter to the editor.

Residents' Clinics
The Residents' Clinic section of Mayo Clinic Proceedings is strictly an educational tool for Mayo Clinic residents and submissions are limited to Internal Medicine Residents. Submissions of Residents' Clinic manuscripts from external authors not affiliated with Mayo Clinic will be automatically rejected. Please read and follow the detailed Residents' Clinic Instructions before submitting your manuscript.

REVISIONS
Enter your Author Center and click on "Manuscripts with Decisions." Locate the appropriate manuscript and click on the "Create a Revision" link. This will create a revision draft with a .R1, .R2, etc. extension. On the first screen, respond to the reviewer's comments in the section entitled "Comments to Decision Letter." Verify the accuracy of the article type, title, abstract, authors, and keywords. Complete the checklist on the Details and Comments screen. On the File Upload screen, delete any original files that are not pertinent to the revised manuscript and upload the revised manuscript files. View the HTML and PDF versions of the manuscript to ensure accuracy and click the Submit button when finished. You will receive an e-mail confirmation that the revised manuscript has been successfully submitted.

ACCEPTANCE
All accepted manuscripts are edited according to the American Medical Association Manual of Style: A Guide for Authors and Editors, 10th ed. New York, NY; Oxford University Press; 2007, and the corresponding author will receive an approval copy of the page proofs before publication.

REPRINTS
Journal corresponding authors will receive a free PDF of their own articles for personal use only. A form for ordering paper reprints will accompany the author acknowledgement e-mail from the Publisher.

Use of inclusive language
Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Content should make no assumptions about the beliefs or commitments of any reader; contain nothing which might imply that one individual is superior to another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

VIDEOS
We have the capacity to link a video with your article on our website. Articles with a video tend to have higher online readership. Videos should have an educational, not commercial, purpose. Interviews, a presentation of the highlights of the article, and an illustration of a given procedure would all be appropriate subjects for videos. For information about using your published material, please see Author Rights & Responsibilities.
--Videos are considered to be part of the article and should not have been previously "published" (posted on another journal's website) or permission must be obtained for reuse.
--Files should be in .wmv or .avi format. Typically, they should be no larger than 10 MB and no longer than 5 minutes. Minimum dimensions for the video should be 320 pixels wide by 240 pixels deep. Please verify that videos are viewable in QuickTime or Windows MediaPlayer.
--Videos should be uploaded at the time of submission with the manuscript files via Manuscript Central http://mc.manuscriptcentral.com/mayoclinproc. If you experience difficulty uploading the file, please submit the video file separately offline to the Editorial Office at mcproceedings@mayo.edu.

**Copyright**

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.

For gold open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (more information). Permitted third party reuse of gold open access articles is determined by the author's choice of user license.

**Author rights**

As an author you (or your employer or institution) have certain rights to reuse your work. More information.

Elsevier supports responsible sharing

Find out how you can share your research published in Elsevier journals.

**Data Sharing Policy**

At this time authors are asked to state if data will be shared and provide an explanation if data cannot be shared.

**Open access**

Please visit our Open Access page for more information.

**Data references**

This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

**Reference management software**

Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link: http://open.mendeley.com/use-citation-style/mayo-clinic-proceedings

When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

**Offprints**

The corresponding author will, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is
accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's Author Services. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

**EMBARGO**

All information regarding the content and publication date of accepted manuscripts is confidential. Information contained in or about accepted articles cannot appear in any media outlet (print, broadcast, or electronic) until print or online publication.

© Copyright 2018 Elsevier | https://www.elsevier.com