

# **AMERICAN THORACIC SOCIETY GUIDELINES PACKET**

**These Guidelines were approved  
by the ATS Board of Directors in  
May 2006 and updated  
in April 2023. These Guidelines  
are available on the ATS Website  
([http://www.thoracic.org/statements/document-  
development/resources/gats.pdf](http://www.thoracic.org/statements/document-development/resources/gats.pdf))  
or through the ATS Documents Unit,  
Tel.212-315-8611.**



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## ATS Document Types and Definitions

### Clinical practice guidelines

Clinical practice guidelines make diagnostic and treatment recommendations that assist physicians, other healthcare practitioners, and patients to make decisions about the appropriate course of action in specific clinical situations. They are developed by a multidisciplinary committee, which must include a guideline methodologist (i.e., an individual who has led the development of guidelines and systematic reviews using the Grading, Recommendations, Assessment, Development, and Evaluation [GRADE] approach). As an example, see “An Official ATS/ERS/JRS/ALAT Clinical Practice Guideline: Treatment of Idiopathic Pulmonary Fibrosis. *Am J Respir Crit Care Med* 2015; 192(2):e3-e19”.

Guidelines may be conceptualized in two parts. The first part consists of 1) formulating and prioritizing clinical questions using the patient, intervention, comparator, outcome (PICO) format, 2) searching the literature, 3) selecting relevant studies, and 4) appraising and summarizing the evidence using the GRADE approach. The second part focuses on developing and grading recommendations using the GRADE approach, as well as writing the guidelines. Enough progress must be demonstrated during the first year for consideration for a second year of funding.

Guidelines are published in the *American Journal of Respiratory and Critical Care Medicine*. An Executive Summary can be published in the print version of the journal (maximum of 4,500 words), while the full-length version is published online (maximum of 10,000 words). A non-typeset online supplement can also be published on the journal’s website (maximum of 20,000 words). Word limits are strictly enforced. The peer review process is overseen by the Documents Editor and is completely independent from the journal. Guidelines must be approved by the ATS Documents Editor and the Board of Directors.

Systematic reviews performed in the context of guideline development may be published separately, following publication of the guidelines. The *Annals of the American Thoracic Society* has the right of first refusal (occasionally, the Documents Development and Implementation Committee may approve submission to the *American Journal of Respiratory and Critical Care Medicine*). Systematic reviews follow a separate review and approval process from the guideline; they are subject to the editorial review process and decision of the journal, rather than the Documents Editor and the Board of Directors.

### Statements

There are four types of ATS statements: clinical statements, policy statements, research statements, and

technical statements:

- Clinical statements are like clinical practice guidelines in that they make diagnostic and treatment recommendations that assist physicians, other healthcare practitioners, and patients to make decisions about the appropriate course of action in specific clinical situations. Recommendations are developed by a multidisciplinary committee and must be informed by a systematic review of the evidence. However, they do not require that the GRADE approach be used to write and grade recommendations.
- Policy statements present ATS positions on issues that pertain to bioethics, public health policy, health care financing and delivery, medical education, and governmental policy. They may make policy recommendations. As an example, see “An Official ATS/AACN/CHEST/ESICM/SCCM Policy Statement: Responding to Requests for Potentially Inappropriate Treatments in Intensive Care Units. *Am J Respir Crit Care Med* 2015; 191:1318-1330”.
- Research statements present ATS positions on issues that pertain to governmental funding of research, future research needs and initiatives, and other issues that promote or hinder pulmonary, critical care, and sleep research. They may make research recommendations. As an example, see “An Official American Thoracic Society / European Respiratory Society Statement: Research Questions in Chronic Obstructive Pulmonary Disease. *Am J Respir Crit Care Med* 2015; 191:e4-e27”.
- Technical statements describe how to perform a test or procedure. They do not compare tests or procedures, nor do they identify populations to which a test or procedure should be applied. They may make “how to” recommendations. Technical statements should be based upon evidence, but they do not require a full or pragmatic systematic review of the literature. As an example, see “Official American Thoracic Society Technical Standards: Flexible Airway Endoscopy in Children. *Am J Respir Crit Care Med* 2015; 191(9):1066-1080”.

Policy, research, and technical statements may make recommendations for policy, research, and how to perform a test, respectively; they may not make recommendations for patient care. Recommendations for clinical care can only be made within clinical statements and clinical practice guidelines.

Clinical statements should be submitted within two years of the project start date. Clinical statements are published in the *American Journal of Respiratory and Critical Care Medicine*. An Executive Summary can be published in the print version of the journal (maximum of 4,500 words), while the full-length version is published online (maximum of 10,000 words).

Policy, research, and technical statements should be submitted within one year of the project start date. Statements are published in the *American Journal of Respiratory and Critical Care Medicine*. An Executive Summary can be published in the print version of the journal (maximum of 3,500 words), while the full-length version is published online (maximum of 10,000 words).

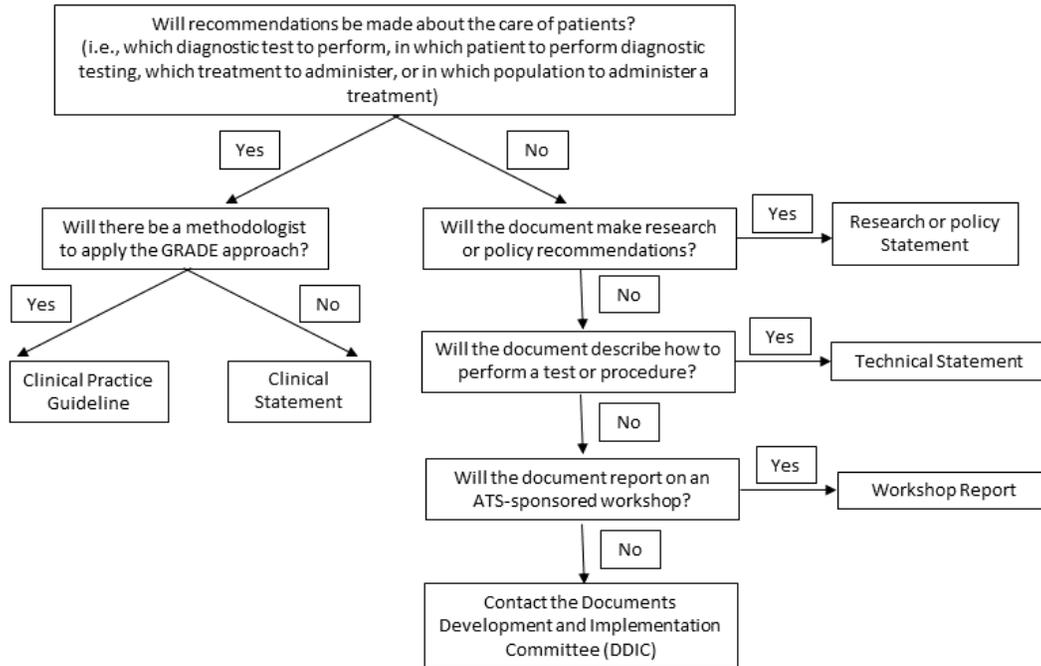
For all statements, a non-typeset online supplement can also be published on the journal's website (maximum of 25,000 words). Word limits are strictly enforced. The peer review process is overseen by the Documents Editor and is completely independent from the journal. Statements must be approved by the ATS Documents Editor and the Board of Directors.

### **Workshop reports**

Workshop reports are summaries of conferences and workshops that were sponsored by the ATS. While most of the content in the report should derive from the conference or workshop, additional discussions and further development of ideas following the conference or workshop are acceptable. As an example, see “An Official American Thoracic Society Workshop Report: A Framework for Addressing Multimorbidity in Clinical Practice Guidelines for Pulmonary Disease, Critical Illness, and Sleep Disorders. *Ann Am Thorac Soc* 2016; 13(3):S12-21”.

Workshop reports may not make recommendations for patient care. They should be submitted within one year of the project start date. Workshop reports are published in the *Annals of the American Thoracic Society* (maximum of 4,500 words). A non-typeset online supplement can also be published on the journal's website (maximum of 20,000 words). Word limits are strictly enforced. The peer review process is overseen by the Documents Editor and is completely independent from the journal. Workshop reports must be approved by the ATS Documents Editor and Board of Directors.

**Figure 1 – Deciding upon the type of document**



**Table 1 – Comparison of the document types**

	Clinical Practice Guidelines	Clinical Statements	Policy & Research Statements	Technical Statements	Workshop Reports
<b>Purpose</b>	Provide evidence-based recommendations for clinical practice	Provide evidence-based recommendations for clinical practice	State the ATS position on matters of research and/or public health policy	Describe how a test or procedure should be performed.	Summarize ATS-sponsored workshops and conferences
<b>Development team includes ≥1 methodologist (expertise in Systematic Reviews and GRADE)</b>	Mandatory	Optional	Optional	Optional	Optional
<b>Systematic Reviews (full or pragmatic)</b>	Mandatory	Mandatory	Optional	Optional	Optional
<b>Use of GRADE to assess quality of evidence and rate strength of treatment recommendations</b>	Mandatory	Optional	Optional	Optional	Optional
<b>Describes implementation and implications for quality improvement</b>	Mandatory	Mandatory	Optional	Optional	Optional
<b>Development of derivatives, e.g. flow sheets, checklists, order sets, slide presentations.</b>	Mandatory	Mandatory	Optional	Optional	Optional
<b>Length of document</b>	4,500 words (print) 10,000 words (online)	4,500 words (print) 10,000 words (online)	3,500 words (print) 10,000 words (online)	3,500 words (print) 10,000 words (online)	4,500 words (online)
<b>Expected duration until submission</b>	2 years	2 years	1 year	1 year	1 year
<b>Journal</b>	AJRCCM with or without separate publication of the systematic reviews in the Ann ATS.	AJRCCM	AJRCCM	AJRCCM	Ann ATS

# PROJECT PROPOSAL

## Submitting the proposal

Individuals who develop an official ATS document do so as volunteers of the ATS. This requires a minimum commitment of two years and substantial time and effort. Prior to applying, potential applicants should confer with a member of the Documents Development and Implementation Committee (DDIC) or a colleague who has previously participated in the development of an official document to fully understand how the commitment compares with other opportunities to contribute to the ATS. In addition, potential applicants should review the material available in the Assembly/Committee Project Application Resource Center (<http://www.thoracic.org/members/assemblies/about/assembly-project-application-resource-center.php>).

For those who decide to propose development of an official document, the process begins with the completion of an application (<http://www.thoracic.org/assemblies/project-application.php>). The application usually becomes available in early July and then is due in late July. Any ATS member may apply to develop an Official ATS Document, but the concept and draft application should ideally be pre-approved by an assembly or committee. In the application, the project's importance, goals, methods, timetable, and potential derivatives need to be described. In addition, the following individuals must be identified in the application:

- Chair(s): The document development group should be led by one or more chairs who 1) understand the scope of the proposed project, 2) have the skills to lead the document development group, and 3) understand the methods required for the type of document being proposed. For clinical practice guidelines, the chair ideally will have been a participant in a previous ATS document project. ATS' conflict-of-interest policy requires that at least one chair be free of any relevant conflict-of-interest and remain free of such conflicts-of-interest for at least one year after publication.
- Committee Members: Participants in the proposed project should represent the perspectives of healthcare professionals (i.e., patients, nurses, rehabilitation specialists, respiratory technicians, pharmacists, researchers, and ethicists) and organizations (i.e., regulators and payers) involved in the management of patients who will be affected by the document, as well as patients themselves. Documents aimed at an international audience should include international participants.
- Methodologist(s): Clinical practice guidelines require at least one methodologist, defined as an individual who has previously led a systematic review and the development of a guideline that used the GRADE

approach. The individual(s) who will serve as the methodologist for the guideline project should be identified in the application. ATS staff are available to help identify potential methodologists.

### **Review of the proposal**

Project proposals are initially reviewed by the relevant Assembly Planning Committees and the DDIC. These reviews are provided to the applicant, so that the application can be modified and resubmitted. The revised application and the reviews are then sent to the Program Review Committee (PRC).

The PRC reviews each proposal including the topic (i.e., relevance to the ATS), scope (i.e., sufficiently focused and achievable), methods (i.e., appropriate methodology for the proposed document type), and committee members (i.e., enough expertise to adhere to the required methods; provides a balanced perspective; reflects the diversity of the ATS). The PRC ranks the proposals and then recommends approval of the highest ranked proposals. These recommendations are forwarded to the Finance Committee for approval and funding as part of the overall ATS budget. Final approval of the ATS budget is the responsibility of the ATS Board of Directors, which usually meets in December.

### **Notification of approval**

Applicants are notified whether their project proposal has been “approved in-concept” or “not approved” by a letter from the ATS Staff and the PRC. The letters are generally sent in January. Approval in-concept indicates that the project will be approved once the processes of conflict-of-interest disclosure and management are complete. The notification letter describes the terms and conditions of project development and provides supplementary background materials. Project Chairs should contact their ATS staff facilitator, John Harmon ([jharmon@thoracic.org](mailto:jharmon@thoracic.org)) or Rachel Kaye ([rkaye@thoracic.org](mailto:rkaye@thoracic.org)) once they receive notification that their project has been approved in order to begin planning their project.

## **DOCUMENT DEVELOPMENT**

### **Preparation**

The chair of approved in-concept projects must submit an updated list of proposed participants. Both the chair and the proposed participants are then contacted by the ATS and asked to declare potential conflicts-of-interest. Such declaration of potential conflicts-of-interest is required of all individuals who can control the outcome of an official ATS project (in part or in full), including all project participants.

For policy statements, research statements, technical statements, and workshop reports, the ATS Conflict-of-

interest Office reviews the participants' conflict-of-interest disclosures and then instructions for appropriate conflict-of-interest management are provided to the project chairs. The chairs are responsible for ensuring that the required conflict-of-interest management steps are followed. Management usually consists of recusal of an individual from making recommendations and authoring portions of the document related to his or her relevant commercial interests.

For clinical practice guidelines and clinical statements, the ATS Conflict-of-interest Office reviews the participants' conflict-of-interest disclosures and then categorizes the participants as having no conflicts-of-interest, manageable conflicts-of-interest, or disqualifying conflicts-of-interest. Participants with manageable or disqualifying conflicts-of-interest will be contacted by the ATS Conflict-of-interest Office. Those with manageable conflicts will be allowed to participate in the guideline project but must be recused from making recommendations related to their conflicts. Those with disqualifying conflicts will be given the options of not participating in the project, terminating their relationship to participate in the project as an individual with a manageable conflict, or participating in the project as a non-voting expert contributor who cannot participate in making any recommendations. These decisions will be conveyed to the chairs, who are responsible for ensuring that the required conflict-of-interest management steps are followed.

Regardless of the document type, proposed participants may not participate in any activities related to the project until their conflict-of-interest disclosures have been submitted and reviewed.

A kick-off teleconference is held that includes the project chairs and ATS staff. The goals of the teleconference are to confirm that the project goals and methods fit the approved document type, outline expectations, describe the rules of document development, and answer questions. The rules of document development include the following:

- **Timeline:** All official document types, except clinical practice guidelines and clinical statements, should be submitted within one year. Clinical practice guidelines and clinical statements take longer to complete (i.e., two years), but should demonstrate timely completion of deliverables that include clinical questions in the PICO (population, intervention, comparator, outcome) format, completed literature searches for each question, evidence and summary of findings tables, and recommendations.
- **Responsibilities:** Chairs are responsible for working with ATS staff to schedule the meetings and teleconferences, running all meetings and teleconferences, and adhering with all of ATS' document development policies.

- Annual Renewal: Project approval is for one year. A renewal application must be submitted annually for a project to be renewed. Renewal is not guaranteed, but rather, contingent upon evidence of satisfactory progress during the first year. Failure to submit a renewal application will result in inactivation of the project, which means that no funds will be provided, the document will not be accepted for review, and a new application will be required to re-activate the project.
- Co-sponsorship: All projects are approved as ATS-only projects (with the only exception of those for which an ATS/ERS project application was submitted). Chairs who want their project to be co-sponsored by an additional organization must submit their request in writing to the ATS Chief of Documents, who will pass the request along to the DDIC. The request should include the rationale and potential benefits of co-sponsorship. The DDIC and relevant assembly chair will consider the request. If approved, the ATS Chief of Documents and the ATS Executive Director will work together to develop a Memorandum of Understanding with the other organization. No project is considered a joint project until the Memorandum of Understanding has been signed by all co-sponsoring societies. Chairs should not approach potential co-sponsoring organizations themselves; this should be done by ATS staff.
- Confidentiality: Project participants must keep confidential any information that they learn from their participation until the document is published. The only exception is that a document may be presented at the ATS International Conference if it has been formally approved by the ATS Board of Directors, even if publication has not yet occurred. Subject to confidentiality are documents, data, drafts, charts, notes, reports, articles, pictures, drawings, discussions, plans or ideas, and intellectual property whether in written, verbal, digital, or other form. Participants will be asked to review the confidentiality policy and, if they cannot abide by the policy, to resign from the project. A breach of confidentiality determined by the ATS to have created a real or potential bias may result in the project being terminated.
- Conflicts-of-interest: Conflict-of-interest disclosures must be updated by committee members annually, when new relationships with industry develop, and when the final document is submitted for peer review. The chairs are responsible for periodically reminding the panel members of these requirements, requiring panel members to disclose new conflicts-of-interest at the beginning of each meeting or teleconference, and managing conflicts-of-interest throughout the development process.
- Publication site: ATS statements and clinical practice guidelines are published in the *American Journal of Respiratory and Critical Care Medicine*, while workshop reports are published in the *Annals of the American*

*Thoracic Society*. Occasionally, a document may be published in the *American Journal of Respiratory Cell and Molecular Biology*. For multi-society documents, publication site is negotiated on a case-by-case basis and recorded in a Memorandum of Understanding.

- Word counts: Word limits have been established for a variety of reasons including publication costs, space limitations, constraints related to peer review, and reader preferences. Word limits are strictly enforced. See Table 1.
- Intellectual Property: Recipients agree, as a condition of receipt of ATS support, that the ATS owns the copyright and all other rights to any output created partly or completely with ATS funding, unless stipulated in writing by the ATS. The disposition of such products is at the sole discretion of the ATS.
- All official ATS policies must be followed during all phases of Assembly and Committee project activity. The relevant policies are listed in the “References”.

## **Monitoring**

Document developers should expect periodic contact from the ATS Documents Editor, who will check-in to see how the document is progressing. Teleconferences are held periodically with ATS staff to discuss issues that emerge, such as planning for the ATS International Conference. The relevant Assembly Chairs, Assembly Planning Committees, Assembly Staff, Committee Chairs, and Committee Staff may also monitor the progress of the project.

Developers are urged to be proactive in seeking advice as soon as questions or uncertainties arise. The following individuals are available to lend assistance:

- Kevin Wilson, Documents Editor, [kwilson@thoracic.org](mailto:kwilson@thoracic.org) (for issues related to interactions with other organizations; guideline methods; conflict of interest management; manuscript organization, submission, or review; or the Board of Directors)
- Judy Corn, ATS Staff, [jcorn@thoracic.org](mailto:jcorn@thoracic.org) (for general issues or issues related to the document-patient interface)
- John Harmon, ATS Staff, [jharmon@thoracic.org](mailto:jharmon@thoracic.org) (for issues related to project management and conflict of interest management)
- Rachel Kay, ATS Staff, [rkaye@thoracic.org](mailto:rkaye@thoracic.org) (for issues related to scheduling or project management)

- Joseph Ruminjo, ATS Staff, [jruminjo@thoracic.org](mailto:jruminjo@thoracic.org) (for issues related to guideline dissemination and implementation)

## Document preparation

Official ATS documents are single documents; a project may not be divided into multiple documents. All documents must adhere to the organization described in this section and the ATS style guidelines described in “Style Guidelines” below.

Official documents should begin with a title page that provides the following information:

- Title: Titles should end, “. . . : An Official American Thoracic Society [document type]” As an example, a title might read, “Treatment of Aspiration Pneumonia: An Official American Thoracic Society Clinical Practice Guideline.”
- Authors: The order of authors is determined by the chairs. Most commonly, one chair is first author, the other chair is last author, and other participants are listed either alphabetically or by contribution. Middle initials should be used. The list of authors should be followed by the phrase “on behalf of the [sponsoring ATS assembly]”. The authorship policy is described in “Authorship” below.
- Author affiliations: The authors’ academic affiliations should be listed in the same order as the authors. The academic affiliations should be followed by ORCID numbers.
- Corresponding author: The name, address, email address, telephone number, and fax number of the corresponding author should be provided.
- Word count: The word count includes the introduction, methods, and body of the document. It does not include the title page, table of contents, abstract, overview section, references, tables, or figures. The word limits are provided in “Word count” below.
- Key words: Three to five key words should be listed that are not in the document’s title. Key words should be consistent with Medical Subject Headings (MeSH) terms, the vocabulary used by PubMed. The MeSH browser (<http://www.ncbi.nlm.nih.gov/mesh>) may be helpful for assigning key words.

An abstract with a maximum of 250 words precedes a table of contents. For statements and guidelines, the abstract should describe the background, goals, methods, results, and conclusions. For workshop reports, the abstract may be unstructured. The table of contents should list the document’s first- and second-level headings. The table of contents should be followed by an overview section that consists of a single paragraph, followed by a bulleted list of key conclusions and recommendations. The overview section will probably be the most read portion of the document and should be viewed as the authors’ best opportunity to present their bottom-line and to entice readers to read more.

The introduction and methods sections appear next. The methods section of all document types should indicate that “potential conflicts-of-interest were disclosed and managed in accordance with the policies and procedures of the ATS.” For clinical practice guidelines and clinical statements, the methods section should describe committee formation, formulation of clinical questions, literature search strategies, and study selection criteria, as well as the methods used to appraise the evidence and formulate recommendations.

The remainder of the document should be organized as follows: body of the document, acknowledgements, references, and figure legends. The acknowledgement section should recognize the sponsoring Assembly (e.g., “This Statement was prepared by an ad hoc subcommittee of the [relevant assembly]”). All participants should be listed, grouped by their role (e.g., chairs, methodologists, group leaders, committee members).

Tables and figures should not be embedded within the body of the manuscript. The tables should be placed after the references, followed by the figure legends. [Figures will be submitted as separate files and then electronically merged into a single PDF file along with the manuscript for review]. An online supplement is permitted; it should consist of its own title page, table of contents, body, and references.

### **Submission**

Manuscripts ready for submission should be organized as described in “Document preparation” above and formatted as described in “Style guidelines” below. In addition, manuscripts should be approved by all authors. Documents are submitted to via Scholar One (<http://mc.manuscriptcentral.com/atsdocs>). Authors should be careful to select “American Thoracic Society Documents Review” rather than one of the journals when submitting their manuscript. Multi-society documents should be submitted to the lead society as determined at the start of the project.

## **DOCUMENT REVIEW AND APPROVAL**

### **Peer review**

The review process for official ATS documents is independent from the ATS journals’ review processes. The Documents Editor will perform an initial review of the document upon submission. If there are major flaws (e.g., not compliant with word limits, incorrect methodology used), the document will be returned to the authors with a description of what needs to be revised for the document to be ready for peer review. If the document is satisfactory, it will be sent for peer review by content experts.

Peer reviewers are selected by the Documents Editor, with input from the relevant assembly chair. The

authors' preferred and non-preferred reviewers are also considered. Both domestic and international reviewers are typically sought to solicit a diversity of opinions. Most documents are reviewed by two to four peer reviewers, although the exact number is at the discretion of the Documents Editor. Peer review generally takes three to five weeks.

A decision letter will be issued following peer review, which is almost always a request for revisions. The decision letter includes comments from peer reviewers about content and from the Documents Editor about methodology and formatting/organization of the document. Authors are expected to consider each reviewer comment, make revisions deemed appropriate, and then resubmit the revised version of the document along with a point-by-point response to the reviewers' comments. Resubmission of revised manuscripts is expected within two months from the date the decision letter. The revised document and the point-by-point responses will be reviewed by the Documents Editor and/or the peer reviewers. Following this review, another decision letter will be issued, which is usually either a request for additional modifications or notification that the document has been accepted by the Documents Editor. If any major conflicts between the Documents Editor and the chairs occur during the peer review process, the DDIC is responsible for the appropriate course action. In cases where extreme conflict occurs, the ATS Executive Committee can be called upon to intervene.

Peer review is managed differently for multi-society projects. The document is submitted to the lead society, as designated in the Memorandum of Understanding. Following submission of the document, each society conducts its own peer review. The total number of reviewers and the time required for peer review are variable, although both are greater with more societies involved. The lead society collates the reviewer comments from the participating societies and then issues a single decision letter, which is usually a request for revisions. Authors are expected to consider each reviewer comment, make revisions deemed appropriate, and then resubmit the revised version of the document along with a point-by-point response to the reviewers' comments to the lead society. Cycles of peer review, decision letters, revisions, and resubmission continue until the co-sponsoring societies agree that the document is ready to be advanced to the leadership of each society for approval.

### **Board of Directors review and approval**

Once approved by the Documents Editor, the document is sent to the Board of Directors for further review and a vote for or against approval at the next Board of Directors meeting. At the same time, the Documents Editor will request that all authors submit both an International Committee of Medical Journal Editors (ICMJE) conflict-of-interest disclosure and a copyright assignment form. The document will not be sent to the journal to be copyedited and prepared for publication until all forms are received. The journals do not

conduct any additional review.

## IMPLEMENTATION

The ATS' commitment to a project does not end with its publication. The ATS is dedicated to ensuring that its clinical practice guidelines and clinical statements are maximally disseminated and implemented. The effort is coordinated by the ATS Director of Guideline Implementation, in conjunction with the chairs. Among dissemination and implementation efforts are the following: clinical summaries that are published in the *Annals of the American Thoracic Society*, including questions that provide Continuing Medical Education (CME) credits; an annual scientific symposium at the ATS International Conference to highlight new guidelines; summaries for inclusion several guideline repositories; patient information; pocket cards; videos; podcasts; and, possibly, performance metrics. These implementation tools are consolidated on dedicated implementation webpages created for each guideline. Chairs of guidelines may be asked to assist and provide feedback during the creation of these derivatives. The repertoire of dissemination and implementation activities continues to evolve.

## PUBLICATION POLICY

### Publication site

Clinical practice guidelines, clinical statements, policy statements, research statements, and technical statements are published in the *American Journal of Respiratory and Critical Care Medicine*, while workshop reports are published in the *Annals of the American Thoracic Society*. Occasionally, an official ATS document is published in the *American Journal of Respiratory Cell and Molecular Biology*. The publication site of multi-society documents is negotiated on a case-by-case basis and recorded in a Memorandum of Understanding. The document is also posted on the ATS website following publication in the journal.

### Executive summaries and full documents

Clinical practice guidelines and clinical statements are published in the *American Journal of Respiratory and Critical Care Medicine*. An Executive Summary can be published in the print version of the journal (maximum of 4,500 words), while the full-length version is published online (maximum of 10,000 words). A non-typeset online supplement (maximum of 20,000 words) can also be published on the journal's website.

Policy, research, and technical statements are also published in the *American Journal of Respiratory and Critical Care Medicine*. An Executive Summary can be published in the print version of the journal (maximum of 3,500

words), while the full-length version is published online (maximum of 10,000 words). A non-typeset online supplement (maximum of 20,000 words) can also be published on the journal's website.

Workshop reports are published in the *Annals of the American Thoracic Society*. A full-length version is published online (maximum of 4,500 words). A non-typeset online supplement (maximum of 20,000 words) can also be published on the journal's website.

### **Word count**

Word limits have been established for each document type and are strictly enforced – Clinical practice guidelines and clinical statements (4,500-word Executive Summary in print; 10,000-word full document online); research, policy, and technical statements (3,500-word Executive Summary in print; 10,000-word full document online); and workshop reports (4,500-word full document online).

### **Authorship**

The order of authors is determined by the chairs. Most commonly, one chair is first author, the other chair is last author, and other participants are listed either alphabetically or by contribution. Middle initials should be used. The list of authors should be followed by the phrase “on behalf of the [sponsoring ATS assembly]”. The authorship policy is described in “Authorship” below.

### **References**

Document developers should cite the highest quality and most relevant literature. References should be updated periodically during the document development phase, as well as during the revision phase, since important literature may become available during those times. The number of references cited in a document is not limited.

### **Conflict-of-interest disclosures**

ATS staff will draft a summary of conflict-of-interest disclosures once the document has been approved by the Documents Editor. The summary is based upon the disclosures made to ATS at the beginning of the project, during the annual renewal process, and when new industry relationships develop. This includes the disclosure of all commercial interests relevant to the subject matter or materials discussed in the manuscript. In addition, ICMJE disclosure forms must be submitted along with the manuscript.

### **Joint publication**

The publication site of ATS documents developed in collaboration with other professional societies is

determined by the societies and not the authors. In the past, such documents were frequently published in duplicate in the journals of the participating societies. The ATS and most other societies no longer allow duplicate publication (see Publications Policy Committee Policy on Simultaneous Publications, 4/29/00), regardless of whether duplicate publication is simultaneous or staggered. Multi-society documents are published in either an ATS journal or the journal of the cosponsor(s), but not both.

The ATS recognizes that a prohibition against all forms of duplicate publication might hamper the dissemination of information to its members and that suspension of this policy may be warranted under extenuating circumstances. An example of these circumstances includes manuscripts that are developed in both English and a foreign language. Regardless of the rationale, duplicate publication must be approved by the ATS Executive Committee or Board of Directors.

To facilitate collaboration, the ATS has developed approaches with our most common partnering societies for assigning joint documents to a journal for publication. The approach varies, but may include alternating publication sites, distributing documents according to the number and impact of the publications, and others. When an ATS document is published in another society's journal, it is common for an editorial to be published in an ATS journal that highlights and informs ATS members about publication of the ATS document in another society's journal.

## **STYLE GUIDELINES**

Official ATS documents must conform to the journals' style. This is described briefly in this section and in more detail in the "Instructions for Authors" at (<http://www.atsjournals.org/page/ajrccm/instructions>). You may also wish to contact Eric Gumpert, Director of Editorial/Production ([egumpert@thoracic.org](mailto:egumpert@thoracic.org), 212-315-6447) for technical inquiries.

### **Font / Margins**

Manuscripts should be typed in 12 point type on 8 ½ x 11 inches (i.e., 21.6 x 27.9 cm) paper with margins of at least 1 inch (2.5 centimeters).

### **Spacing**

Manuscripts should be double-spaced throughout.

### **Abbreviations**

Abbreviations are generally discouraged by the ATS journals, but it is recognized that an abbreviation can ease communication if a reader is familiar with it and the writer uses it skillfully. Thus, it is acceptable to substitute a standard abbreviation for an unwieldy word or phrase appearing more than ten times in a manuscript.

An abbreviation should never replace a single short word. As examples, “ETX” and “AR” should not be used as abbreviations for endotoxin and arousal, respectively. However, “LAM” is an appropriate abbreviation for lymphangi leiomyomatosis. One way of avoiding abbreviations is to use a substitute word. As an example, instead of writing “IRL” for inspiratory resistive load, one could simply write “load” after specifying the type of load.

If an abbreviation is used, a) the abbreviation should always be defined by writing the full term with the abbreviation in parentheses the first time that it occurs, b) common existing abbreviations should be used instead of inventing new abbreviations, and c) the abbreviation should be sensible, such as three capital letters without periods.

### **Internal References**

References within the text should appear in parentheses. As an example, “the use of antibiotics is controversial (34).”

### **Drug Names**

Generic names of drugs must be used instead of trade names. The location (city, state, country) of the manufacturer should be provided after the first reference to the manufacturer.

### **Works in Progress**

Unpublished work (i.e., work that is submitted but not in press) should not be cited as a reference, but may be cited parenthetically within the text. Written permission from the author for citation of unpublished work should accompany the manuscript.

### **References**

References should be formatted as a single list, similar to an original scientific manuscript. They should be double-spaced, begin on a separate page, and be numbered in the order that they appear in the text. All authors' names (i.e., do not use “et. al.” except for references with more than ten authors), complete article titles, and inclusive page numbers should be included. Articles that have been accepted and are in press may

be included, but submitted manuscripts that have not been accepted for publication should not be included. If an article cited is in press, two copies of that article should be included with the submitted manuscript. Abbreviations for the names of journals are provided in Index Medicus (<http://www.nlm.nih.gov/bsd/aim.html>). The names of journals that are not listed should be written out.

References should be formatted as follows:

- Journal articles: Gandevia SC, Gorman RB, McKenzie DK, DeTroyer A. Effects of increased ventilatory drive on motor unit firing rates in human inspiratory muscles. *Am J Respir Crit Care Med* 1999;160:1598-1603.
- In-press journal articles: Lakatos E, DeMets DL, Kannel, WB, Sorlie P, MacNamara P. Influence of cigarette smoking on lung function and COPD incidence. *Chronic Dis.* (In press)
- Abstracts: Carr MJ, Undem BJ. Trypsin-induced, neurokinin-mediated contraction of guinea pig isolated bronchus [abstract]. *Am J Respir Crit Care Med* 2000;161:A466.
- Books: Lang TA, Secic M. How to report statistics in medicine. Philadelphia: American College of Physicians; 1997.
- Book chapters: Weibel ER. The structural basis of lung function. In: West JB, editor. *Respiratory physiology: people and ideas*. New York: Oxford University Press; 1996, p. 346.
- Government or association reports: U.S. Public Health Service. Smoking and Health. A Report on the Surgeon General. Washington, DC.: U.S. Government Printing Office; 1979. DHEW Publication No. (PHS)7950066.
- Journal articles in electronic format: Manoloff ES, Francioli P, Taffé P, van Melle G, Bille J, Hauser PM. Risk for *Pneumocystis carinii* transmission among patients with pneumonia: a molecular epidemiology study. *Emerg Infect Dis* [serial online] 2003 Jan [cited 2004 Jul 14]; vol. 8. Available from: <http://www.cdc.gov/ncidod/EID/vol9no1/02-0141.html>

## Tables

Tables should be created in Microsoft Word, double-spaced, and configured to fit vertically on the printed page. Do not insert horizontal or vertical lines in a table. Tables should be numbered consecutively (i.e., do not label tables 1a, 1b, 1c, and so forth), have a brief title, and be cited in text.

Avoid arbitrary labels or classifications (e.g., groups A and B) if specific descriptors (e.g., control and intervention) can be used. Nonstandard abbreviations should be explained in footnotes. The footnotes should use the following symbols in this sequence: \*, †, ‡, §, ||, ¶, \*\*, ††, etc.

Each table should be an independent file, rather than embedded within the manuscript. It should be possible to understand the information within a table without reading the related text. Tables will be typeset to fit a width of 3 ½ inches (9 centimeters) for single column or up to 7 ½ inches (18 ½ centimeters) for double column.

## Figures

Figures must be high quality, clear, and legible. They may be submitted either electronically or as hard copies. All figures must be submitted in a high resolution.

For electronic submission, refer to the *American Journal of Respiratory and Critical Care Medicine's* description of the "Submission of Digital Art Guidelines". For questions, you may contact Eric Gumpert, Editorial/Production Manager at [egumpert@thoracic.org](mailto:egumpert@thoracic.org) or 212-315-6447.

For the submission of figures as hard copies, two hard copies of each figure should be submitted. Each should be on its own piece of paper, with a white label on the back that states the figure number, name of individual who submitted the figure, and title of the document. Do not write this information directly on the back of the figure because the ink may bleed through to the other side of the paper and alter the appearance of the figure. Glossy paper is required for photographs, but not other types of figures. Photocopies are not acceptable. Figure legends should be included in the manuscript, following the references as described in "Document preparation" on page 10.

## REFERENCES

- Attributes of ATS documents that guide clinical practice. *Am J Respir Crit Care Med* 1997; 156:2015-2025.
- A New ATS Committee: Competing in the Marketplace of Ideas. *Am J Respir Crit Care Med* 2005; 172(9); 10678.
- ATS statement: Grading the quality of evidence and strength of recommendations for guidelines and recommendations. *Am J Respir Crit Care Med* 2006; 174:605-614.
- Gould MK, Cooke CR. A guide to guidelines for pulmonary, sleep, and critical care medicine clinicians. *Proceedings of the American Thoracic Society* 2012; 9:211-214.
- Cooke CR, Gould MK. Advancing clinical practice and policy through guidelines: the role of the American Thoracic Society. *Am J Respir Crit Care Med* 2013; 187:910-914.
- Conflict-of-interest Policy for Clinical Practice Guidelines.

<http://www.thoracic.org/statements/document-development/resources/cpg-specific-coi-policy.pdf>.

- Policy on Management of Conflict-of-interest in Official ATS Documents, Projects, and Conferences. <https://www.thoracic.org/about/governance/ethics-and-coi/resources/coi-policy.pdf>.

- Code for Interaction with Companies. <https://www.thoracic.org/about/governance/nominations/cmss-key-leaders.pdf>.

- Policy Governing Relationships Between the Tobacco Industry, ATS Members, and Non-Members Who Participate in ATS Activities. <http://www.thoracic.org/about/governance/ethics-and-coi/resources/ats-tobacco-policy.pdf>

- ATS Publications Policy Committee Policy on Simultaneous Publication.

- Descriptions and comparisons of the three types of Official ATS Documents. <http://www.thoracic.org/statements/document-development/>.

- Submitting a new project proposal to develop an Official ATS Document. <http://www.thoracic.org/members/assemblies/about/assembly-project-application-resource-center.php>

- Collaboration with other organizations on document development. <http://www.thoracic.org/statements/document-development/resources/collaboration.pdf>.

- Clinical Practice Guideline Development Manual. <http://www.thoracic.org/statements/document-development/resources/guideline-development-manual.pdf>.

- Policy for the management of projects that do not submit an annual renewal application. <http://www.thoracic.org/statements/document-development/resources/Renewal-policy.pdf>