PRACTICE PARAMETERS AND TECHNICAL STANDARDS

DEVELOPMENT AND REVISION HANDBOOK

American College of Radiology
1891 Preston White Drive
Reston, VA 20191

http:///www.acr.org/guidelines

TABLE OF CONTENTS

ORGANIZATION 1

COMMITTEE STRUCTURE AND DUTIES OF CHAIRS AND MEMBERS 1

Standing Committees 1

Ad Hoc Collaborative Committees 2

Duties of the Committee Chair 2

Duties of the Committee Member 2

PROCESS 3

REQUESTING NEW TOPICS FOR PRACTICE PARAMETERS AND TECHNICAL STANDARDS DEVELOPMENT 3

TIMELINE FOR DEVELOPING OR REVISING ACR-ONLY PRACTICE PARAMETERS AND TECHNICAL STANDARDS 3

Phase 1: Drafting Documents 3

Phase 2: Field Review Cycles 4

Phase 3: Reconciling Draft Documents 4

Phase 4: Informing Leadership 4

Phase 5: Finalizing Draft Documents 5

Phase 6: Approving Practice Parameter or Technical Standard Documents 5

Phase 7: Disseminating Practice Parameter and Technical Standard Documents 5

Considerations for Working Collaboratively With Other Societies 5

COLLABORATIVE PRACTICE PARAMETERS AND TECHNICAL STANDARDS 6

Developing Practice Parameters and Technical Standards Collaboratively with Other Societies 7

Collaborative Practice Parameter Process 7

REVIEW AND APPROVAL PROCESS 8

Overview 9

Council Steering Committee Subcommittees for Practice Parameters and Technical Standards Review 9

Duties of the Chair 9

Moderating a Conference Call 10

Getting Started 10

Call Scheduling 10
Managing the Call 10
Follow-Up after the Call 11

AMENDING PRACTICE PARAMETERS AND TECHNICAL STANDARDS COLLABORATIVELY WITH OTHER SOCIETIES 11
Purpose 12
Process for Amending Collaborative Practice Parameters 12
Key Features of the Process for Amending Collaborative Practice Parameters 12
Decisions Required by Collaborating Society if Amended Practice Parameter is approved by the Council 12

DEVELOPING COLLABORATIVE RADIATION ONCOLOGY PRACTICE PARAMETERS AND TECHNICAL STANDARDS 13
Process for Radiation Oncology Collaborative Practice Parameters and Technical Standards 14

EXPEDITED APPROVAL OF ACR-AAPM COLLABORATIVE MEDICAL PHYSICS PRACTICE PARAMETERS AND TECHNICAL STANDARDS 16
Purpose 16
Process for Expedited Approval of Collaborative Medical Physics Practice Parameters or Technical Standards with AAPM 16
Key Features of the Process for Approving Medical Physics Practice Parameters / Technical Standards with AAPM 17

SUNSETTING PROCESS FOR PRACTICE PARAMETERS AND TECHNICAL STANDARDS 17

DOCUMENTS 19

DOCUMENT STYLE AND FORMATTING NOTES 19
New Practice Parameters or Technical Standards 19
Revised Practice Parameters or Technical Standards 19
Drafting Hazards 19
Basic Rules to Follow 19

NORMALIZING THE LANGUAGE IN PRACTICE PARAMETERS AND TECHNICAL STANDARDS 19

APPENDIX 1 22

DEFINITION OF PRACTICE PARAMETERS 22

DEFINITION OF TECHNICAL STANDARDS 22

APPENDIX 2 23

NEW PRACTICE PARAMETER AND TECHNICAL STANDARDS PROPOSAL FORM 23

APPENDIX 3 24

DOCUMENT TEMPLATES 24

Disclaimer and Preamble for Diagnostic and Interventional Documents 24

Disclaimer and Preamble for Radiation Oncology Documents 25

Document Template with Section Descriptions 26

Standard Language for Concepts that should not be restated in the Practice Parameters 38

APPENDIX 4 40

COLLABORATIVE SOCIETIES REPRESENTATIVES' ROLES 40

APPENDIX 5 41

EXAMPLES OF STANDARD LANGUAGE FOR QUALIFIED MEDICAL PHYSICISTS BY MODALITY 41

APPENDIX 6 45

LIST OF PRACTICE PARAMETERS AND TECHNICAL STANDARDS WITH ACR RESOLUTION 29, 2011 45

ORGANIZATION

THE AMERICAN COLLEGE OF RADIOLOGY

Within the ACR, there are a number of commissions tasked to carry out specific activities. There are twelve Operational Commissions, which address the day-to-day operations of the College. The Commission on Quality and Safety is the Operational Commission that oversees quality and safety initiatives of the ACR. It is composed of several committees, including the Committee on Practice Parameters and Technical Standards.

The College also has ten Specialty Commissions that represent specific specialties and practice types within the field of radiology. Most Specialty Commissions have standing committees that correspond to ACR Operational Commissions, for example, a committee on practice parameters and technical standards (The Commission on Body Imaging is the exception to this structure). The chairs of each of these committees are members of the Specialty Commission under which they operate and the Operational Commission to which their committee activity relates.

The ACR Committee on Practice Parameters and Technical Standards comprises the committee chair on practice parameters and technical standards of each Specialty Commission as well as four committee chairs from the Commission on Body Imaging (Table 1).

This committee structure encourages a broad spectrum of specialty representation on the Commission on Quality and Safety as well as members from private practice settings and academic medical centers with a wide geographic distribution.

COMMITTEE STRUCTURE AND DUTIES OF CHAIRS AND MEMBERS

Standing Committees

Fourteen committees lead the development and revision of Practice Parameters and Technical Standards.

TABLE 1. The list of committees that work on Practice Parameters or Technical Standards

ID Number	Committee Name
05113246	Committee On Practice Parameters and Technical Standards–Q&S
05040082	Committee on Practice Parameters–General, Small, and Rural Practice
05040100	Committee on Practice Parameters–Interventional and Cardiovascular Radiology
05040109	Committee on Practice Parameters and Technical Standards–Nuclear Medicine & Molecular Imaging
05040117	Committee on Practice Parameters–Neuroradiology
05040125	Committee on Practice Parameters and Technical Standards–Medical Physics
05040151	Committee on Practice Parameters–Radiation Oncology
05040175	Committee on Practice Parameters–Ultrasound
05051589	Committee on Practice Parameters–Pediatric Radiology
05046627	Committee on Practice Parameters –Breast Imaging
05044976	Committee on Cardiovascular Imaging–Body Imaging
05044977	Committee on Thoracic Radiology–Body Imaging
05044978	Committee on Abdominal Imaging–Body Imaging
05044979	Committee on Musculoskeletal Imaging-Body Imaging

Ad Hoc Collaborative Committees

In addition to these standing committees, ad hoc collaborative committees are formed for each collaborative document that is being developed or revised. These committees are formed with members of the lead standing Committee on Practice Parameters and Technical Standards and representatives from the collaborating specialty societies (mostly radiology subspecialty societies). The number of committee members should not exceed twelve and there must be equal membership among the participating societies. The ad hoc committee exists only for the time it takes to approve the collaborative document. For more information on these committees, see the section on the collaborative process.

Duties of the Committee Chair

1. Leading the committee and the overseeing the committee processes
2. Replacing committee members who are rotating off or are not participating
3. Assigning principal drafters or reviewers for each practice parameter or technical standard for the year
4. Working with staff to keep the process on time and ensuring the committee meets the key deadlines
5. Leading the conference calls to keep the document within the scope of the Practice Parameters or Technical Standards and addressing key clinical areas.
6. Working with ACR staff to create reports to leadership
7. Working with ACR staff to determine when a meeting is required for the committee and scheduling the meeting date and time (typically corresponding to another societies' meeting when committee members are likely to attend.
8. Working with ACR staff to draft the agenda, review meeting notes, and revise the workload going forward.
9. When the practice parameter or technical standard is collaborative with other societies, leading the document development or revision process.

Duties of the Committee Member

Participating in the reviewing or drafting processes for practice parameters and technical standards

a. Reviewing and commenting on practice parameters and technical standards
b. Participating on conference calls
c. Participating in all polls and committee activities, traveling to and attending committee meetings when schedule and resources permit.

PROCESS

Requesting New Topics for Practice Parameters and Technical Standards Development

In an effort to streamline and to avoid overlapping or redundancy in the practice parameters and technical standards process, the Commission on Quality and Safety has adopted a procedure for requesting new topics for practice parameters and technical standards development.

In general, proposed practice parameters or technical standards should represent an imaging modality, therapy, or intervention that addresses disorders or conditions resulting from the most frequently occurring illnesses and/or those with the highest morbidity and mortality. It is also important that the College develop practice parameters or technical standards relating to recommendations in the ACR Appropriateness Criteria®, particularly giving attention to those procedures receiving a rating of six or higher on the Appropriateness Criteria Scale.

To achieve these goals, the Commission has developed a review process for proposed practice parameters and technical standards. Each Specialty Committee will submit its choices for on the form (see *Appendix 4 - Proposal Form for Developing a New Practice Parameters or Technical Standards*). Submission of the form allows the committee members, as well as the Commission, to bring into focus the rationale for each new document.

The Chair of the Commission on Quality and Safety and the Chair of the Committee on Practice Parameters and Technical Standards will review proposals and return them to the committee, with recommendations for incorporation into an existing practice parameter or technical standard, or for development of a unique practice parameter or technical standard.

Timeline for Developing or Revising ACR-Only Practice Parameters and Technical Standards

Phase 1: Drafting Documents

October – June

- Practice parameters and technical standards are reviewed every five years (sooner when appropriate). They are distributed to the lead standing practice parameter or technical standard committee(s) in October to decide who should be involved in the revision. The lead standing committee is determined when the document is initially created and is typically the committee responsible for the body or practice area who suggested the document. A principal reviewer is assigned to draft an updated, revised version of each parameter and technical standard up for review.
- Ideas for new practice parameters and technical standards may be suggested by any ACR member.
    - A proposal form is submitted to the Chair of the Commission on Quality and Safety and the Chair of Practice Parameters and Technical Standards for approval.
    - Once the proposal is approved, the principal drafter or drafting committee is assigned. If collaborative, a letter is sent to the collaborating society asking for names for the collaborative committee and Conflict of Interest (COI) information.
    - The Chair of the drafting committee may assign sections of the parameters to be drafted among the committee members.
- ACR staff coordinates with the committee to ensure the completion of the draft in time for the formal field review process.

- The deadline for drafts to be completed for submission at the annual meeting is July 1st of the previous year. (ie, if the annual meeting is in May 2016, the deadline for completing the drafts would be July 2015).

Phase 2: Field Review Cycles

August – October

- All drafts are prepared for a field review cycle.
    - Four separate cycles are scheduled for August through October. Each cycle lasts three weeks.
    - All ACR members are invited to review and comment on the practice parameters and technical standards.
    - Blast e-mails and web announcements are sent as reminders to all ACR members.
    - E-mails are sent as reminders to all practice parameters and technical standards committee members and the appropriate Commissions and Accreditation Committees.
    - E-mails are sent to collaborative societies to be circulated for review and comment.

Phase 3: Reconciling Draft Documents

September – December

- Subcommittees of the Council Steering Committee (CSC) are formed to reconcile comments received during field review. Invited members of the Subcommittee include:
    - Council Steering Committee Chair(s)
    - Chair, Commission on Quality and Safety
    - Chair, Practice Parameters and Technical Standards
    - Speaker
    - Vice Speaker
    - Chair, Commission representing the Sponsoring Committee
    - Chair, Parameters Committee (sponsoring the parameter)
    - Principal Drafter or Principal Reviewer
    - Drafting committee / Collaborative Committee
    - Commenter(s)
    - ACR staff (including legal staff)
- Conference calls are scheduled for each practice parameter or technical standard; unless no comments or only editorial comments are received. The CSC Chair determines whether a conference call is required or whether comments can be resolved through e-mail.
- Revisions are based on the recommendations of the CSC subcommittee.

Phase 4: Informing Leadership

January – February

- Practice parameters and technical standards are distributed to the Board of Chancellors (BOC) for information at the winter BOC meeting to ensure each relevant Commission is aware of all the documents that are going before the ACR Council at the Annual Meeting.
- The collaborative societies verify that the practice parameters and technical standards have gone through the societies' review process and indicate the societies' approval in writing. This is typically done via e-mail with attached forms at the staff level.

Phase 5: Finalizing Draft Documents

February

- Practice parameters and technical standards to be approved are assigned a "Resolution" number and a Reference Committee.
- Practice parameters and technical standards are made available on the annual meeting's website portal.

Phase 6: Approving Practice Parameter or Technical Standard Documents

April / May

- Practice parameters and technical standards are discussed during the Open Session on Monday at the annual meeting. Each Reference Committee listens to the testimony presented during the Open Session.
- For collaborative practice parameters and technical standards, members may suggest revisions during Open Session, just as for the non-collaborative practice parameters and technical standards. A representative from each society who has been invited to attend the meeting may offer input on the suggestions when recognized by the Speaker.
- Once the Open Session is complete, the Reference Committee will adjourn to its "closed session" to discuss the comments and suggestions which were heard during the Open Session. The Reference Committee may request further input by inviting the relevant person, such as the principal drafter / principal reviewer, collaborative society representative, parameter and standards chair, or others, into the closed session.
- The Reference Committees will deliberate and prepare a Final Report containing the recommendations from the committee.
- These reports will be provided to the Council online late Monday evening for review.
- During Tuesday's Council session, each Reference Committee will lead the discussion regarding their recommendations. The Council will be free to discuss the recommendations of the Reference Committee and either "adopt", "not-adopt" or "refer" the parameters/standards.
- If the Council adopts the collaborative practice parameter or technical standard with revisions adopted during the Council session, the collaborative societies will be asked to approve the final document. See the "Decisions Required by Collaborating Society if Amended Practice Parameter is Approved by the Council" for further information.

Phase 7: Disseminating Practice Parameter and Technical Standard Documents

June – October

- Following the annual meeting, the approved practice parameters and technical standards will be posted on the ACR annual meeting portal under "Proceedings of the Annual Meeting".
- The approved practice parameters and technical standards are edited and prepared for publication. Practice parameters and technical standards will be posted on the ACR practice parameters/technical standards web pages by September following the meeting, and have an effective date of October 1st.

Considerations for Working Collaboratively With Other Societies

1. **Collaboration with Radiology Societies**. As a rule, the ACR will collaborate on practice parameters or technical standards only with other U.S. / North American radiology societies. The purpose of the practice parameters / technical standards is to reduce the variability of radiology practices in the U.S. Adding foreign-based radiology societies would add complexities that may not necessarily be relevant to the U.S.

2. **Equal Representation with Collaborative Societies**. The collaborative committee will consist of equal representation by all organizations participating on the document but the total number of committee members may not exceed 12 members. (Each society is asked to provide a particular number of members to have equal representation on the committee; however, the society may provide fewer members than requested). Multiple collaborating societies may be contacted to work on a single practice parameter or technical standard document, however no more than three collaborating societies (not counting the ACR) may participate on any one document. If the Chair of the Collaborative Committee feels more than three societies is required, a request will be forwarded to the Chair of the Committee on Practice Parameters and Technical Standards for consideration.
3. **List of Societies**. Listed below (Table 2) are societies with whom the ACR is currently working.
4. **Radiation Oncology Collaborative practice parameters**. In May 2010, the ACR Council adopted a Resolution (8) to change the way that radiation oncology collaborative practice parameters were adopted. The new process for addressing these parameters is in the next section. Non-collaborative practice parameters will follow the process for ACR parameters.

Collaborative Practice Parameters and Technical Standards

Table 2. The medical specialty societies that are working collaboratively with the ACR on Practice Parameters and Technical Standards are listed. These are predominately radiology subspecialty societies.

Acronym	Formal Name
AAPM	American Association of Physicists in Medicine*
ABS	American Brachytherapy Society**
ACNM	American College of Nuclear Medicine
ACOG	American College of Obstetricians and Gynecologists
AIUM	American Institute of Ultrasound in Medicine
ASER	American Society of Emergency Radiology
ASNR	American Society of Neuroradiology
ASSR	American Society of Spine Radiology
ASTRO	American Society for Radiation Oncology**
NASCI	North American Society of Cardiovascular Imaging
SAR	Society of Abdominal Radiology (formally SUR and SGR)
SCBT-MR	Society of Computed Body Tomography &Magnetic Resonance
SIIM	Society for Imaging Informatics in Medicine
SIR	Society of Interventional Radiology
SNIS	Society of Neurointerventional Radiology
SPR	Society of Pediatric Radiology
SRU	Society of Radiologists in Ultrasound
SSR	Society of Skeletal Radiology
STR	Society of Thoracic Radiology

* There is a different approval process for medical physics practice parameters and technical standards that are collaborative with only AAPM.

** There is a different approval process for collaborative radiation oncology practice parameters and technical standards.

Collaborative Practice Parameter Process[1]

Once a practice parameter or technical standard begins the revision or development process, the Chair of the sponsoring committee will determine whether or not collaboration may enhance the document and, if so, which society should be invited to participate.

1. If the proposed society has previously collaborated on any ACR practice parameter or technical standard, the document development or revision process can proceed. Otherwise, any collaboration with a society that has never worked with the ACR on practice parameters or technical standards must be approved by the Chair of the Commission on Quality and Safety and the Chair of the Committee on Practice Parameters and Technical Standards. If approved, a letter from the ACR CEO to the Executive Director of the proposed society is sent to confirm collaboration.
2. After collaboration has been approved, the society is asked to provide representatives for the collaborative committee. For new societies, a letter is sent. The letter lists the practice parameter(s) or technical standard(s) under review. It also briefly explains the practice parameter and technical standard process, including attendance by the collaborating society's representative at the annual meeting. In addition, ACR staff may invite the collaborating society staff to meet in order to review the ACR parameter process and to understand the collaborating society's process to approve the documents.
3. A collaborative committee is formed, consisting of equal numbers of representatives from each organization participating on any one document. (Each society is asked to provide a particular number of members to have equal representation on the committee; however, the society may provide fewer members than requested.) The total number of collaborative committee members may not exceed 12 members. Multiple collaborating societies may be contacted to work on an individual practice parameter or technical standard document, however no more than three collaborating societies (not counting the ACR) may participate on any one document. If the Chair of the collaborative committee feels more than three societies is required, the request will be forwarded to the Chair of the Committee on Practice Parameters and Technical Standards for consideration.
4. After the collaborative committee has been formed, a literature search may be ordered by the principal drafter who will provide the search terms. The new or revised document is reviewed and revised until the committee finalizes the draft document.
5. Suggested modifications and other comments are collated by ACR staff and sent to the collaborative committee for consideration. The practice parameter or technical standard document is then prepared for field review (see below).
6. The practice parameters or technical standards are completed by July 1st in order to be included in the field review process.
7. All draft practice parameters or technical standards that are to be considered for adoption at the annual meeting must go through the field review process:
    - Field review is the process by which any ACR member may review and comment on any new or revised practice parameter or technical standard. ACR members are notified to participate through the ACR website and by e-mail. In addition, e-mails are sent to all practice parameters and technical standards committee members and the appropriate Commissions and Accreditation Committees.
    - Documents are sent to all collaborative societies working on the practice parameter or technical standard. They are asked to follow their process to circulate the draft for review and comment.

[1]This process is for all collaborative practice parameters except Radiation Oncology. A separate process for Radiation Oncology Collaborative practice parameters can be found in the following section.

- Because of the number of documents that need to be reviewed, ACR staff groups the documents into four separate review cycles, which are scheduled for August through October. Each cycle lasts three weeks.
- At the end of each field review cycle, comments are collated by ACR staff and forwarded to the CSC Subcommittee Chair, and a CSC Subcommittee may be formed. If there are no comments or the comments are editorial or non-controversial, the CSC Subcommittee Chair may decide that a conference call is not required. The changes to the document, if any, are made. In this instance, the document is now ready for presentation at the annual meeting.

8. The purpose of the CSC Subcommittee is to consider all of the comments received during the field review for a specific practice parameter or technical standard, and decide whether to change the document or not. A conference call is scheduled with the CSC Subcommittee for each practice parameter or technical standard with comments submitted. The collaborative committee members are invited to participate on this conference call.
9. Any modifications to a practice parameter or technical standard document suggested during the field review are made based on the recommendations of the CSC Subcommittee.
10. In January, all of the practice parameters or technical standards go to the ACR Board of Chancellors for approval.
11. In January/February, all of the practice parameters or technical standards are sent to the respective collaborative society for final approval. They are also posted on the ACR annual meeting web portal.
12. Before the ACR annual meeting, the practice parameters or technical standards are assigned to a Reference Committee. Typically, four separate Reference Committees are formed.
13. The collaborative society is invited to send a representative to the annual meeting. The representative is responsible to attend the Open Session when the practice parameters and technical standards are being considered.
14. During the open session at the annual meeting, ACR Councilors and participants attending the meeting may stand and give testimony (comment) on the practice parameters or technical standards, if recognized by the Speaker. This testimony is considered by the Reference Committee assigned to the document.
15. The Reference Committee goes into closed session and discusses the testimony. The committee drafts a report that may suggest changes to some of the documents for which the committee is responsible. The recommendations represent the committee's interpretation of what the ACR Council had suggested for each document during the Open Session.
16. The final report is reviewed with the Reference Committee Chair and the Speaker and Vice-Speaker of the Council. This provides a check on the Reference Committee's work to ensure that the testimony presented to the Council has been correctly represented. The final report from the Reference Committee is presented to the Council for a final vote the following day.
17. If revisions are proposed to a collaborative practice parameter / technical standard during the annual meeting, the collaborative society representatives will be asked to provide input on how their society may respond to suggested changes to the document (for more information on this, please see the attached – *Collaborative Societies Representatives Role*).
18. If a collaborative practice parameter or technical standard was revised during the annual meeting, the revised draft document will be sent to the collaborative society for final approval following the meeting (see the *Decisions Required by Collaborating Society if Amended Practice Parameter Is Approved by the Council*).
19. Following the annual meeting, prepublication versions of the adopted practice parameters and technical standards are placed on the website under the "Proceedings of the Annual Meeting" section of the ACR website in July.
20. Drafts are edited and prepared for publication on the ACR website. Practice parameters and technical standards adopted at the annual meeting have an effective date of October 1st.

Overview

This portion of the practice parameters and technical standards process affects the committee members and Councilors most directly. It is hoped that the changes in the review process described earlier will assist you in reviewing and commenting on the practice parameters and technical standards.

Field review is the electronic equivalent of reference committee testimony with the advantage that comments made at this point can be considered in greater detail than is possible or appropriate at the annual meeting. Your thoughtful consideration is needed to complete the preparation of the drafts that will be presented for adoption at the annual meetings. Review of the draft documents is an important part of Councilor duties, but all ACR members are encouraged to take part in the field review process.

Once the comments are received, the remarks of all commenters are collated by ACR staff on a review form appropriate to the parameter and standard, and submitted to the chair of the Council Steering Committee (CSC) subcommittee with responsibility for reconciling that practice parameter or technical standard. The Chair and the subcommittee members meet by conference call to discuss the comments and revise the draft.

Each of the finalized drafts is assigned to a Reference Committee at the annual meeting. There is additional opportunity to comment on draft practice parameters and technical standards during the Open Session. Comments are welcome from all members and must be submitted either electronically or in writing to ensure clarity and lessen the task of the Reference Committee. All amendments must be presented orally in Open Session.

The resolutions relating to practice parameters and technical standards will be presented in a consent calendar. Practice parameters and technical standards will be listed there for adoption, rejection, or referral.

Council Steering Committee Subcommittees for Practice Parameters and Technical Standards Review

Duties of the Chair

1. Select a committee composed of:

   2-3 commenters from the field review process

   1-2 committee members (from sponsoring committee)

   Chair of the Committee on Practice Parameters and Technical Standards (sponsoring committee)

   Principal drafter of the practice parameter or technical standard (if applicable)

   Others on the committee will include:

   Members of the Collaborative Committee

   Chair of the appropriate commission

   Either the Chair or Vice-Chair of the Commission on Quality and Safety

   Either the Speaker or Vice-Speaker of the Council

   Chair may invite other people who might bring special expertise or insight that would be valuable to the committee

   ACR Practice Parameters and Technical Standards staff

   ACR legal staff

   The committee composition should be as good a mix as possible. Elements that should be considered include:

- Geography
- Practice types such as Community or Academic
- Male / Female
- Regular member / Young Professional / Resident - Fellow

2. Activities to finalize practice parameters and technical standards will be limited to conference calls except in very unusual situations.

3. If possible, review the comments and work with staff to incorporate them into a draft to be used during the conference call. This will help expedite the call.

Moderating a Conference Call

As Chair or Co-Chair of a practice parameter or technical standards conference call committee, your primary responsibility is to provide structure and guidance to the discussion, and assist the committee members to reach consensus on the issues, recommendations and comments provided during field review. The following is provided to assist you in this role.

Getting Started

If the conference reconciliation committee has more than one (e.g., a chair with a vice-chair or co-chairs), it is important that both leaders agree who will direct or moderate the call prior to the call's initiation. To avoid any confusion, please let staff know who will take the lead role or apprise them of any issues that arise.

Call Scheduling

- Staff will assist in scheduling the call.
- The Chair and/or Co-Chair will usually suggest days and times that he or she could be available and staff will poll the other members for availability.
- There are obvious conflicting priorities that have to be considered, including interruption during the workday, time zone differences, and imposition on family obligations and staff for after work-hours meetings.
- There is no "one time fits all," as each committee is different in make-up and availability. Staff will assist finding a time that maximizes the number of participants available for the call while minimizing the inconvenience to all involved.
- The calls are scheduled for 60 minutes typically, depending on the number and complexity of the comments.
- Occasionally there are numerous comments or highly controversial issues. In such instances, calls may last up to 2 hours. However, calls should rarely be allowed to extend beyond 90 minutes. The committee's work tends to become inefficient and unfocused on a long call. If the call is reaching this length and there are unresolved issues, the Chair should make a determination as to the best course of action. This could include:
    - Continuing on the current call to conclusion
    - Recessing the current call and scheduling another call at a later time
    - Appointing one or more subcommittees to work on a particular issue and bring back a recommendation on a subsequent call
    - Assigning one or more members to draft new language to resolve the issue that can then be circulated among the committee members for approval via e-mail

Managing the Call

- Be familiar with the document and the issues to be discussed.
- Try to start as close to the appointed time as possible. It is reasonable to wait one or two minutes for members to join the call.

- To give structure to the discussion, most conference call Chairs find it easiest to use the field review comments as a guide. If, for example, the first comment concerns line 100 in a document, the Chair will say, "Our first comment is on line 100. Before we discuss that comment, is there anything prior to line 100 that someone would like to discuss? If not, then let's review the first comment." After the comment is handled, the Chair will move on to the next comment again asking if there are any issues with intervening language.
- Keep the conversation focused on the issues.
- Be respectful to all participants. Try to make sure that all participants are included in the discussion and have an opportunity to state their views.
- When there are very complex issues or controversial issues that will likely require long discussion, it may be wise to address them first while people are fresh.
- For most conference calls, the issues will be straightforward and it is best to simply go through the document from its beginning to end.
- The call will be scheduled using the GoToMeeting® software and will also be taped so that staff can go back and review discussions. This ensures changes are made correctly. Staff will also keep notes. It is not necessary for the Chair to do so, which will allow you to focus on keeping the discussion on task. Once the revisions are incorporated into a new draft and approved, the tape and notes are destroyed.
- The Chair should ask for assistance from the staff. Staff will be familiar with the history of the development of the document, and will frequently be aware of prior discussions concerning specific language or issues. Staff will also know about how similar issues were handled by other committees for other parameters and if the issue may have come up in previous years.
- For any of these conference calls, the Chair of the Commission on Quality and Safety and the Chair of the Committee on Practice Parameters and Technical Standards will be on the call. They have extensive experience with these calls. Do not hesitate to ask for their assistance.
- Committee members will frequently identify language that they believe should be changed. If they don't offer alternative language, the Chair can ask them and the other participants to suggest specific preferable language. This helps keep the discussion focused.
- The Chair or Co-Chair should be aware of and remind the committee when the document is drafted in collaboration with another professional society. These documents often undergo significant negotiation and compromise. It may be appropriate to exercise some committee restraint in over-enthusiastic editing or word changes that may have been previously negotiated during the drafting. The moderator should remind committee members that the practice parameter or technical standard document should represent the best interests of the patients they serve, as well as the goals of the ACR. Changes to a collaborative document may have to be re-submitted to the collaborating society for approval.
- At the end of the call, the staff will detail what additional actions will occur with the parameter.

Follow-Up after the Call

Sometimes, a person or an informal working group will be asked to draft a sentence, paragraph, or section as the result of the discussion, rather than spending time on the call trying to find the exact wording. The Chair should make assignments that are to be completed within a specified time period. All notes and additional drafts will be collated by ACR staff, which will prepare and format the next draft. The revised draft is circulated to the committee to verify that all the comments have been captured and accurately represent the decisions of the committee. If changes are required, the Chair will work with the committee and staff to incorporate the revisions either by e-mail or in rare cases, another call may be required.

Amending Practice Parameters and Technical Standards Collaboratively with Other Societies

Purpose

In order to address the concerns of the ACR Council regarding collaborative practice parameters, the Commission on Quality and Safety has developed a process to allow changes or clarifications to be made to a collaborative practice parameter during and immediately after the annual meeting. The goal is to provide an orderly mechanism for considering proposed changes jointly with the collaborative society, and to produce a final practice parameter which either has final collaborative approval, or if the collaborating society chooses to withdraw its support, a document which has converted to an ACR-only practice parameter.

Process for Amending Collaborative Practice Parameters

All diagnostic and interventional radiology practice parameters, whether ACR only or collaborative, will be treated in the same manner; allowing for testimony and amended language during the open sessions at the annual meeting to be considered by the Reference Committee. If the Council does not agree to the amendments to a collaborative practice parameter proposed by the Reference Committee, the practice parameter would revert to its original language for a final vote to adopt, not-adopt, or refer.

The ACR has established an interactive process to allow collaborating professional societies' representation at the annual meeting, in order to provide input from the societies' perspective on amendments to the collaborative practice parameters proposed by ACR members during the annual meeting. Additionally, an ACR / collaborative society conference committee may be formed to work out compromise language should no agreement be reached after the annual meeting. The goal of the conference committee is to finalize the proposed language changes on the collaborative practice parameter or technical standard within 30 days following the close of the annual meeting.

Key Features of the Process for Amending Collaborative Practice Parameters

1. Collaborative society representatives are invited to attend the Open Sessions to hear the testimony as presented by those recognized by the Council Speaker so they may better understand the need for changes to the document.
2. In the closed session during its deliberations, the Reference Committee may seek the opinion of the collaborative society representatives on the proposed changes or issues regarding the collaborative practice parameter.
3. Once the Reference Committee has completed its deliberations regarding any changes to a collaborative document, the collaborative society representative will be asked to state the organization's agreement or disagreement with the proposed changes (consulting with the society's leadership if necessary). The collaborative society's position on the collaborative document is noted in the final report of the Reference Committee.
4. Collaborative practice parameters, which are not extracted from the consent calendar, are presented to the Council to decide to adopt, adopt as amended, not-adopt, or refer the collaborative practice parameter.
5. If a collaborative document is extracted for discussion, only those items discussed during the Open Session are under consideration. No other new action can be discussed (ie, wordsmithing). The collaborative society's representative may ask to be recognized to state their society's position represented during the Council meeting. The collaborative society's representative may be recognized by the Speaker to make comments on the amended language before the Council. No other portion of the practice parameter except the extracted proposed changes will be discussed.
6. If the Council does not agree with the extracted changes that were made to the collaborative document, the original language is reinstated. Once all the changes are decided, the entire document is adopted, adopted as amended, not adopted, or referred by the Council.

Decisions Required by Collaborating Society if Amended Practice Parameter is approved by the Council

If the Council adopts any changes in the collaborative practice parameter the revised document will be forwarded to the collaborative society for final approval. The collaborating society will formally notify the ACR in writing of its final position on the changes, identifying one of the following decision options:

AT THE CONCLUSION OF THE ACR ANNUAL MEETING:			
Collaborative Society Decision	**Written Confirmation Due**	**ACR Action**	**Practice Parameter Status**
Agrees with the changes to the practice parameter as adopted at the ACR annual meeting	Within 30 days following the ACR annual meeting	Inform BOC and CSC	Adopted as a collaborative practice parameter
Does not agree with the changes to the practice parameter as adopted at the ACR annual meeting	Within 30 days following the ACR annual meeting	Form a Conference Committee with collaborative society to draft compromise language	Not determined until conference committee process is concluded

AT THE CONCLUSION OF THE CONFERENCE COMMITTEE PROCESS:			
Collaborative Society Decision	**Written Confirmation Due**	**ACR Action**	**Practice Parameter Status**
Adopts compromise language drafted by conference committee	Within one week after the final conference committee call	Send to BOC for referral to CSC with recommendation for adoption	If CSC approves - adopted as a collaborative practice parameter
Does not adopt compromise language drafted by conference committee OR **Withdraws** support of practice parameter	Within one week after the final conference committee call	Refer to the BOC for either of the following actions:	
		Refer practice parameter to the ACR sponsoring committee to be considered for next year, or	Not adopted, old practice parameter is sunset if older than 5 years since last revision. If less than 5 years since adoption, original practice parameter remains in effect and on web as displayed.
		Refer to CSC with recommendation to adopt the practice parameter (new language or original as approved at ACR annual meeting) as an ACR-only practice parameter.	Adopt as an ACR-only practice parameter as the document was finalized during ACR annual meeting.

Developing Collaborative Radiation Oncology Practice Parameters And Technical Standards

A 2010 resolution was adopted by the ACR Council to provide a different approval process for collaborative radiation oncology practice parameters and technical standards.

ACR Radiation Oncology Practice Parameters and Technical Standards

After completion of field review and the CSC chaired conference call, the proposed collaborative radiation oncology practice parameter or technical standard work product will then be reviewed by the ACR Commission on Radiation Oncology and ACR Commission on Medical Physics.

After review and approval by the ACR Commission on Radiation Oncology and the ACR Commission on Medical Physics, it will next be reviewed by the ACR Council Steering Committee. After review and approval by the ACR Council Steering Committee it will be sent to the ACR Board of Chancellors for final review and approval by the College; ***adopted 2010 (Res. 8)****.*

Process for Radiation Oncology Collaborative Practice Parameters and Technical Standards

The primary difference between the process for radiation oncology collaborative practice parameters and that for developing diagnostic or interventional radiology is in the review and approval processes.

1. ACR staff will contact the Chair of the Committee on Practice Parameters – Radiation Oncology regarding those parameters that are due for the 5-year review, with sufficient time to include the documents in the existing 18-month review process in order to ensure completion by the time of the annual meeting, as required by ACR by-laws. ACR staff also informs the Chair of any new practice parameters that have been proposed. The Chair determines what documents will be developed or revised and which ones will be collaborative. The Chair requests ACR staff to begin the radiation oncology collaborative process (the non-collaborative radiation oncology practice parameters follow the normal process).
2. The process continues in the same manner as steps one through six in the *Process for Developing Practice Parameters and Technical Standards Collaboratively with Other Societies*.
3. If the proposed society has previously collaborated on any ACR practice parameter or technical standard, the document development or revision process can proceed. Otherwise, any collaboration with a society that has never worked with the ACR on practice parameters or technical standards must be approved by the Chair of the Commission on Quality and Safety and the Chair of the Committee on Practice Parameters and Technical Standards. If approved, a letter from the ACR CEO to the Executive Director of the proposed society is sent to confirm collaboration.
4. After collaboration has been approved, the society is asked to provide representatives for the collaborative committee. For new societies, a letter is sent. The letter lists the practice parameter(s) or technical standard(s) under review and briefly explains the parameter process. The ACR staff may invite the collaborating society staff to meet in order to review the ACR parameter process and to understand the collaborating society's process to approve the documents.
5. A collaborative committee is formed, consisting of equal numbers of representatives from each organizations participating on any one document. (Each society is asked to provide a particular number of members to have equal representation on the committee; however, the society may provide fewer members than requested.) However, the total number of collaborative committee members may not exceed 12 members. Multiple collaborating societies may be contacted to work on an individual practice parameter or technical standard document, however no more than three collaborating societies (not counting the ACR) may participate on any one document. If the Chair of the collaborative committee feels more than three societies is required, the request will be forwarded to the Chair of the Committee on Practice Parameters and Technical Standards for consideration.
6. After the collaborative committee has been formed, a literature search may be ordered by the principal drafter assigned by the sponsoring committee chair, who will provide the search terms. The new or revised document is reviewed and revised until the committee finalizes the draft document.
7. Suggested modifications and other comments are collated and sent to the collaborative committee for consideration. There may be several drafts and conference calls to finalize the document. The practice parameter is then prepared for field review.
8. During field review, the radiation oncology collaborative practice parameters are made available on ACR website for 3 weeks for comments and suggested revisions during field review.

a. Send notification by e-mail to all ACR members (other appropriate outreach methods may be implemented) to announce which radiation oncology collaborative practice parameters will be available and when these documents will be on the ACR website for field review. Because of the costs associated with sending out e-mail blasts to all members, all radiation oncology collaborative practice parameters that are being considered should be in the same field review if possible. If any radiation oncology collaborative practice parameter is ready during the regular field review for the existing parameters process, that radiation oncology draft will be included in that field review.

b. Send notification by e-mail (or other appropriate method) to the following commissions / committees / societies that the radiation oncology collaborative practice parameters are available for review, how to access the documents, and how to submit comments or suggested revisions:

   i. Committee on Practice Parameters – Radiation Oncology

   ii. Committee on Practice Parameters and Technical Standards – Medical Physics

   iii. ACR Commission on Radiation Oncology

   iv. ACR Commission on Medical Physics

   v. ACR Radiation Oncology Accreditation Committee

   vi. Collaborative societies as appropriate (collaborative society staff is responsible for communicating with their leadership and circulating the draft documents for review and comment)

9. ACR staff collates all comments and suggested revisions to be considered for inclusion in the draft documents. ACR staff will schedule a conference call, which will be led by a Council Steering Committee member. Invitations to participate on the call are sent to:

   a. The Committee on Practice Parameters – Radiation Oncology.

   b. Collaborative Society leadership (as the society determines to be appropriate).

   c. Chairs of the: ACR Commission on Radiation Oncology, ACR Commission on Medical Physics, Committee on Practice Parameters – Radiation Oncology, Committee on Practice Parameters and Technical Standards – Medical Physics and the ACR Radiation Oncology Accreditation Committee.

   d. Commenters who participated in the field review for the radiation oncology collaborative practice parameter, as determined by the CSC member who is chairing the conference call.

   e. Speaker and Vice-Speaker of the ACR Council.

10. After the CSC conference call and all revisions to the radiation oncology collaborative practice parameter document(s) are finalized, the draft is sent to all conference call participants for review. The chair of the CSC committee addresses any subsequent issues that may not have been resolved.

11. ACR Publication staff edits the final draft documents. An external contractor may be used depending on staff availability.

12. The final draft radiation oncology collaborative practice parameter documents will be sent to the collaborative society (or societies) for final approval. The collaborating society will have 60 days to approve the final radiation oncology collaborative practice parameter document, in writing. If the collaborative society has actively participated and kept their leadership informed during the process, we anticipate society approval will be pro forma. If the collaborating society does not approve or does not inform ACR in writing of their decision within 60 days, the process skips to step 17 below.

13. After written approval from the collaborative society is received, the parameter will be sent to the ACR Commission on Radiation Oncology and the ACR Commission on Medical Physics for review and approval.

14. If the ACR Commission on Radiation Oncology and the ACR Commission on Medical Physics approve the parameter, it will be sent to the CSC for approval. A simple majority will determine the final recommendation. The CSC can only vote the document up or down. CSC cannot make revisions to the radiation oncology collaborative practice parameter. The CSC can recommend that the document be a) adopted, b) not adopted, or c) referred back to the Collaborative Committee for additional work.
15. If the radiation oncology collaborative practice parameter is adopted by the CSC, it will be sent to the BOC for review and final approval. A simple majority will determine the final recommendation. The BOC can only vote the document up or down; it cannot revise the radiation oncology collaborative practice parameter. The BOC can recommend that the document be a) adopted, b) not adopted, or c) referred back to the Collaborative Committee for additional work.
16. If the BOC adopts the radiation oncology collaborative practice parameter, ACR staff will prepare it for publication on the ACR website.

    - For purposes of publication, the radiation oncology collaborative practice parameter becomes effective on the first day of the first month following 60 days after final adoption by the ACR BOC.

17. If a collaborating society does not approve the radiation oncology collaborative practice parameter or does not inform the ACR of their decision in writing within 60 days, ACR staff will inform the BOC, CSC and radiation oncology collaborative committee. The BOC determines the next steps:

    - Extend the deadline for the society to make a final determination.
    - Form a Conference Committee with collaborative society to discuss their issues with the document.
    - Remove the collaborating society from the document and publish it as an ACR-only document.

Expedited Approval of ACR-AAPM Collaborative Medical Physics Practice Parameters and Technical Standards

PURPOSE

This process implements resolution 54, adopted at the ACR 2015 annual meeting, regarding the approval of ACR-AAPM Collaborative Medical Physics Practice Parameters and Technical Standards.

Process for Expedited Approval of Collaborative Medical Physics Practice Parameters or Technical Standards with AAPM

This process applies to the medical physics practice parameters or technical standards (ie, the collaborative medical physics document) that are collaborative with AAPM only. The medical physics documents that are collaborative with AAPM and one or more other medical specialty societies are not eligible for this expedited approval process.

All collaborative medical physics documents will follow the established process for drafting new documents or revising existing documents.

After the final draft collaborative medical physics document has had all the comments from field review reconciled on the CSC-led conference call, it will be sent to AAPM for final agreement. After the decision regarding the collaborative medical physics document is received from AAPM in writing, it will be sent to the ACR Commission on Medical Physics and the Commission on Quality and Safety for review and final recommendation to the CSC and the BOC.

Approving collaborative medical physics documents to which AAPM has agreed

I. AAPM approves the collaborative medical physics document.

II. If the ACR Commission on Medical Physics and the Commission on Quality and Safety approve the collaborative medical physics document, it will be sent to the CSC with a recommendation to adopt the document.

III. The CSC can only vote the document up or down. It cannot make revisions to the document. The CSC can recommend that the document be: a) adopted, b) not adopted, or c) referred back to the Commission on Medical Physics for additional revisions. A simple majority of the CSC will determine its final decision. The adopted collaborative medical physics document is sent to the BOC for review and final adoption.

IV. The BOC can only vote the document up or down. It cannot make revisions to the practice parameter(s)/technical standard(s). The BOC can recommend that the document be: a) adopted, b) not adopted, or c) referred back to the Commission on Medical Physics for additional revisions. A simple majority will determine the BOC's final decision.

V. The adopted final collaborative medical physics document will be prepared for publication on the ACR website. The collaborative medical physics document becomes effective on the first day of the first month following 60 days after final adoption by the ACR BOC. The five-year revision schedule for the adopted collaborative medical physics document will be synchronized with the other practice parameters and technical standards adopted during the same year.

Approving formerly collaborative, ACR-only medical physics documents to which AAPM has not agreed

If AAPM does not approve the collaborative medical physics document or does not inform the ACR of its decision in writing within 60 days of the date ACR sent the document to AAPM, ACR staff will inform the Commission on Medical Physics and the Commission on Quality and Safety, which will determine the next steps:

a) Form a Conference Committee with AAPM to discuss the issues with the document, or

b) Within 30 days, determine a mutually agreed upon deadline extension to make a final determination by AAPM, or

c) Remove AAPM from the document.

Note: If the ACR Commission on Medical Physics approves a version of the document to which AAPM cannot agree, it will be sent to the CSC to consider sponsoring the document for ACR Council approval. If sponsored, the document will follow the normal Council approval process.

SUNSETTING PROCESS FOR PRACTICE PARAMETERS AND TECHNICAL STANDARDS

The ACR Commission on Quality and Safety adopted the following procedure to sunset existing practice parameters and technical standards when review of the literature indicates that a procedure or therapy is no longer considered effective or efficacious, or has been replaced by other procedure, technology, practice, or treatment:

- The revising committee will write a proposal with justification of why the procedure or therapy should be sunset, for review by the parameters committee and the relevant commission.
- If the relevant committee and commission concur in the recommendation to sunset the practice parameter or technical standard, the proposal and justification will be submitted for review to the Speaker, Vice-Speaker, Chair

of the Committee on Practice Parameters and Technical Standards, and the Chair of the Commission on Quality and Safety.

- If there is overall agreement to recommend sunsetting the practice parameter or technical standard, the sponsoring parameter committee will draft a resolution for presentation to the Council that is sponsored by the Council Steering Committee.

DOCUMENT STYLE AND FORMATTING NOTES

New Practice Parameters or Technical Standards

Standardized language and ACR Resolution sections should be incorporated unchanged.

Drafts should be submitted by e-mail attachment saved as Word.

All references must be embedded into the text. AMA style is used in formatting both references and the writing style in general..

Revised Practice Parameters or Technical Standards

Original language to be considered for deletion must remain in the text and be ~~struck-through~~.

Proposed new language should be **bolded**.

References should be updated; if older references are to remain, justification should accompany the draft.

All references must be embedded into the text.

Drafting Hazards

The present tense should be used in parameters. "Must" is the auxiliary verb to indicate required action in the parameter. For recommended actions, the adverb "should" is to be used.

- "Must" requires the practitioner to perform an act
- "Should" allows the practitioner to decide to implement the recommended action or not.

The word **"shall"** is not used in the practice parameters and technical standards.

Basic Rules to Follow

1. Neither the gray box nor the preamble can be modified or revised.
2. For ACR only practice parameters and technical standards, titles begin with "ACR" – not spelled out (ie, American College of Radiology).
3. For collaborative practice parameters, the titles include the collaborative societies' acronyms following "ACR" with an em-dash separating the acronyms, eg, ACR–AIUM–SPR.
4. Tables: There is no rule for table placement. The tables may be placed in an appendix or incorporated within the main text of document.

NORMALIZING THE LANGUAGE IN PRACTICE PARAMETERS AND TECHNICAL STANDARDS

ACR uses normalized language in the practice parameter or technical standard documents. By consistently presenting concepts using the same language across documents, the ACR hopes to improve the reliability and clarity of the guidance provided to its members and other health care professionals.

There are two types of normalized language are use in the practice parameter and technical standard documents: 1) boilerplate language, which cannot be modified as it is typically an ACR Council-adopted policy and 2) standard language which may vary slightly but is consistent among similar documents.

Adopted policies or resolutions must be included in their entirety. These cannot be edited unless there is specific language that clearly indicates what can be modified. In draft documents during the revision process, resolutions are formatted in a red border so committee members understand that the text cannot be changed; only removed in its entirety. It is up to the committee to delete this language entirely or to add language to it either before or after the boilerplate. There should be no change to the actual language except in those instances where the language requires specification (eg, *when wording may vary slightly depending on the modality or procedure)*. Substitution language cannot contradict or modify an ACR policy.

When adopted policies or resolutions appear in a practice parameter or technical standard, they should have a reference in parenthesis where the resolution wording ends. The reference indicates the resolution number, the last ACR Council action (i.e., to adopt, revise, or amend), and the year of the revision or amendment; eg, *(ACR Resolution 17, adopted in 1995 – revised in 2005, Resolution 1a)*, or if a new policy, *(ACR Resolution 35, adopted in 2006)*. Council-adopted policies and resolutions are reviewed at least every ten years and cannot be edited, except by Council action.

Standard language within a practice parameter or technical standard conveys key concepts consistently but may be modified when appropriate.

For example, Resolution 29 adopted in 2011 relates to the "second" pathway of physicians' initial qualifications under the section "Qualifications and Responsibilities of Personnel." The resolution states that 'The American College of Radiology will revise the alternative pathway language in all appropriate Practice Guidelines and Technical Standards to read: *Completion of an approved diagnostic radiology residency program by the Accreditation Council for Graduate Medical Education (ACGME), the Royal College of Physicians and Surgeons of Canada (RCPSC), the Collège des Médecins du Québec, or the American Osteopathic Association (AOA)….* (ACR Resolution 29, adopted 2011).'

The intent of the resolution was to include the Collège des Médecins du Québec as a valid radiology residency program. While it specifically calls out diagnostic radiology, if the intent was to include radiation oncology, it would be appropriate to modify the language in the resolution and cite it as the approved policy. Staff would make a note of this modification and track it. Similarly, there is no abbreviation for Collège des Médecins du Québec. If the *Collège des Médecins du Québec* were to be referenced again in the document, staff could editorially change the resolution to include the abbreviation (ie, *the Collège des Médecins du Québec (CMQ)*) and cite the resolution with impunity. The resolution could then be cited as *Completion of an approved diagnostic radiology residency program by the Accreditation Council for Graduate Medical Education (ACGME), the Royal College of Physicians and Surgeons of Canada (RCPSC), the Collège des Médecins du Québec (CMQ), or the American Osteopathic Association (AOA)….*(ACR Resolution 29, adopted 2011).

ACR staff track standard language and variations to maintain the consistency of the concepts across all practice parameters and technical standards. If the language is changed from the standard language within one parameter, staff will identify all other practice parameters and technical standards that contain similar language. The Chair of the Committee on Practice Parameters and Technical Standards is informed of the changes to ensure that it is appropriate for all the affected parameters. The sponsoring committee chair will be informed of the changes.

Another method to standardize language in a practice parameter or technical standard is to refer directly to another practice parameter or technical standard or to specific language within a particular practice parameter or technical standard.

For example from the *ACR Practice Parameter for the Performance of Therapy with Unsealed Radiopharmaceutical Sources*:

"The qualifications and responsibilities of physicians and other personnel performing these therapeutic procedures should be in accordance with the ACR–SNM Technical Standard for Diagnostic Procedures Using Radiopharmaceuticals and the ACR–ASTRO Practice Parameter for Radiation Oncology. In addition, training and experience must be in compliance with the applicable laws and regulations."

Specific standard language frequently used in the practice parameters and technical standards and how it is used can be found in appendices 3, 4, 5, and 6. The appendices do not contain all standard language examples found in the documents. Committee chairs, principal drafters, and principal reviewers may rely on ACR staff to provide practice parameter and technical standard templates that includes appropriate boilerplate and standard language. For boilerplate language, It is up to the committee to delete this language entirely or to add language to it either before or after the boilerplate language. There should be no change to the actual boilerplate language except in those instances where the intent is to provide specific language (eg, when wording may vary slightly depending on the modality or procedure).

APPENDIX 1

PURPOSE AND INTENDED USE OF THE PRACTICE PARAMETERS AND TECHNICAL STANDARDS

ACR practice parameters and technical standards define principles and technical parameters of radiologic and radiation oncology practice, which should generally produce, desired health care outcomes. They describe a range of acceptable approaches for the diagnosis and/or treatment of disease for most patients in most circumstances. Given differences in training, experience, and local conditions, the ACR practice parameters and technical standards acknowledge the need for health care providers to exercise their independent medical judgment in making decisions regarding the use and specific details of any procedure.

ACR practice parameters and technical standards are educational tools designed to provide consensus-based scientifically valid and medically credible information to assist health care providers in delivering effective, efficient, consistent and safe medical care. They may be developed jointly with other professional organizations. Used in conjunction with the ACR Appropriateness Criteria®, it is expected that the ACR practice parameters and technical standards will increase the likelihood that appropriate procedures will be performed in a safe and acceptable manner and will help reduce unnecessary ones.

ACR practice parameters and technical standards are intended to be living documents that are regularly reviewed and revised to reflect changes in radiologic and radiation oncology practice.

DEFINITION OF PRACTICE PARAMETERS

PRACTICE PARAMETERS describe recommended conduct in specific areas of clinical practice. They are based on analysis of current literature, expert opinion, open forum commentary, and informal consensus. Parameters are not intended to be legal standards of care or conduct and may be modified as determined by individual circumstances and available resources.

DEFINITION OF TECHNICAL STANDARDS

TECHNICAL STANDARDS describe technical parameters that are quantitative or measurable. They often include specific recommendations for patient management or equipment specifications or settings. Technical Standards are based on analysis of current literature, expert opinion, open forum commentary, and informal consensus. Technical Standards are intended to set a minimum level of acceptable technical parameters and equipment performance and may be modified as determined by individual circumstances and available resources.

APPENDIX 2

NEW PRACTICE PARAMETER AND TECHNICAL STANDARDS PROPOSAL FORM

Proposed **Title**:

Please enter the title here

Name of the **Organization** submitting proposal:

Organization Name if applicable

Name of **Contact Person** OR if an Individual or Individuals are proposing, the Name of the Lead Person:

Mr.

First Name

Last Name

Proposal for (Please see reverse side for definitions of Practice Parameters and Technical Standards):

☐ **Practice Parameter** ☐ **Collaborating with another Society or Association**

☐ **Technical Standard** **Name of Collaborating Society** _____

Justification for proposed new/early revision of practice parameter or technical standard:

Justification for proposed document

Potential for **overlap**

or **conflict** with existing document(s)

Overlap/Conflict with Existing Documents

Could the proposed

document be **combined** with an existing practice parameter or technical standard during review process?

☐ No

☐ Yes If YES, Please write the title of the existing practice parameter or technical standard.

Title of Existing Parameter / Standard to be Combined

If approved, anticipated date of submission of the completed draft to the Commission: **DATE**: _____

[N.B.: To allow sufficient time for all reviews to be completed, Drafts or Revisions of new, revised or collaborative Practice Parameters and Technical Standards should be FINALIZED by July of the year before being submitted at the Spring ACR Annual Meeting and Council Leadership Conference.]

Evaluation by the Commission on Quality and Safety

☐ Recommend incorporating into an existing Practice Parameter or Technical Standard

To be reviewed by: ACR staff ACR staff

☐ Approved for development as a ☐ new standard ☐ early revision of an existing standard

Comments

Sponsoring Committee responsible for developing draft:

Chair, Committee on Parameters & Standards

Date: _____

Chair, Commission on Quality & Safety

Date: _____

APPENDIX 3

DOCUMENT TEMPLATES

Disclaimer and Preamble for Diagnostic and Interventional Documents

The American College of Radiology, with more than 30,000 members, is the principal organization of radiologists, radiation oncologists, and clinical medical physicists in the United States. The College is a nonprofit professional society whose primary purposes are to advance the science of radiology, improve radiologic services to the patient, study the socioeconomic aspects of the practice of radiology, and encourage continuing education for radiologists, radiation oncologists, medical physicists, and persons practicing in allied professional fields.

The American College of Radiology will periodically define new practice parameters and technical standards for radiologic practice to help advance the science of radiology and to improve the quality of service to patients throughout the United States. Existing practice parameters and technical standards will be reviewed for revision or renewal, as appropriate, on their fifth anniversary or sooner, if indicated.

Each practice parameter and technical standard, representing a policy statement by the College, has undergone a thorough consensus process in which it has been subjected to extensive review and approval. The practice parameters and technical standards recognize that the safe and effective use of diagnostic and therapeutic radiology requires specific training, skills, and techniques, as described in each document. Reproduction or modification of the published practice parameter and technical standard by those entities not providing these services is not authorized.

Revised [YEAR] (Res. [RESOLUTION NUMBER])

PREAMBLE

This document is an educational tool designed to assist practitioners in providing appropriate radiologic care for patients. Practice parameters and technical standards are not inflexible rules or requirements of practice and are not intended, nor should they be used, to establish a legal standard of care[2]. For these reasons and those set forth below, the American College of Radiology and our collaborating medical specialty societies caution against the use of these documents in litigation in which the clinical decisions of a practitioner are called into question.

The ultimate judgment regarding the propriety of any specific procedure or course of action must be made by the practitioner in light of all the circumstances presented. Thus, an approach that differs from the guidance in this document, standing alone, does not necessarily imply that the approach was below the standard of care. To the contrary, a conscientious practitioner may responsibly adopt a course of action different from that set forth in this document when, in the reasonable judgment of the practitioner, such course of action is indicated by the condition of the patient, limitations of available resources, or advances in knowledge or technology subsequent to publication of this document. However, a practitioner who employs an approach substantially different from the guidance in this document is advised to document in the patient record information sufficient to explain the approach taken.

The practice of medicine involves not only the science, but also the art of dealing with the prevention, diagnosis, alleviation, and treatment of disease. The variety and complexity of human conditions make it impossible to always reach the most appropriate diagnosis or to predict with certainty a particular response to treatment. Therefore, it should be recognized that adherence to the guidance in this document will not assure an accurate diagnosis or a successful outcome. All that should be expected is that the practitioner will follow a reasonable course of action

[2] Iowa Medical Society and Iowa Society of Anesthesiologists v. Iowa Board of Nursing, ___ N.W.2d ___ (Iowa 2013) Iowa Supreme Court refuses to find that the *ACR Technical Standard for Management of the Use of Radiation in Fluoroscopic Procedures* (Revised 2008) sets a national standard for who may perform fluoroscopic procedures in light of the standard's stated purpose that ACR standards are educational tools and not intended to establish a legal standard of care. See also, Stanley v. McCarver, 63 P.3d 1076 (Ariz. App. 2003) where in a concurring opinion the Court stated that "published standards or guidelines of specialty medical organizations are useful in determining the duty owed or the standard of care applicable in a given situation" even though ACR standards themselves do not establish the standard of care.

based on current knowledge, available resources, and the needs of the patient to deliver effective and safe medical care. The sole purpose of this document is to assist practitioners in achieving this objective.

Disclaimer and Preamble for Radiation Oncology Documents

The American College of Radiology, with more than 30,000 members, is the principal organization of radiologists, radiation oncologists, and clinical medical physicists in the United States. The College is a nonprofit professional society whose primary purposes are to advance the science of radiology, improve radiologic services to the patient, study the socioeconomic aspects of the practice of radiology, and encourage continuing education for radiologists, radiation oncologists, medical physicists, and persons practicing in allied professional fields.

The American College of Radiology will periodically define new practice parameters and technical standards for radiologic practice to help advance the science of radiology and to improve the quality of service to patients throughout the United States. Existing practice parameters and technical standards will be reviewed for revision or renewal, as appropriate, on their fifth anniversary or sooner, if indicated.

Each practice parameter and technical standard, representing a policy statement by the College, has undergone a thorough consensus process in which it has been subjected to extensive review and approval. The practice parameters and technical standards recognize that the safe and effective use of diagnostic and therapeutic radiology requires specific training, skills, and techniques, as described in each document. Reproduction or modification of the published practice parameter and technical standard by those entities not providing these services is not authorized.

Revised [YEAR] (Res. [RESOLUTION NUMBER])

PREAMBLE

This document is an educational tool designed to assist practitioners in providing appropriate radiation oncology care for patients. Practice parameters and technical standards are not inflexible rules or requirements of practice and are not intended, nor should they be used, to establish a legal standard of care[3]. For these reasons and those set forth below, the American College of Radiology and our collaborating medical specialty societies caution against the use of these documents in litigation in which the clinical decisions of a practitioner are called into question.

The ultimate judgment regarding the propriety of any specific procedure or course of action must be made by the practitioner in light of all the circumstances presented. Thus, an approach that differs from the guidance in this document, standing alone, does not necessarily imply that the approach was below the standard of care. To the contrary, a conscientious practitioner may responsibly adopt a course of action different from that set forth in this document when, in the reasonable judgment of the practitioner, such course of action is indicated by the condition of the patient, limitations of available resources, or advances in knowledge or technology subsequent to publication of this document. However, a practitioner who employs an approach substantially different from the guidance in this document is advised to document in the patient record information sufficient to explain the approach taken.

The practice of medicine involves not only the science, but also the art of dealing with the prevention, diagnosis, alleviation, and treatment of disease. The variety and complexity of human conditions make it impossible always to reach the most appropriate diagnosis or to predict with certainty a particular response to treatment. Therefore, it should be recognized that adherence to the guidance in this document will not assure an accurate diagnosis or a successful outcome. All that should be expected is that the practitioner will follow a reasonable course of action based on current knowledge, available resources, and the needs of the patient to deliver effective and safe medical care. The sole purpose of this document is to assist practitioners in achieving this objective.

[3] Iowa Medical Society and Iowa Society of Anesthesiologists v. Iowa Board of Nursing, ___ N.W.2d ___ (Iowa 2013) Iowa Supreme Court refuses to find that the *ACR Technical Standard for Management of the Use of Radiation in Fluoroscopic Procedures* (Revised 2008) sets a national standard for who may perform fluoroscopic procedures in light of the standard's stated purpose that ACR standards are educational tools and not intended to establish a legal standard of care. See also, Stanley v. McCarver, 63 P.3d 1076 (Ariz. App. 2003) where in a concurring opinion the Court stated that "published standards or guidelines of specialty medical organizations are useful in determining the duty owed or the standard of care applicable in a given situation" even though ACR standards themselves do not establish the standard of care.

The ACR practice parameters and technical standards use a standard template for documents.

The titles of these documents typically begin with "ACR" and the acronyms for societies that collaborated on the document, followed by "Practice Parameter" or "Technical Standard", depending on the type of document. A word or phrase, such as, "performing and interpreting", "management of" further refines the scope. This phrase is followed by the examination or procedure name and may be limited to a specific patient population. Because of the scope of these documents, the title formats may vary widely.

Each ACR Practice Parameter or Technical Standard document begins with boilerplate language for the **disclaimer** and **preamble**. The language differs slightly between Radiation Oncology Practice Parameters and Technical Standards and the rest of the practice parameters and technical standards.

The standard language that is used in ACR practice parameters and technical standards should be used to the extent possible to minimize confusion and reduce errors. The most efficient way to present the available options is to use a practice parameter template. Language that appears in this appendix in **orange** is boilerplate language or an approved Council resolution and cannot be modified unless indicated.

The ACR practice parameters and technical standards follow the document template which may vary but which contains sections that are included depending on the document.

I. INTRODUCTION

The introduction provides the scope of the document. It may describe how the procedure aids the provider to improve the quality of patient care. Sometimes, a description of the epidemiology of the indications for which the procedure is intended may be included. If collaborative, it explicitly states the name of the collaborating societies.

The document will cover both adult and pediatric populations. The reader is directed to the pediatric considerations by this standard language:

*(For pediatric considerations see section **[specify pediatric section within document]**.)*

If the document were intended for a more limited population, it would be reflected in both the document's title and in the introduction section.

II. INDICATIONS

The broad description of the indications that would apply to the procedure is presented in a numbered list. There may be separate numbered lists of contraindications, which may or may not be broken out into relative contraindications and/or absolute contraindications. The indication list is not necessarily comprehensive but should cover the most common or typical indications.

III. QUALIFICATIONS AND RESPONSIBILITIES OF PERSONNEL

To the extent possible, the basic qualifications and responsibilities of personnel for a practice parameter or technical standard should be referred to the appropriate section in the primary document for the modality. Typically, this section includes initial qualifications, maintenance of competency, and continuing medical education for each of the personnel types. If additional qualifications or responsibilities beyond what is mentioned in the referenced primary document for the modality are required or recommended, the committee may add them after the referring statement, provided there is an attempt to standardize the language with similar procedures and it does not restrict the practice from those providers who are qualified to perform the procedure.

Following is the qualification and responsibilities language referencing the primary document for each of the relevant modalities. Alternative practice parameters that may substitute for the relevant modalities are also listed.

[For radiographic procedures use:] (*see Qualifications and Responsibilities of Personnel in the ACR–SPR Practice Parameter for General Radiography)*

- ACR–SPR Practice Parameter for the Performance of Abdominal Radiography
- ACR Practice Parameter for the Performance of a Barium Small Bowel Examination in Adults

[For CT procedures use:] *(see Qualifications and Responsibilities of Personnel in the ACR Practice Parameter for Performing and Interpreting Diagnostic Computed Tomography (CT))*

- ACR–NASCI–SIR–SPR Practice Parameter for the Performance and Interpretation of Body Computed Tomography Angiography (CTA)

[For MRI procedures use:] *(see Qualifications and Responsibilities of Personnel in the ACR Practice Parameter for Performing and Interpreting Magnetic Resonance Imaging (MRI))*

[For ultrasound procedures use:] *(see Qualifications and Responsibilities of Personnel in the ACR–SPR–SRU Practice Parameter for Performing and Interpreting Diagnostic Ultrasound Examinations)*

[For interventional procedures use:] *(see Qualifications and Responsibilities of Personnel in the ACR–SIR–SPR Practice Parameter for the Performance of Arteriography)*

[For radiation oncology procedures use:] *(see Qualifications and Responsibilities of Personnel in the ACR-ASTRO Practice Parameter for Radiation Oncology)*

***[*For nuclear medicine procedures use:]** *(see Qualifications and Responsibilities of Personnel in the ACR–SNM Technical Standard for Diagnostic Procedures Using Radiopharmaceuticals)*

Typically, the document should cover physicians, medical physicists or MR scientist, radiology technologists, and at times, other clinical personnel. If the personnel required to achieve quality patient care that perform the examination or procedure in the practice parameter or technical standard are not mentioned in the primary document for the modality, the committee may add the personnel to the document provided there is an attempt to standardize the language with similar procedures. These additional personnel should be essential to the performance of the procedure.

If the committee needs to add personnel, additional guidance follows.

A. Physician

Initial Qualifications

For physicians, initial qualifications include three pathways (radiology board certified, radiology board eligible, and a third pathway for non-radiologists who are likely to perform the procedure, which focuses on acquiring a minimum level of radiology knowledge and skills training that should be obtained prior to performing the procedure.)

Initial qualifications are not labeled but are described at the beginning of the section under each personnel type. The language below is required to be included for the initial qualifications for physicians in those instances where the committee is not referring to another document, which contains this text. This text is not always presented with the resolution number.

Completion of an approved diagnostic radiology residency program by the Accreditation Council for Graduate Medical Education (ACGME), the Royal College of Physicians and Surgeons of Canada (RCPSC), the Collège des Médecins du Québec, or the American Osteopathic Association (AOA)…; ACR Resolution 29, 2011.

For examples of practice parameters and technical standards that include ACR resolution 29, 2011, please go to Appendix 6

Maintenance of Competence

The standard language recommended for the MOC section for physicians is written below:

*All physicians performing **[specify examination]** examinations should demonstrate evidence of continuing competence in the interpretation and reporting of those examinations. Competency can be assured based on continuing experience or through monitoring and evaluation that indicates acceptable technical success, accuracy of interpretation, and appropriateness of evaluation.*

Standard language can be modified if there is a compelling reason. Typically we prefer that language is added rather than editing the standard language.

ACR continues to discourage specifying the number of procedures performed during a specified time to demonstrated competency. There is no evidence that supports a specific number of procedures performed achieves the desired competency.

Continuing Medical Education

The standard language recommended for the CME section for physicians is written below:

*The physician's continuing education should be in accordance with the ACR Practice Parameter for Continuing Medical Education (CME) and should include CME in **[specify modality or procedure]** as is appropriate to the physician's practice needs.*

B. Qualified Medical Physicist (diagnostic)

ACR used the term Qualified Medical Physicist in all its practice parameters and technical standards when referring to medical physicists or MR scientists. It is always capitalized as it refers to a specific title. The Commission on Medical Physics has standardized the language for QMPs that is based on the modality covered by the practice parameter or technical standard. A distinction is made between diagnostic QMPs and therapy QMPs. This section refers to diagnostic QMPs. You can see examples of standard language for the initial qualifications for QMPs by modality in appendix 5.

The standard language template used for the initial qualification section for diagnostic QMPs is written below. It used when this information is not referenced to another practice parameter or technical standard.

A Qualified Medical Physicist [or a Qualified MR Scientist (MRI only)] must [or should (Ultrasound only)] carry out acceptance testing and monitoring of MODALITY equipment.

The boilerplate language required for the definition of a QMP follows the statement above and is presented below:

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The American College of Radiology (ACR) considers certification, continuing education, and experience in the appropriate subfield(s) to demonstrate that an individual is competent to practice one or more of the subfields in medical physics and to be a Qualified Medical Physicist. The ACR strongly recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR), the Canadian College of Physicists in Medicine, or by the American Board of Medical Physics (ABMP).

A Qualified Medical Physicist should meet the ACR Practice Guideline for Continuing Medical Education (CME). (ACR Resolution 17, 1996 – revised in 2012, Resolution 42)

The standard language required for describing the appropriate subfield for initial qualification for the QMP depends on the diagnostic modality and is written below:

[For single-modality x-ray and ultrasound, use the following:]

The appropriate subfield of medical physics for this standard is Diagnostic Medical Physics (including medical physics certification categories of Radiological Physics, Diagnostic Radiological Physics, or Diagnostic Imaging Physics.)

[For MRI, use the following:]

The appropriate subfield of medical physics for this standard is Diagnostic Medical Physics (including medical physics certification categories of Radiological Physics, Diagnostic Radiological Physics, or Diagnostic Imaging Physics).

Certification by the American Board of Medical Physics in Magnetic Resonance Imaging Physics or Canadian College of Physicists in Medicine in Magnetic Resonance Imaging Physics is also acceptable.

A Qualified MR Scientist is an individual who has obtained a graduate degree in a physical science involving nuclear MR or MRI. He or she should have 3 years of documented experience in a clinical MRI environment.

[For nuclear medicine, use the following:]

The appropriate subfield of medical physics for this standard is Nuclear Medical Physics (including medical physics certification categories of Radiological Physics, Medical Nuclear Physics and Nuclear Medicine Physics).

Certification by the American Board of Science in Nuclear Medicine in Nuclear Medicine Physics and Instrumentation is also acceptable.

[For nuclear medicine hybrid equipment, such as PET-CT, use the following:]

The appropriate subfield of medical physics for this standard is Nuclear Medical Physics (including medical physics certification categories of Radiological Physics, Medical Nuclear Physics and Nuclear Medicine Physics) with continuing medical education in CT physics.

OR

Diagnostic Medical Physics (including medical physics certification categories of Radiological Physics, Diagnostic Radiological Physics and Diagnostic Imaging Physics) with continuing education in nuclear medicine imaging physics.

Certification by the American Board of Science in Nuclear Medicine in Nuclear Medicine Physics and Instrumentation with continuing medical education in CT physics is also acceptable.

Appendix 5 lists examples of QMP qualifications by each type of modality.

C. Qualified Medical Physicist (therapy)

The standard language required for the initial qualification section for therapeutic QMPs is written below.

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The American College of Radiology (ACR) considers certification, continuing education, and experience in the appropriate subfield(s) to demonstrate that an individual is competent to practice one or more of the subfields in medical physics and to be a Qualified Medical Physicist. The ACR strongly recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR), the Canadian College of Physicists in Medicine, or by the American Board of Medical Physics (ABMP).

A Qualified Medical Physicist should meet the ACR Practice Guideline for Continuing Medical Education (CME). (ACR Resolution 17, 1996 – revised in 2012, Resolution 42)

The appropriate subfield of medical physics for this standard is Therapeutic Medical Physics (including medical physics certification categories of Radiological Physics, Therapeutic Radiological Physics and Radiation Oncology Physics).

In addition, the Qualified Medical Physicist must meet any qualifications imposed by federal, state and/or local radiation control agencies to practice radiation oncology physics and/or to provide oversight of the establishment and conduct of the physics quality management program.

Appendix 5 lists examples of therapy QMP qualifications.

D. Registered Radiologist Assistant

The standard language required for the qualification section for the registered radiologist assistant is written below.

A registered radiologist assistant is an advanced level radiographer who is certified and registered as a radiologist assistant by the American Registry of Radiologic Technologists (ARRT) after having successfully completed an advanced academic program encompassing an ACR/ASRT (American Society of Radiologic Technologists) radiologist assistant curriculum and a radiologist-directed clinical preceptorship. Under radiologist supervision, the radiologist assistant may perform patient assessment, patient management and selected examinations as delineated in the Joint Policy Statement of the ACR and the ASRT titled "Radiologist Assistant: Roles and Responsibilities" and as allowed by state law. The radiologist assistant transmits to the supervising radiologists those observations that have a bearing on diagnosis. Performance of diagnostic interpretations remains outside the scope of practice of the radiologist assistant. (ACR Resolution 34, adopted in 2006)

E. Radiologic Technologist

The standard language required for the qualification section for the radiologic technologist is written below.

The technologist should have the responsibility for patient comfort, preparing and positioning the patient for the CT examination, monitoring the patient during the examination, and obtaining the CT data in a manner prescribed by the supervising physician. If intravenous contrast material is to be administered, qualifications for technologists performing intravenous injections should be in compliance

with current ACR policy4 and with existing operating procedures or manuals at the imaging facility. The technologist should also perform the regular quality control testing of the CT system under the supervision of a medical physicist.

Technologists performing CT examinations should be certified by the American Registry of Radiologic Technologists (ARRT) or have an unrestricted state license with documented training and experience in CT.

IV. SPECIFICATIONS OF THE EXAMINATION (or PROCEDURE for therapy/invasive documents)

The section on Specifications of the Examination is not intended to be a primer or textbook to describe fully how to perform the examination or procedure. It is important to remember that the document is written for all radiology practices across the USA. The newest equipment or software should not be the starting point for this section or the document as a whole.

Some of the common topics to consider including in this section as subsections may be: 1) Patient selection and preparation information; 2) Facility requirements (typically concerning availability of emergency medications and equipment); 3) General considerations about the examination, or if more detail is required this subsection could include, Examination techniques and / or Specialized techniques and indications. A brief mention of contrast agents may be appropriate but the reader should be referred to the ACR Manual on Contrast Media for information that is more detailed and current.

The section on Specifications of the Examination begins with the boilerplate language (i.e., language formally adopted by the ACR council as policy) for the request for an examination. The only variation is to specify the procedure, which is typically included in the title of the document.

*The written or electronic request for a **[specify the procedure]** examination should provide sufficient information to demonstrate the medical necessity of the examination and allow for its proper performance and interpretation.*

Documentation that satisfies medical necessity includes 1) signs and symptoms and/or 2) relevant history (including known diagnoses). Additional information regarding the specific reason for the examination or a provisional diagnosis would be helpful and may at times be needed to allow for the proper performance and interpretation of the examination.

The request for the examination must be originated by a physician or other appropriately licensed health care provider. The accompanying clinical information should be provided by a physician or other appropriately licensed health care provider familiar with the patient's clinical problem or question and consistent with the state's scope of practice requirements. (ACR Resolution 35, adopted in 2006)

V. DOCUMENTATION

The section on documentation provides guidance on how to report the findings of the examination or document the procedure results. Additional details may be provided but it is important to only what is medically required or adheres to local, state, or federal laws and regulations. The recommendations or suggestions should not follow any one practice but should represent the basic information to achieve quality patient care.

Most of the time, the documentation section only contains one of the following statements depending on the type of examination or procedure.

[4] See the ACR–SPR Practice Parameter for the Use of Intravascular Contrast Media.

[For diagnostic imaging practice parameters or technical standards] *Reporting should be in accordance with the ACR Practice Parameter for Communication of Diagnostic Imaging Findings.*

[For radiation oncology practice parameters or technical standards] *Reporting should be in accordance with the ACR Practice Parameter for Communication: Radiation Oncology.*

[For interventional radiology practice parameters or technical standards] *Reporting should be in accordance with the ACR –SIR–SPR Practice Parameter for the Reporting and Archiving of Interventional Radiology Procedures.*

VI. EQUIPMENT SPECIFICATIONS

This section varies widely and examples from other practice parameters for similar modalities provides the best guidance about constructing this section. The technical specification of the equipment needed to perform a quality examination or procedure should be discussed broadly. To the extent possible, referring to the appropriate technical standard should be encouraged. Basic specifications are discussed and mentioning the factors that may enhance optimization or lowering dose may be mentioned.

Subheadings consider for this section may include but are not limited to: Equipment (a brief description of the equipment required for the procedure), Care of the equipment (cleaning, storing, general hygiene), Equipment performance standards

[For relevant practice parameters that have Radiographic equipment performance monitoring]

Equipment performance monitoring should be in accordance with the ACR Technical Standard for Diagnostic Medical Physics Performance Monitoring of Radiographic Equipment

[For relevant practice parameters that have Fluoroscopic equipment performance monitoring]

Equipment performance monitoring should be in accordance with the ACR Technical Standard for Diagnostic Medical Physics Performance Monitoring of Fluoroscopic Equipment

[For relevant practice parameters that have CT equipment performance monitoring]

Equipment performance monitoring should be in accordance with the ACR–AAPM Technical Standard for Diagnostic Medical Physics Performance Monitoring of Computed Tomography (CT) Equipment.

[For relevant practice parameters that have MRI equipment]

The MRI equipment specifications and performance must meet all state and federal requirements. The requirements include, but are not limited to, specifications of maximum static magnetic strength, maximum rate of change of the magnetic field strength (dB/dt), maximum radiofrequency power deposition (specific absorption rate), and maximum acoustic noise levels.

[For equipment specifications for teleradiology or image study interpretation delegated to off-site radiologist]

For information on [teleradiology, image study interpretation delegated to off-site radiologist], refer to the ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging and the ACR Position Statements on [Teleradiology, Off-Site Radiology, Interpretation of Radiology Images Outside of the U.S.] available in the Digest of Council Actions on the ACR website.

[For equipment specifications for archiving and retrieval, picture archiving and communication systems (PACS), reliability and redundancy, and work and room environmental and ergonomic considerations]

For information on [archiving and retrieval, picture archiving and communication systems (PACS), reliability and redundancy, work and room environmental and ergonomic considerations], refer to the ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging

[For equipment specifications for security]

For information on [security issues], refer to the ACR–AAPM–SIIM Practice Parameter for Electronic Medical Information Privacy and Security

[For equipment specifications for display capabilities]

For information on viewing digital mammography images, refer to the ACR–AAPM–SIIM Practice Parameter for Determinants of Image Quality in Digital Mammography.

For information on viewing digital radiography images, refer to the ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging

For information on display capabilities, refer to the ACR–AAPM–SIIM Practice Parameter for Electronic Medical Information Privacy and Security and the ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging.

For information on image data integrity, image modifications, image compression, refer to the ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging

[For equipment specifications for image data transmission including wireless transmission of information (prevention of signal interference and corruption, signal encryption, strategy for loss-prevention and image recovery, etc.)**]**

For information on image data transmission refer to the For further details refer to the ACR–AAPM–SIIM Practice Parameter for Electronic Medical Information Privacy and Security, and the ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging.

[For equipment specifications / communication for the use of short message service (SMS) text and instant messaging services to transmit identifiable patient data or other medical information]

The use of short message service (SMS) text and instant messaging services to transmit identifiable patient data or other medical information should be used with caution. Department or institutional policy governing the transmission of PHI by personal communication devices should be followed. For information on [SMS text, instant messaging services] refer to the ACR–AAPM–SIIM Practice Parameter for Electronic Medical Information Privacy and Security

VII. RADIATION SAFETY IN IMAGING

[For CT procedures]

Radiologists, medical physicists, registered radiologist assistants, radiologic technologists, and all supervising physicians have a responsibility for safety in the workplace by keeping radiation exposure to staff, and to society as a whole, "as low as reasonably achievable" (ALARA) and to assure that radiation doses to individual patients are appropriate, taking into account the possible risk from radiation exposure and the diagnostic image quality necessary to achieve the clinical objective. All personnel that work with ionizing radiation must understand the key principles of occupational and public radiation protection (justification, optimization of protection and application of dose limits) and the principles of proper management of radiation dose to patients (justification, optimization and the use of dose reference levels). http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1578_web-57265295.pdf

Additional information regarding patient radiation safety in imaging is available at the Image Gently® for children (www.imagegently.org) and Image Wisely® for adults (www.imagewisely.org) websites. These advocacy and awareness campaigns provide free educational materials for all stakeholders involved in imaging (patients, technologists, referring providers, medical physicists, and radiologists).

Radiation exposures or other dose indices should be measured and patient radiation dose estimated for representative examinations and types of patients by a Qualified Medical Physicist in accordance with the applicable ACR Technical Standards. Regular auditing of patient dose indices should be performed by comparing the facility's dose information with national benchmarks, such as the ACR Dose Index Registry, the NCRP Report No. 172, Reference Levels and Achievable Doses in Medical and Dental Imaging: Recommendations for the United States or the Conference of Radiation Control Program Director's National Evaluation of X-ray Trends. (ACR Resolution 17 adopted in 2006 – revised in 2009, 2013, Resolution 52).

[For Radiography procedures]

Radiologists, medical physicists, registered radiologist assistants, radiologic technologists, and all supervising physicians have a responsibility for safety in the workplace by keeping radiation exposure to staff, and to society as a whole, "as low as reasonably achievable" (ALARA) and to assure that radiation doses to individual patients are appropriate, taking into account the possible risk from radiation exposure and the diagnostic image quality necessary to achieve the clinical objective. All personnel that work with ionizing radiation must understand the key principles of occupational and public radiation protection (justification, optimization of protection and application of dose limits) and the principles of proper management of radiation dose to patients (justification, optimization and the use of dose reference levels)

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1578_web-57265295.pdf

Nationally developed guidelines, such as the ACR's Appropriateness Criteria®, should be used to help choose the most appropriate imaging procedures to prevent unwarranted radiation exposure.

Facilities should have and adhere to policies and procedures that require varying ionizing radiation examination protocols (plain radiography, fluoroscopy, interventional radiology, CT) to take into account patient body habitus (such as patient dimensions, weight, or body mass index) to optimize the relationship between minimal radiation dose and adequate image quality. Automated dose reduction technologies available on imaging equipment should be used whenever appropriate. If such technology is not available, appropriate manual techniques should be used.

Additional information regarding patient radiation safety in imaging is available at the Image Gently® for children (www.imagegently.org) and Image Wisely® for adults (www.imagewisely.org) websites. These advocacy and awareness campaigns provide free educational materials for all stakeholders involved in imaging (patients, technologists, referring providers, medical physicists, and radiologists).

Radiation exposures or other dose indices should be measured and patient radiation dose estimated for representative examinations and types of patients by a Qualified Medical Physicist in accordance with the applicable ACR Technical Standards. Regular auditing of patient dose indices should be performed by comparing the facility's dose information with national benchmarks, such as the ACR Dose Index Registry, the NCRP Report No. 172, Reference Levels and Achievable Doses in Medical and Dental Imaging: Recommendations for the United States or the Conference of Radiation Control Program Director's National Evaluation of X-ray Trends. (ACR Resolution 17 adopted in 2006 – revised in 2009, 2013, Resolution 52).

[For nuclear medicine & molecular imaging procedures and medical physics]

Radiation Safety in Imaging

Radiologists, medical physicists, registered radiologist assistants, radiologic technologists, and all supervising physicians have a responsibility for safety in the workplace by keeping radiation exposure to staff, and to society as a whole, "as low as reasonably achievable" (ALARA) and to assure that radiation doses to individual patients are appropriate, taking into account the possible risk from radiation exposure and the diagnostic image quality necessary to achieve the clinical objective. All personnel that work with ionizing radiation must understand the key principles of occupational and public radiation protection (justification, optimization of protection and application of dose limits) and the principles of proper management of radiation dose to patients (justification, optimization and the use of dose reference levels)

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1578_web-57265295.pdf.

Facilities and their responsible staff should consult with the radiation safety officer to ensure that there are policies and procedures for the safe handling and administration of radiopharmaceuticals and those they are adhered to in accordance with ALARA. These policies and procedures must comply with all applicable radiation safety regulations and conditions of licensure imposed by the Nuclear Regulatory Commission (NRC) and by state and/or other regulatory agencies. Quantities of radiopharmaceuticals should be tailored to the individual patient by prescription or protocol

Nationally developed guidelines, such as the ACR's Appropriateness Criteria®, should be used to help choose the most appropriate imaging procedures to prevent unwarranted radiation exposure.

Additional information regarding patient radiation safety in imaging is available at the Image Gently® for children (www.imagegently.org) and Image Wisely® for adults (www.imagewisely.org) websites. These advocacy and awareness campaigns provide free educational materials for all stakeholders involved in imaging (patients, technologists, referring providers, medical physicists, and radiologists).

Radiation exposures or other dose indices should be measured and patient radiation dose estimated for representative examinations and types of patients by a Qualified Medical Physicist in accordance with the applicable ACR Technical Standards. Regular auditing of patient dose indices should be performed by comparing the facility's dose information with national benchmarks, such as the ACR Dose Index Registry, the NCRP Report No. 172, Reference Levels and Achievable Doses in Medical and Dental Imaging: Recommendations for the United States or the Conference of Radiation Control Program Director's National Evaluation of X-ray Trends. (ACR Resolution 17 adopted in 2006 – revised in 2009, 2013, Resolution 52).

VIII. QUALITY CONTROL AND IMPROVEMENT, SAFETY, INFECTION CONTROL, AND PATIENT EDUCATION

Policies and procedures related to quality, patient education, infection control, and safety should be developed and implemented in accordance with the ACR Policy on Quality Control and Improvement, Safety, Infection Control, and Patient Education appearing under the heading Position Statement on QC & Improvement, Safety, Infection Control, and Patient Education (ACR Resolution 9, 1998 – revised in 2008, Resolution 1e) on the ACR website (http://www.acr.org/guidelines).

For relevant practice parameters that may have pregnant or potentially pregnant patients

For the pregnant or potentially pregnant patient, see the ACR–SPR Practice Parameter for Imaging Pregnant or Potentially Pregnant Adolescents and Women with Ionizing Radiation.

Equipment for emergencies

Examples of standard language include:

1. Patient monitoring equipment and facilities for cardiopulmonary resuscitation, including vital signs monitoring equipment, support equipment, should be immediately available.
2. Appropriate emergency equipment and medications must be immediately available to treat adverse reactions associated with administered medications. The equipment and medications should be monitored for inventory and drug expiration dates on a regular basis. The equipment, medications, and other emergency support must also be appropriate for the range of ages and sizes in the patient population.

IX. ACKNOWLEDGEMENTS *(ACR staff will revise this section)*

This section identifies those who participated in the development or revision of the current version of the document.

This practice parameter was revised according to the process described under the heading The Process for Developing ACR Practice Parameters and Technical Standards on the ACR website (http://www.acr.org/guidelines) by the Committee on Practice Parameters and Technical Standards of ACR Commission on [name of commission, eg, Commission on Body Imaging].

Example

This parameter was revised according to the process described under the heading The Process for Developing ACR Practice Parameters and Technical Standards on the ACR website (http://www.acr.org/guidelines) by the Committee on Body Imaging (Abdominal) of the ACR Commission on Body Imaging and by the Committee on Practice Parameters – GSR of the ACR Commission on General, Small, and Rural Practice, and the Committee on Practice Parameters – Pediatric Radiology of the ACR Commission on Pediatric Radiology, in collaboration with the SPR.

Collaborative Committee

For documents in which ACR collaborated, list the society's acronym and the representatives' names, degrees, and relevant fellowships

[List names, degrees and fellowships]

Principal Reviewer(s) or Reviewing Committee

[List names, degrees and fellowships]

Committee on Practice Parameters and Technical Standards of Commission on [name of Sponsoring Commission, eg, Body Imaging]

ACR Committee responsible for sponsoring the draft through the process. If more than one commission, list the lead society is listed first. List the chair of the Commission

[List names, degrees and fellowships]

X. REFERENCES *(ACR staff will work with the committee to revise and format this section into the AMA style)*

Lists the citation used to support statements made in the documents. All citations must be embedded into the text of the document. There is no reading list of related, recommended or interesting articles.

After the Reference section, an explanation of the documents' effective date is provided.

---

*Practice parameters and technical standards are published annually with an effective date of October 1 in the year in which amended, revised, or approved by the ACR Council. For practice parameters and technical standards published before 1999, the effective date was January 1 following the year in which the practice parameter or technical standard was amended, revised, or approved by the ACR Council.

Development Chronology for this Practice Parameter *(ACR staff will revise this section)*

[First year that Council adopted (resolution number)], eg, [*Adopted 2002 (Resolution 2)*]

[Other years that the document came before Council (*action, year,* Resolution *[resolution number])*

[Last year that Council adopted (resolution number)], eg, [*Revised 2012 (Resolution 6)*]

END OF TEMPLATE

Practice parameters and technical standards should use the same language to the extent possible. Typically, we accomplish this by referring the reader to specific "major" documents. The documents below often need to be referred to as a whole rather than just particular sections. This way we do not duplicate content in multiple documents where the information could diverge over time.

[For standard language on Breast Imaging]

ACR Practice Parameter for the Performance of Screening and Diagnostic Mammography

[For standard language on Contrast Media Information]

ACR Manual on Contrast Media

[For standard language on Intravascular Contrast Media Information]

ACR–SPR Practice Parameter for the Use of Intravascular Contrast Media

[For standard language on Sedation Information]

ACR–SIR Practice Parameter for Sedation/Analgesia

[For standard language on Teleradiology / Electronic Practice]

ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging

[For standard language on Pregnant or Potentially Pregnant Patients]

ACR–SPR Practice Parameter for Imaging Pregnant or Potentially Pregnant Adolescents and Women with Ionizing Radiation Res. 48 – 2013, Amended 2014 (Res. 39)

[For standard language on Informed Consent]

Diagnostic Radiology

The American College of Radiology recommends that informed consent should be obtained from patients on whom radiological procedures with a significant incidence of serious complications are to be performed. Where consent is to be obtained for procedure, the radiologist, radiation oncologist or interventional radiologist or his or her designee, should be involved on a personal level with the patient, family, or guardian as clinical circumstances warrant. There is no recognized consensus as to whether or not radiologists should obtain informed consent from patients for a procedure with a low incidence of serious complications. In deciding whether or not to obtain informed consent for these procedures, the radiologist should be knowledgeable about the statutory and/or common law for the particular practice setting; [1987, amended 1997, revised 2007 (Res. 36-s)].

Interventional Radiology

ACR–SIR Practice Parameter on Informed Consent for Image-Guided Procedures Res. 39 – 2011, Amended 2014 (Res. 39)

Radiation Oncology

ACR Practice Parameter on the Physician Expert Witness in Radiology and Radiation Oncology Res. 38 – 2012, Amended 2014 (Res. 39)

APPENDIX 4

COLLABORATIVE SOCIETIES REPRESENTATIVES' ROLES

- The collaborating society's appointed representative shall have the authority to stipulate his or her organization's positions on collaborative parameters/standards issues and proposed changes during the ACR annual meeting.

- The majority of the proposed changes to a collaborative document typically are minor and non-controversial in nature, primarily typographical, grammatical, or technical corrections, and/or language, which further clarifies or enhances the parameter/standard's content. In cases where proposed changes may go beyond these typical modifications, the representative will have the opportunity to state his or her society's position, and to ultimately seek resolution through a post-ACR Annual Meeting conference committee, if necessary.

- The collaborating society representative may participate in the discussions on behalf of his or her society during the open sessions when recognized by the Council Speaker. Only comments brought up for consideration should be addressed during this session.

- The collaborating society representative schedule for the annual meeting on the day of the Reference Committees Open Sessions (*all times are estimates based on historical information and are subject to change*):
  - 7:00a.m. – 8:15 a.m. – attend breakfast with the Reference Committee for instructions
  - 9:25 a.m. – 1:30 p.m. – attend open session of the Reference Committee. The collaborating society representative should be available to represent the collaborating society in addressing any issues raised in regards to the relevant document(s).
  - 10:00 a.m. – 7:00 p.m. – be available to the Reference Committee in the closed session. It is possible that the Reference Committee may need to contact the representative later in the evening, because of this, it is important that staff have a way to reach the representative during this time.

- The collaborating society representative schedule for the day of the Reference Committee's Reports to Council (typically the day following the Reference Committee Open and Closed Sessions):
  - 1:30 p.m. – attend the session when the Reference Committee presents their final reports to the Council for a vote. Once the practice parameters and technical standards that were collaborative with the representative's her society have been completed, the representative's tasks are complete.

- ACR staff will be assigned to be a liaison between the representatives and Reference Committees throughout the day. Reserved seating will be available for the representatives in the ballroom. If the representative wishes to sit elsewhere, please make sure the ACR staff liaison is aware of his or her location. The ACR staff liaison will let the representatives know when activities are completed and will release them when their tasks have been completed.

APPENDIX 5

EXAMPLES OF STANDARD LANGUAGE FOR QUALIFIED MEDICAL PHYSICISTS BY MODALITY

FOR CT TECHNICAL STANDARD

A Qualified Medical Physicist must carry out acceptance testing and monitoring of computed tomography equipment.

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The American College of Radiology (ACR) considers certification, continuing education, and experience in the appropriate subfield(s) to demonstrate that an individual is competent to practice one or more of the subfields in medical physics and to be a Qualified Medical Physicist. The ACR strongly recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR), the Canadian College of Physicists in Medicine, or by the American Board of Medical Physics (ABMP).

A Qualified Medical Physicist should meet the ACR Practice Guideline for Continuing Medical Education (CME). (ACR Resolution 17, 1996 – revised in 2012, Resolution 42)

The appropriate subfield of medical physics for this standard is Diagnostic Medical Physics (including medical physics certification categories of Radiological Physics, Diagnostic Radiological Physics, or Diagnostic Imaging Physics).

FOR ULTRASOUND TECHNICAL STANDARD

A Qualified Medical Physicist should carry out acceptance testing and monitoring of ultrasound equipment.

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The American College of Radiology (ACR) considers certification, continuing education, and experience in the appropriate subfield(s) to demonstrate that an individual is competent to practice one or more of the subfields in medical physics and to be a Qualified Medical Physicist. The ACR strongly recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR), the Canadian College of Physicists in Medicine, or by the American Board of Medical Physics (ABMP).

A Qualified Medical Physicist should meet the ACR Practice Guideline for Continuing Medical Education (CME). (ACR Resolution 17, 1996 – revised in 2012, Resolution 42)

The appropriate subfield of medical physics for this standard is Diagnostic Medical Physics (including medical physics certification categories of Radiological Physics, Diagnostic Radiological Physics, or Diagnostic Imaging Physics.)

FOR MRI TECHNICAL STANDARD

A Qualified Medical Physicist or a Qualified MR Scientist must carry out acceptance testing and monitoring of magnetic resonance imaging equipment.

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The American College of Radiology (ACR) considers certification, continuing education, and experience in the appropriate subfield(s) to demonstrate that an individual is competent to practice one or more of the subfields in medical physics and to be a Qualified Medical Physicist. The ACR strongly recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR), the Canadian College of Physicists in Medicine, or by the American Board of Medical Physics (ABMP).

A Qualified Medical Physicist should meet the ACR Practice Guideline for Continuing Medical Education (CME). (ACR Resolution 17, 1996 – revised in 2012, Resolution 42)

The appropriate subfield of medical physics for this standard is Diagnostic Medical Physics (including medical physics certification categories of Radiological Physics, Diagnostic Radiological Physics, or Diagnostic Imaging Physics).

Certification by the American Board of Medical Physics in Magnetic Resonance Imaging Physics or Canadian College of Physicists in Medicine in Magnetic Resonance Imaging Physics is also acceptable.

A Qualified MR Scientist is an individual who has obtained a graduate degree in a physical science involving nuclear MR or MRI. He or she should have 3 years of documented experience in a clinical MRI environment.

FOR PET TECHNICAL STANDARD

A Qualified Medical Physicist must carry out acceptance testing and monitoring of PET equipment.

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The American College of Radiology (ACR) considers certification, continuing education, and experience in the appropriate subfield(s) to demonstrate that an individual is competent to practice one or more of the subfields in medical physics and to be a Qualified Medical Physicist. The ACR strongly recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR), the Canadian College of Physicists in Medicine, or by the American Board of Medical Physics (ABMP).

A Qualified Medical Physicist should meet the ACR Practice Guideline for Continuing Medical Education (CME). (ACR Resolution 17, 1996 – revised in 2012, Resolution 42)

The appropriate subfield of medical physics for this standard is Nuclear Medical Physics (including medical physics certification categories of Radiological Physics, Medical Nuclear Physics and Nuclear Medicine Physics).

Certification by the American Board of Science in Nuclear Medicine in Nuclear Medicine Physics and Instrumentation is also acceptable.

FOR SPECT /CT TECHNICAL STANDARD

A Qualified Medical Physicist must carry out acceptance testing and monitoring of SPECT/CT equipment.

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The American College of Radiology (ACR) considers certification, continuing education, and experience in the appropriate subfield(s) to demonstrate that an individual is competent to practice one or more of the subfields in medical physics and to be a Qualified Medical Physicist. The ACR strongly recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR), the Canadian College of Physicists in Medicine, or by the American Board of Medical Physics (ABMP).

A Qualified Medical Physicist should meet the ACR Practice Guideline for Continuing Medical Education (CME). (ACR Resolution 17, 1996 – revised in 2012, Resolution 42)

The appropriate subfield of medical physics for this standard is Nuclear Medical Physics (including medical physics certification categories of Radiological Physics, Medical Nuclear Physics and Nuclear Medicine Physics) with continuing medical education in CT physics.

OR

A Qualified Medical Physicist must carry out acceptance testing and monitoring of SPECT/CT equipment.

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The American College of Radiology (ACR) considers certification, continuing education, and experience in the appropriate subfield(s) to demonstrate that an individual is competent to practice one or more of the subfields in medical physics and to be a Qualified Medical Physicist. The ACR strongly recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR), the Canadian College of Physicists in Medicine, or by the American Board of Medical Physics (ABMP).

A Qualified Medical Physicist should meet the ACR Practice Guideline for Continuing Medical Education (CME). (ACR Resolution 17, 1996 – revised in 2012, Resolution 42)

Diagnostic Medical Physics (including medical physics certification categories of Radiological Physics, Diagnostic Radiological Physics and Diagnostic Imaging Physics) with continuing education in nuclear medicine imaging physics.

Certification by the American Board of Science in Nuclear Medicine in Nuclear Medicine Physics and Instrumentation with continuing medical education in CT physics is also acceptable.

FOR BRACHYTHERAPY TECHNICAL STANDARDS

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The American College of Radiology (ACR) considers certification, continuing education, and experience in the appropriate subfield(s) to demonstrate that an individual is competent to practice one or more of the subfields in medical physics and to be a Qualified Medical Physicist. The ACR strongly recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR), the Canadian College of Physicists in Medicine, or by the American Board of Medical Physics (ABMP).

A Qualified Medical Physicist should meet the ACR Practice Guideline for Continuing Medical Education (CME). (ACR Resolution 17, 1996 – revised in 2012, Resolution 42)

The appropriate subfield of medical physics for this standard is Therapeutic Medical Physics (including medical physics certification categories of Radiological Physics, Therapeutic Radiological Physics and Radiation Oncology Physics).

In addition, the Qualified Medical Physicist must meet any qualifications imposed by the state and/or local radiation control agency to practice radiation oncology physics and/or to provide oversight of the establishment and conduct of the physics quality management program.

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The American College of Radiology (ACR) considers certification, continuing education, and experience in the appropriate subfield(s) to demonstrate that an individual is competent to practice one or more of the subfields in medical physics and to be a Qualified Medical Physicist. The ACR strongly recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR), the Canadian College of Physicists in Medicine, or by the American Board of Medical Physics (ABMP).

A Qualified Medical Physicist should meet the ACR Practice Guideline for Continuing Medical Education (CME). (ACR Resolution 17, 1996 – revised in 2012, Resolution 42)

The appropriate subfield of medical physics for this standard is Therapeutic Medical Physics (including medical physics certification categories of Radiological Physics, Therapeutic Radiological Physics and Radiation Oncology Physics).

In addition, the Qualified Medical Physicist must meet any qualifications imposed by the state and/or local radiation control agency to practice radiation oncology physics and/or to provide oversight of the establishment and conduct of the physics quality management program.

APPENDIX 6

LIST OF PRACTICE PARAMETERS AND TECHNICAL STANDARDS WITH ACR RESOLUTION 29, 2011

Completion of an approved diagnostic radiology residency program by the Accreditation Council for Graduate Medical Education (ACGME), the Royal College of Physicians and Surgeons of Canada (RCPSC), the Collège des Médecins du Québec, or the American Osteopathic Association (AOA)…; ACR Resolution 29, 2011.

The practice parameters and technical standards with ACR Resolution 29, 2011
1. ACR–SIR–SPR Practice Parameter for Performance of Arteriography
2. ACR–ABS Practice Parameter for Transperineal Permanent Brachytherapy of Prostate Cancer
3. ACR–ASNR–SIR–SNIS Practice Parameter for the Performance of Diagnostic Cervicocerebral Catheter Angiography in Adults
4. ACR Practice Parameter for Performing and Interpreting Diagnostic Computed Tomography (CT)
5. ACR–SPR Practice Parameter for General Radiography
6. ACR–ABS Practice Parameter for the Performance of Radionuclide-Based High-Dose-Rate Brachytherapy
7. ACR Practice Parameter for the Performance of Hysterosalpingography
8. ACR–SPR Practice Parameter for the Use of Intravascular Contrast Media
9. ACR–SIR–SPR Practice Parameter for the Performance of Inferior Vena Cava (IVC) Filter Placement for the Prevention of Pulmonary Embolism
10. ACR–ABS Practice Parameter for the Performance of Low-Dose-Rate Brachytherapy
11. ACR–SIR Practice Parameter for Endovascular Management of the Thrombosed or Dysfunctional Dialysis Access
12. ACR–AAPM Technical Standard for Management of the Use of Radiation in Fluoroscopic Procedures
13. ACR Practice Parameter for the Performance of the Modified Barium Swallow
14. ACR–ASNR Practice Parameter for the Performance of Non-Breast Magnetic Resonance Imaging (MRI) Guided Procedures
15. ACR Practice Parameter for Performing and Interpreting Magnetic Resonance Imaging (MRI)
16. ACR–ASNR–SPR Practice Parameter for the Performance of Myelography and Cisternography
17. ACR–SIR–SPR Practice Parameter for Specifications and Performance of Image-Guided Percutaneous Drainage/Aspiration of Abscesses and Fluid Collections (PDAFC)
18. ACR–SIR–SPR Practice Parameter for the Performance of Percutaneous Nephrostomy
19. ACR–SIR–SPR Practice Parameter for the Performance of Image-Guided Percutaneous Needle Biopsy (PNB)
20. ACR–ASTRO Practice Parameter for Communication: Radiation Oncology
21. ACR–SNM Technical Standard for Diagnostic Procedures Using Radiopharmaceuticals
22. ACR–SIR Practice Parameter for the Performance of Angiography, Angioplasty, and Stenting for the Diagnosis and Treatment of Renal Artery Stenosis in Adults
23. ACR–SIR Practice Parameter for Radioembolization with Microsphere Brachytherapy Device (RMBD) for Treatment of Liver Malignancies
24. ACR Practice Parameter for the Performance of Stereotactic Radiosurgery
25. ACR–SIR–SPR Practice Parameter for the Creation of a Transjugular Intrahepatic Portosystemic Shunt (TIPS)
26. ACR–SIR Practice Parameter for the Performance of Diagnostic Infusion Venography
27. ACR–ASNR–ASSR–SIR–SNIS Practice Parameter for the Performance of Vertebral Augmentation
28. ACR–NASCI–SPR Practice Parameter for the Performance and Interpretation of Cardiac Magnetic Resonance Imaging (MRI)
29. ACR–NASCI–SPR Practice Parameter for the Performance and Interpretation of Cardiac Computed Tomography (CT)
30. ACR–SAR–SCBT-MR Practice Parameter for the Performance of CT Colonography in Adults