Revised 2017 (Resolution 9)*

ACR PRACTICE PARAMETER ON THE PHYSICIAN EXPERT WITNESS IN RADIOLOGY AND RADIATION ONCOLOGY

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[1]. 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 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.

[1] 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.

I. INTRODUCTION

For the purpose of this practice parameter, radiology is defined as diagnostic radiology, interventional radiology, nuclear medicine, radiation oncology, and medical physics. For the scope of this practice parameter, radiologists and radiology oncologists include diagnostic radiologists, interventional radiologists, nuclear medicine physicians, and radiation oncologists. For medical physicists, please see the ACR–AAPM Practice Parameter on the Expert Witness in Medical Physics [1].

Radiologists and radiation oncologists are frequently called upon to serve as medical expert witnesses in a variety of legal proceedings that may include cases of alleged medical malpractice, personal injury, product liability, workers compensation, and criminal law and have an obligation to do so in the appropriate circumstances. This obligation includes not only the review of documents, radiologic images, records of treatments, and/or procedures but also the willingness to give sworn testimony by deposition or in court. The public interest requires readily available, objective, and unbiased medical expert testimony. The expert witness should be qualified for the role and follow clear and consistent guidelines. The American College of Radiology (ACR) recognizes the decisive role of the judge in determining admissibility of expert testimony as well as the difficulty in setting the balance between variations of viewpoints and their reasonableness, which fairness requires (see Note 1 that appears in the Notes section after the references).

Medical expert witness testimony is indicated in any legal proceeding in which the court needs an objective physician who is not a party to the case, has no personal interest in the outcome of the case, and has expertise in the matter at hand to help explain the issues.

II. QUALIFICATIONS AND RESPONSIBILITIES OF THE EXPERT WITNESS

The expert witness should be a physician with the following qualifications:

Unless otherwise stipulated by applicable state law, licensure and active engagement at the time of the incident under review and for a reasonable period of time in the practice of the radiologic specialty or subspecialty relating to the testimony.

Certification in Radiology, Diagnostic Radiology, Interventional Radiology/Diagnostic Radiology (IR/DR), Therapeutic Radiology, Nuclear Radiology, or Radiation Oncology by the American Board of Radiology, the American Osteopathic Board of Radiology, the American Board of Nuclear Medicine, the Royal College of Physicians and Surgeons of Canada, or the Collège des Médecins du Québec. Participation in Maintenance of Certification (MOC) by the relevant board, if they have a time limited board certificate.

Education, training, and practical experience, as well as current knowledge and skill, concerning the subject matter of the case, including in a medical liability case the relevant standard of care.

Should the physician defendant be required by federal or state statute to fulfill certain educational or practice experience requirements, the expert witness should also meet these same requirements.

III. REQUISITES OF AN EXPERT WITNESS

A. The role of the expert witness is to help the fact finder analyze the issues in dispute necessary to decide the case. The expert witness is expected and should be able to render an opinion regarding the reasonableness of the conduct of the parties in the circumstances at hand. Depending on the legal issues being tried, this may include an opinion about a defendant doctor's training and experience; the relevant standard of care; the relevance of particular imaging findings, interventional procedures, or radiation therapy treatment to causation of damages; or the adequacy of the technical equipment used.

In a medical liability case, the expert opinion should be based on all relevant clinical and radiologic information available at the time of the incident now under review. Information, facts, and results of imaging studies performed after the incident generally should not be used to formulate an opinion. The expert witness should make every effort to avoid being influenced by hindsight and framing biases [2,3]. Mechanisms to mitigate bias have been well studied in the literature [4]. It should be recognized that physicians with different levels of expertise may still practice within the standard of care.

B. Recommended Guidelines of Conduct for the Radiologist and Radiation Oncologist Expert Witness

1. Although the nature of legal proceedings is adversarial, the expert witness must be as impartial and objective as possible.
2. In a medical liability case, the expert witness should be familiar with the relevant standard of care. Care must be taken to distinguish between the expert's personal opinion and the standard of care.
3. The expert witness should review all relevant material and information in order to assure an informed and fair opinion. Images and other relevant materials reviewed by the expert witness should be the original images and other relevant materials used by the interpreting or treating physician in the case. If original images or other relevant materials are not available, good-quality copies of the originals may be acceptable. In cases involving images originally interpreted using a picture archiving and communication system (PACS), the expert witness review should consider the original algorithm and format (PACS or hard copy) used by the interpreting physician.
4. The expert witness should be prepared to explain the basis of an opinion and should take care that proffered testimony will be scientifically valid and applicable to the facts at issue, can be or has been tested, and has withstood or reasonably could withstand a peer review. The expert witness should be familiar with and be prepared to address the known or potential limitations regarding an opinion, as well as the degree to which that opinion is accepted in the medical community.
5. Compensation of the expert witness should reflect the time and effort involved. Linking compensation for expert testimony to the outcome of the case (contingency fee) is unethical.
6. The expert witness should strive to minimize all potential sources of conscious and subconscious bias when reviewing case materials. Images and other relevant material presented in a blinded fashion to the expert in a malpractice lawsuit strengthens the credibility of the opinion rendered by the expert.

An individual holding an official capacity with the College who testifies in a legal proceeding must exercise great care to distinguish between his or her personal opinions and the policy positions of the College (see Note 2 that appears in the Notes section after the references).

The expert witness can be held accountable for statements made during a legal proceeding. Expert witness testimony may be reviewed and evaluated by medical boards and professional societies.

ACKNOWLEDGEMENTS

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 – General, Small, Emergency and/or Rural Practice of the ACR Commission on General, Small, Emergency and/or Rural Practice, and the Committee on Practice Parameters – Radiation Oncology of the ACR Commission of Radiation Oncology.

Reviewing Committee

Candice A. Johnstone, MD, Chair
Alan C. Hartford, MD, PhD, FACR
Jared R. Robbins, MD
Jeffrey D. Robinson, MD, MBA
Nikhil Thaker, MD

Committee on Practice Parameters – General, Small, Emergency and/or Rural Practice
(ACR Committee responsible for sponsoring the draft through the process)

Sayed Ali, MD, Chair
Marco A. Amendola, MD, FACR
Gory Ballester, MD
Lonnie J. Bargo, MD
Christopher M. Brennan, MD, PhD
Resmi A. Charalel, MD
Charles E. Johnson, MD
Candice A. Johnstone, MD
Padmaja A. Jonnalagadda, MD
Pil S. Kang, MD
Jason B. Katzen, MD
Serena McClam Liebengood, MD
Steven E. Liston, MD, MBA, FACR
Gagandeep S. Mangat, MD
Tammam N. Nehme, MD
Jennifer L. Tomich, MD

Committee on Practice Parameters – Radiation Oncology
(ACR Committee responsible for sponsoring the draft through the process)

Alan C. Hartford, MD, PhD, FACR, Chair
Nathan H. J. Bittner, MD
Chee-Wai Cheng, PhD, FAAPM
Nancy A. Ellerbroek, MD, FACR
Beth A. Erickson, MD, FACR
Lesley A. Jarvis, MD, PhD
Bill W. Loo, MD, PhD
Jeff M. Michalski, MD, MBA, FACR
Christopher H. Pope, MD
Naomi R. Schechter, MD
Nikhil Thaker, MD
Suzanne L. Wolden, MD, FACR
Ying Xiao, PhD
Sue S. Yom, MD, PhD
Bassem I. Zaki, MD

Robert S. Pyatt, Jr., MD, FACR, Chair, Commission on General, Small, Emergency and/or Rural Practice
Seth A. Rosenthal, MD, FACR, Chair, Commission on Radiation Oncology
Jacqueline A. Bello, MD, FACR, Chair, Commission on Quality and Safety
Matthew S. Pollack, MD, FACR, Chair, Committee on Practice Parameters and Technical Standards

Comments Reconciliation Committee
Neil U. Lall, MD, Chair
McKinley Glover, IV, MD, MHS, Co-Chair
Sayed Ali, MD
Jacqueline A. Bello, MD, FACR
Leonard Berlin, MD, FACR
Alan C. Hartford, MD, PhD, FACR
William T. Herrington, MD, FACR
Candice A. Johnstone, MD
Lijun Ma, PhD
Neerav R. Mehta, MD
Robert S. Pyatt, Jr., MD, FACR
Matthew S. Pollack, MD, FACR
Jared R. Robbins, MD
Jeffrey D. Robinson, MD, MBA
Seth A. Rosenthal, MD, FACR
David A. Rubin, MD, FACR
Timothy L. Swan, MD, FACR, FSIR
Hema S. Thaker, MD
Nikhil Thaker, MD
Peter R. Wahba, MD

REFERENCES

1. American College of Radiology. ACR–AAPM Practice Parameter on the Expert Witness in Medical Physics. 2013; Available at: https://www.acr.org/-/media/ACR/Files/Practice-Parameters/ExpertWitnessMP.pdf. Accessed August 4, 2016.
2. Berlin L. Hindsight bias. *AJR Am J Roentgenol.* 2000;175(3):597-601.
3. Berlin L. Outcome bias. *AJR Am J Roentgenol.* 2004;183(3):557-560.

4. Durand DJ, Robertson CT, Agarwal G, et al. Expert witness blinding strategies to mitigate bias in radiology malpractice cases: a comprehensive review of the literature. *Journal of the American College of Radiology : JACR.* 2014;11(9):868-873.
5. Berlin L. Can a radiologist be compelled to testify as an expert witness? *AJR Am J Roentgenol.* 2005;185(1):36-42.

Additional articles that are not cited in the document but that the committee recommends for further reading on this topic:

Berlin L, Hoffman TR, Shields WF, Cox J. When does expert witness testimony constitute a violation of the ACR Code of Ethics? *JACR* 2006;3:252-258.
Berlin L. Bearing false witness. *AJR* 2003;180:1515 1521.
Berlin L. The miasmatic expert witness. *AJR* 2003;181:29-35.
Deigert F. Cherewick T, Gunn W. Top 10 Tips for a Radiology Medical-Legal Expert. JACR 2007;4:229-233.
Eloy JA, Svider PF, Folbe AJ, Couldwell WT, Liu JK. Comparison of plaintiff and defendant expert witness qualification in malpractice litigation in neurological surgery. *Journal of neurosurgery.* 2014;120(1):185-190.
Johnston JC, Sartwelle TP. The expert witness in medical malpractice litigation: through the looking glass. *Journal of child neurology.* 2013;28(4):484-501.
Kagan AR. Malpractice in radiation oncology: redefining the role of the medical expert. *Int J Radiat Oncol Biol Phys* 2005;61:638-639.
Svider PF, Eloy JA, Bareds S, Setzen M, Folbe AJ. Expert witness testimony guidelines: identifying areas for improvement. *Otolaryngology head and neck surgery: official journal of American Academy of Otolaryngology Head and Neck Surgery:* 2015;152(2):207-210.
Wallner K, Elliott K, Merrick G, Herstein P, Rieke J. Malpractice in radiation oncology: redefining the role of the medical expert: In regard to Kagan. *Int J Radiat Oncol Biol Phys* 2005;62:1254-1255.

NOTES

[1]These practice parameters are not meant to apply to percipient witnesses such as a doctor who is a party to the case. However, in some jurisdictions (California, for example) a defendant doctor can be deposed both as a defendant and as an expert [5].

[2]The policies of the College are a matter of public record and, if relevant, may be appropriately cited in testimony. Also, the fact that an individual holds an official position with the College may be an appropriate part of his or her qualifications as an expert witness. However, the College, except pursuant to specific action by the Board of Chancellors, does not take a position on the merits of particular cases. A witness who holds an official capacity with the College must therefore be at pains to make clear that his or her testimony expresses his or her personal views and must not state or imply in a written opinion or deposition or trial testimony that he or she is speaking as a representative of the College or is testifying to the views of the College on the merits of a particular case. (1987, 1997, 2007 - ACR Resolution 36-v).

*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
2002 (Resolution 43)
Revised 2007 (Resolution 40)
Revised 2012 (Resolution 38)
Amended 2014 (Resolution 39)
Revised 2017 (Resolution 9)
Amended 2018 (Resolution 44)