



Expert Witness Participation in Civil and Criminal Proceedings

Sandeep K. Narang, MD, JD, FAAP,^a Stephan R. Paul, MD, JD, FAAP,^{b,c}
COMMITTEE ON MEDICAL LIABILITY AND RISK MANAGEMENT

The interests of the public and both the medical and legal professions are best served when scientifically sound and unbiased expert witness testimony is readily available in civil and criminal proceedings. As members of the medical community, patient advocates, and private citizens, pediatricians have ethical and professional obligations to assist in the civil and criminal judicial processes. This technical report explains how the role of the expert witness differs in civil and criminal proceedings, legal and ethical standards for expert witnesses, and strategies that have been employed to deter unscientific and irresponsible testimony. A companion policy statement offers recommendations on advocacy, education, research, qualifications, standards, and ethical business practices all aimed at improving expert testimony.

BACKGROUND

The American Academy of Pediatrics (AAP) first articulated policy on appropriate medical expert witness testimony in 1989¹ and was among the first medical specialty societies to do so. The statement was revised in 1994² to incorporate additional provisions on expert witness testimony guidelines from the Council of Medical Specialty Societies.³ A 2002 revision outlined responsible practices that physicians should follow to safeguard their objectivity in preparing and presenting expert witness testimony.⁴ Key legal concepts were explained, and the role of the expert witness in the litigation process (pretrial and trial) was described. A 2009 iteration expanded the requirements and qualifications for experts testifying in civil and criminal cases, the latter primarily relating to cases involving alleged child abuse and/or neglect.⁵ The importance of expert witness testimony in the process of determining civil liability, child safety, or criminal culpability and its unique significance in pediatric cases also was stressed. This technical report provides the evidentiary basis on which the recommendations found in its companion policy statement⁶ of the same title are based. The 2016 policy statement replaces the previous policy statement. This technical report expands

abstract

FREE

^aDepartment of Pediatrics, West Virginia University, Morgantown, West Virginia ^bFulbright-Nehru Scholar and Division Head of Child Abuse Pediatrics, Ann and Robert H. Lurie Children's Hospital of Chicago; and ^cAssociate Professor of Pediatrics, Feinberg School of Medicine, Northwestern University, Chicago, Illinois

Drs Paul and Harang were each responsible for all aspects of writing and editing the document and reviewing and responding to questions and comments from reviewers and the Board of Directors.

This document is copyrighted and is property of the American Academy of Pediatrics and its Board of Directors. All authors have filed conflict of interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication.

The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

All technical reports from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

DOI: 10.1542/peds.2016-4122

Address correspondence to Sandeep K. Narang, MD, JD. E-mail: sanarang@luriechildrens.org

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2017 by the American Academy of Pediatrics

FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: No external funding.

To cite: Narang SK, Paul SR, AAP COMMITTEE ON MEDICAL LIABILITY AND RISK MANAGEMENT. Expert Witness Participation in Civil and Criminal Proceedings. *Pediatrics*. 2017;139(3):e20164122

the information on how testifying in child abuse cases differs from doing so in civil proceedings, bolsters the requirements for expert testimony, and provides new guidance on ways to prevent and censure irresponsible testimony in medical liability proceedings as well as child abuse cases.

This technical report applies to medical expert witness consultation or testimony in all legal venues (including pretrial consultations, civil suits, criminal legal proceedings, or other legal proceedings) in which attorneys ask pediatricians, pediatric medical subspecialists, or pediatric surgical specialists to provide their expert opinions or testimony.

DEFINITION OF EXPERT WITNESS

The expert witness plays an essential role under the US system of jurisprudence. Courts rely on expert witness testimony in most civil and criminal cases to explain scientific matters and provide their opinions to jurors and judges. Standards of admissibility for expert testimony vary depending on state and federal rules of procedure and evidence. Although most state laws conform to both the Federal Rules of Procedure and Federal Rules of Evidence (FRE), some do not.⁷ The same testimony from a given expert witness, therefore, might be admissible in some state courts but not in federal court and vice versa. Qualifying to be an expert is governed by statutory and evidentiary rules. In malpractice cases, statutory rules may vary from jurisdiction to jurisdiction about whether an expert must be of the same specialty as the defendant. FRE 702 provides basic background credentials for an expert, stating that an expert must be qualified by “knowledge, skill, experience, training, or education.”⁷ In both civil and criminal cases, the expert, nevertheless, must demonstrate to the judge sufficient knowledge and expertise about the

issue to qualify as an expert. FRE 702 authorizes a judge to admit expert testimony into evidence if it assists the jury or the judge to “understand the evidence or to determine a fact in issue.”⁷ FRE 703 permits a qualified expert to give testimony based on data of others, provided that “experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject.”⁷ FRE 704 permits an expert to opine on the ultimate factual issue. In a malpractice case, testimony of an expert witness differs from that of other witnesses. “Witnesses of fact” (those testifying because they have personal knowledge of the incident or are persons involved in the lawsuit) typically restrict their testimony to the facts of the case at issue. The expert witness is given more latitude. The expert witness is allowed to compare the applicable standards of care with the facts of the case and interpret whether the evidence indicates a deviation from the standard of care. Without the expert’s explanation of the range of acceptable diagnostic and treatment modalities within the standard of care (see the *Determining the Standard of Care* section) and interpretation of medical facts, juries may not have the technical expertise needed to distinguish malpractice (an adverse event caused by negligent or “bad care”) from maloccurrence (an unavoidable adverse event or “bad outcome”).

In a criminal case, however, FRE 704 limits the expert. Although the expert may opine on a factual issue, the expert may not opine “about whether the defendant did or did not have a mental state or condition that constitutes an element of the crime charged.”⁷

PROVIDING EXPERT TESTIMONY AS THE PRACTICE OF MEDICINE

For an expert witness to be censured for unethical or unreliable scientific testimony by

professional organizations or state medical boards, it is necessary to determine whether the provision of expert testimony is the practice of medicine. In 1998, the House of Delegates of the American Medical Association adopted the position that the provision of expert witness testimony should be considered the practice of medicine and should be subject to peer review.⁸ Adopting this approach not only makes medical licensure a requirement for providing expert witness testimony, but also puts physicians on notice about potential actions against their medical license for giving false, biased, or unscientific testimony.⁹ ¹⁰ Expectedly, not all courts have agreed that medical expert witness testimony is engaging in the practice of medicine.¹¹ However, in one jurisdiction, the Seventh Circuit Court of Appeals clearly stated that the provision of medical legal testimony is concomitant with the practice of medicine.¹²

MALPRACTICE LIABILITY FOR NEGLIGENCE EXPERT TESTIMONY

It is unclear whether there may be financial risks to physician experts who testify negligently in malpractice matters.¹³ Because clients are entitled to sue their attorneys for malpractice, it is not unreasonable that malpractice liability can attach to medical expert testimony. However, the malpractice litigation against expert witnesses to date suggests that the courts generally will grant immunity from civil liability to these defendants.¹⁴ Nonetheless, pediatricians, pediatric medical subspecialists, and pediatric surgical specialists contemplating serving as expert witnesses may want to contact their professional liability insurance carrier to ascertain the need for additional coverage for these activities.

COMPENSATION FOR EXPERT TESTIMONY

Some experts can significantly increase their income by providing expert medical testimony. Asking for excessive compensation may be considered unethical. It is appropriate to ask for compensation that is commensurate with the expertise, time, and effort required for preparing and providing responsible testimony. Common factors considered in valuing expert testimony include calculating the amount earned if the pediatrician, pediatric medical subspecialist, or pediatric surgical specialist saw patients in the office or performed surgery that day; the difficulty in preparing the case; and the dearth of appropriate experts in a specific field. Additionally, written expert witness agreements often include a fee schedule for depositions and in-court testimony, a cancellation policy, out-of-pocket expenses (eg, travel costs, car rental, hotel, food, parking, etc), research, printing, postage and express packages, preparation time, the retaining counsel's fee payment responsibility, and interest for overdue accounts.¹⁵

It is unethical to charge unreasonable rates or to exaggerate the time required to prepare expert testimony. It is also unethical for remuneration to be contingent on the outcome of the case.

LEGAL AND ETHICAL STANDARDS OF TESTIMONY

The judge acts as the gatekeeper in deciding the qualifications of the expert as well as the relevance and reliability of the testimony. The 2 main standards used by judges in determining relevance and reliability are referred to as the *Daubert* and *Frye* standards.^{16,17} The *Daubert* standard (expanded in later cases known as *Joiner*¹⁸ and *Kumho*¹⁹) was established by the US Supreme Court in the 1993 case *Daubert v Merrell*

Dow Pharmaceuticals Inc. This standard is used in federal courts and has been adopted by many states for use in state courts. Under *Daubert*, the judge is tasked as the gatekeeper for determining whether expert testimony is both relevant and reliable. The *Daubert* court offered 4 guidelines a judge may, but need not, use in assessing the reliability of testimony:

1. whether the expert's theory or technique can be (or has been) tested (aka, "falsifiability");
2. whether the theory or technique has been subjected to peer review or publication;
3. the known or potential error rate of the theory; and
4. whether there is general acceptance in the relevant scientific community.

The latter guideline, "general acceptance," is at the core of the *Frye* standard of expert testimony. This standard, established more than 80 years ago, is still the standard used in some states. Other states use a hybrid of the *Daubert* and *Frye* standards.

Under the *Daubert* standard, trial judges are to focus on the reasoning or scientific validity of the methodology, not the conclusion generated. Once the judge permits expert testimony to be admitted into evidence, it is the jury's role to determine the "weight" (or importance) to be ascribed to that testimony. The *Daubert* court noted that challenges to questionable testimony are to be contested via cross-examination and the presentation of contrary evidence. The effect of the *Daubert* decision in reducing "junk science" from being admitted into evidence continues to be debated.²⁰ The importance of standards for admissibility of expert testimony at the trial level is underscored by the fact that appellate courts can only consider an "abuse-of-discretion" standard in reviewing a trial judge's decision to

admit or exclude expert testimony (ie, defers to the trial judge's rulings unless overtly erroneous). Critics have voiced concern over judicial discretionary power in admitting experts, because some judges lack the requisite scientific or medical background to interpret potentially complex medical issues.²¹

Although *Daubert* has superseded *Frye* in most jurisdictions, some jurisdictions still use the *Frye* standard. *Frye* provides that expert opinion based on a scientific technique is admissible only where the technique is generally accepted as reliable in the relevant scientific community.

Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this gray zone, the evidential force of the principle must be recognized, and although the courts will go a long way in admitting experimental testimony deduced from a well-recognized scientific principle or discovery, the deduction made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.¹⁶

Attorneys may request experts to state that their testimony is being given "within a reasonable degree of medical certainty."²² This rubric is not universally defined and has been interpreted differently by different courts.²³ Also, it is not a standard required in all jurisdictions.²⁴ Ideally, expert witnesses are not advocates for the side that retains them. Rather, they are advocates for their unbiased opinion, which is derived from facts and evidence-based medicine.

The pivotal factor in civil and criminal cases is the integrity of the expert witness testimony. Reliable, objective, and accurate, it provides truthful analysis of the medical information. Regrettably, not all medical experts testify within

these boundaries.²⁵ In a study of expert witnesses in lawsuits against neurologists over a 10-year period, significant errors of fact or interpretation and incorrect statements were noted to be common.²⁶ The medical community has long been aware that not all experts testify within scientific standards and ethical guidelines.²⁷ However, more research is needed to determine how pervasive improper expert testimony is in the legal process. It seems that a small cadre of physicians provide a disproportionate percentage of expert testimony in cases and that there may be suboptimal expertise and possible bias in testimony.²⁸

A study of neurologic birth injury litigation found that the majority of expert testimony in this controversial area is provided by a group of less than 100 physicians. These physicians served in nearly 90% of the sampled trials and consistently for the same side (eg, plaintiff or defendant).²⁹

Similar concerns have pervaded the child maltreatment arena.³⁰ Child maltreatment cases, whether adjudicated in the civil or criminal realm, can be emotionally charged cases. In some circumstances, pediatricians have forged strong relationships with their patient families. A natural consequence is that pediatricians develop a strong emotional bond to a patient's family and may permit that emotional bias to confound the diagnostic decision-making process.³¹ Given the significant outcomes of civil and criminal proceedings in these cases, it is important to remain especially vigilant of any emotional bias in the assessment of child maltreatment cases.

Secondary to bias and other factors, experts have proffered various unproven theories as valid scientific diagnoses in child maltreatment cases, especially in abusive head trauma cases.³² When testifying,

experts should refrain from "taking one side or the other," and avoid espousing hypotheses that are unsupported by strong, evidence-based medical literature. The ethics of responsible expert testimony require pediatricians to be objective assessors and conveyors of medical information. Clearly, pediatrician expert witnesses need to approach their opinion on the diagnosis of child abuse with the same thoughtful, intelligent, and objective approach that they bring to any other diagnosis.

LEGAL CONCEPTS AND PROCESSES

Definition of Medical Malpractice

Medical malpractice law is based on concepts drawn from tort and contract law. It is commonly understood as liabilities arising from the delivery of medical care. Causes of action can be based on negligence, insufficient informed consent, intentional misconduct, breach of a contract (ie, guaranteeing a specific therapeutic result), defamation, divulgence of confidential information, or failure to prevent foreseeable injuries to third parties.

Medical negligence is the predominant theory of liability in medical malpractice actions. According to *Black's Law Dictionary*, negligence is defined as "the failure to exercise the standard of care that a reasonably prudent person would have exercised in a similar situation."³³

To establish negligence, the plaintiff must prove all of the following elements:

1. the existence of the physician's duty to the plaintiff, usually based on the existence of the physician-patient relationship;
2. the applicable standard of care and its violation (ie, breach of the duty);

3. damages (a compensable injury); and
4. a legal causal connection between the violation of the standard of care and the injury.

In a medical malpractice case, experts may be asked to provide an opinion about one or all of these elements of a malpractice case. It is important not to testify about all of these elements if they are not within the pediatrician's area of expertise (eg, it may not be appropriate for a pediatrician to testify about whether a cesarean delivery should have been performed to prevent a brachial plexus injury).

Besides negligence, a medical malpractice lawsuit also may include an allegation of insufficient informed consent. Informed consent includes a discussion with a noncoerced patient or parent who has decision-making capacity.³⁴ The discussion should include the benefits versus the risks of proposed and alternative tests or treatments and the option of no treatment. In some jurisdictions, an informed consent claim is a derivative of a negligence claim and requires that a physician have done something inconsistent with prevailing practice standards. In other jurisdictions, the lack of informed consent is a claim discrete from medical malpractice, and a valid claim may be alleged whether the physician gave appropriate care. Inadequate informed consent may be the basis of a civil tort even if the care provided by the physician was consistent with the standard of care. When insufficient informed consent is an aspect of the case, the expert needs to be familiar with the standards of informed consent in the particular state involved. There are 2 main standards of providing informed consent that have been implemented by either judicial decision or statute: the "reasonable-patient" standard and the "reasonable-physician" standard (also known as "community" or

“professional” standard).³⁵ In the former standard, the physician must disclose the treatments and risks that a reasonable patient/person would want disclosed to make an informed medical decision. In the latter standard, the physician must disclose the treatments and risks that a reasonable physician would disclose to the patient. In both circumstances, the jury or trier of fact determines whether the standard has been satisfied, and expert testimony is usually helpful. In some circumstances in some jurisdictions, failure to obtain informed consent can result in a claim of “battery” (intentional, unauthorized touching of a person).³⁶

Determining the Standard of Care

In the law of negligence, the standard of care is generally thought of as “that degree of care which a reasonably prudent person should exercise in same or similar circumstances.”³¹ If the defendant’s conduct falls outside the standards, then he or she may be found liable for any damages that resulted from this conduct.

In medical negligence cases, the defendant’s medical decision-making and practice are compared with the applicable standard of care. Generally, this is understood to be the “reasonable and ordinary care, skill, and diligence” that physicians and surgeons “in good standing and in the same general line of practice” ordinarily exercise in similar circumstances.³⁷ Many courts have held that the increased specialization of medicine and the establishment of national board certifications are more significant factors than geographic differences in establishing the standard of care.³⁸ These courts contend that board-certified medical or surgical specialists should adhere to standards of their respective specialty boards (ie, a national standard). However, one criticism of this specialty-based standard is that it does not account for variances in

resources in rural and underserved communities or for variances in access to specialized health care facilities. Thus, some jurisdictions continue to use a “locality” standard—a standard in which the physician is held to the standards of like physicians in the same (or similarly-situated) community.³⁹ Along that vein, some states require out-of-state experts to demonstrate familiarity with the “local” standard of care.⁴⁰

Role of the Expert Witness in Malpractice Proceedings

In medical liability cases, the role of the expert witness is often twofold:

1. to establish the standard of care applicable to the case at issue; and
2. to opine as to whether there has been any deviation from acceptable standards.

When care has been deemed “substandard,” the expert witness may be asked to opine whether that deviation from the standard of care could have been the proximate (ie, legal) cause of the patient’s alleged injury.

Because courts and juries depend on medical experts to make medical standards understandable, the testimony should be clear, coherent, and consistent with the standard applicable at the time of the incident. Although experts may testify as to what they think the most appropriate standard of care was at the time of occurrence, alternatives to this standard of care may be raised during direct testimony or under cross-examination. The standard of care needs to be expressed broadly enough, such that it allows for variability in clinical actions/decisions. It is important that expert witnesses not consider new evidence, guidelines, or studies that were not available to the treating physicians at the time of the occurrence. Expert witnesses should not define the standard so narrowly that it only

encompasses their opinion on the standard of care to the exclusion of other acceptable or reasonable diagnostic or treatment options available at the time of the incident.

Medical Error or Medical Negligence

The Institute of Medicine’s sentinel report on medical errors, *To Err Is Human: Building a Safer Health System*,⁴¹ provides a helpful framework for understanding the many factors involved in medical interventions and how their permutations can affect patient outcome. Whenever a medical intervention is undertaken, several outcomes can occur: the patient’s condition can improve, stay the same, or deteriorate. These same outcomes are possible even when the medical treatment is performed properly. A negative outcome alone is not sufficient to indicate professional negligence. It is often necessary to be prepared to educate the trier of the case (either jury or judge) that negligence cannot be inferred solely from an unexpected result, a bad result, failure to cure, failure to recover, or any other circumstance that shows merely a lack of success.

Burden of Proof

In a medical malpractice case, the plaintiff bears the burden of proof and must convince a jury that all elements of a malpractice action have been met by a preponderance of the evidence. *Black’s Law Dictionary* defines preponderance of the evidence as “the most convincing force” or “superior evidentiary weight.”³³ Typically, the jury is instructed to find for the party that, on the whole, has the stronger evidence, however slight the edge might be.³¹ Traditionally, this is thought of as “more than 50% likely.” Thus, jurors in a medical malpractice case must be persuaded that the evidence presented by the plaintiff is more plausible than any counterargument offered by the defendant.⁴² The plaintiff and

defense attorneys will present their respective experts, each side hoping their witnesses will appear more knowledgeable, objective, and credible than their counterparts.

In criminal cases, the prosecutor bears the burden of proof, and guilt of a particular crime must be proven by a much higher standard: beyond a reasonable doubt. What constitutes "reasonable doubt" is a nebulous determination that lies within the province of the jury/trier of fact.³¹ Some states and federal jurisdictions have held that constitutional due process requires a jury instruction explaining what reasonable doubt is; some have not.

Role of the Expert in Criminal Cases

Pediatricians often serve as experts in criminal cases of alleged child abuse and neglect. The types of criminal child maltreatment cases in which a pediatrician may be called to provide expert testimony include abusive head trauma, child sexual abuse, starvation/torture, intentional burns, abdominal trauma, multiple fractures/battered child syndrome, and Munchausen syndrome by proxy/medical child abuse. In criminal cases, unlike civil cases, the prosecution must prove the case beyond a reasonable doubt. The pediatrician's involvement may include pretrial hearings, in which the relevance and reliability of proffered testimony will be evaluated (also known as *Daubert* or *Frye* hearings). In these cases, the pediatrician may be called on to educate the court about recognizing the presence of injuries, the general biomechanics of these injuries, likely ways particular injuries may present, date of injury, relevant medical diagnoses on the differential diagnosis, laboratory and radiologic results, and, ultimately, the opinion of whether the medical diagnosis of child physical or sexual abuse was reached or not. It is important for pediatricians to understand and

remember that although the burden of proof in criminal cases is beyond a reasonable doubt, that is not the standard by which pediatricians are required to reach their medical diagnoses. As in civil cases, pediatricians are required to reach their diagnoses by medical standards of diagnostic sufficiency, not legal standards of proof. Attorneys may attempt to confuse pediatricians about this degree of sufficiency during cross examination.

As mentioned previously, because of the gravitas of the civil and criminal outcomes in these types of cases, pediatricians who are inexperienced in evaluating children suspected of abuse or neglect need to be cautious of providing expert testimony in those matters. The new subspecialty of child abuse pediatrics, acknowledged by the AAP and certified by the American Board of Pediatrics, sets high standards for professional competence and conduct in this area. However, pediatricians who are not board certified in child abuse pediatrics still may be called to testify as experts in cases of abuse and neglect, especially if they have special knowledge and/or extensive experience in the field. If a general pediatrician feels uncomfortable in testifying in these cases, he or she may wish to consult with subspecialists in child abuse pediatrics.

Pretrial Expert Testimony

In medical malpractice, expert witness testimony may be used to evaluate the merits of a malpractice claim before filing legal action. Some states have enacted laws requiring that a competent medical professional in the same area of expertise as the defendant review the claim and be willing to testify that the standard of care was breached.⁴³ This may require the filing of an affidavit or certificate of merit that malpractice has occurred. Some states have deemed this system

unconstitutional, claiming that legitimate plaintiffs may be denied access to the legal system solely on procedural, rather than substantive, grounds.⁴⁴

Some states use review panels to prescreen medical malpractice cases. These panels typically consist of a physician, attorney, and lay representative. However, state laws that govern the timing and process for review panels can vary. Depending on the state, the review can take place before or after the claim has been filed. Review panel findings can be binding or nonbinding. The opinion of the review panel may or may not be admissible should the matter proceed to litigation. In cases involving newborn infants with neurologic impairment, experts may also be called to give testimony in states where Neurologic Injury Compensation Acts exist (eg, Florida,⁴⁵ New York,⁴⁶ and Virginia⁴⁷) to affirm whether the infant meets the standards of compensability of that statute. The future role of these panels has been questioned,⁴⁰ yet they remain in effect in 14 states.⁴⁸

Those seeking regulation of expert witness testimony have noted that the expert opinions provided during this early stage of the legal process are subject to even less scrutiny and accountability than later testimony provided later. Critics believe that the lack of oversight of experts during pretrial reviews has allowed too many nonmeritorious cases to proceed, thereby defeating the purpose of having pretrial reviews.⁴⁹

Expert Witnesses and the Discovery Process

The purpose of "discovery" is to identify all the facts related to the case. Discovery is applicable to both fact witnesses and expert witnesses and occurs in both civil and criminal cases. The deposition of key fact witnesses is an important facet of the discovery process in malpractice

cases. A deposition is a witness's recorded testimony given under oath while being questioned by attorneys for the parties in the case. Throughout the deposition process, attorneys gather information on what fact witnesses will say and assess the relative effectiveness of their testimony as well as their demeanor (eg, clarity, believability, arrogance, sincerity). Crucial decisions in determining the next phase of the case (eg, seeking a settlement, going to trial, moving for dismissal/summary judgment) often are based on the strength of the testimony.

Experts Can and Often Will Be Deposed

A discovery alternative to deposition testimony is the expert's written report. Written reports of the expert typically are shared between the parties before trial. However, some states do not require disclosure of the identity of the expert or even disclosure of the report. Many medical malpractice lawsuits that are resolved in favor of the plaintiff typically are settled during or at the conclusion of the discovery phase. In criminal cases, discovery of expert opinion usually is accomplished by pretrial interview with the expert witness or by an expert witness' written report. It is helpful when expert witnesses are willing to be available and to discuss their opinions with both sides in advance of their testimony. It is not advisable that physicians engage in the practice of having attorneys write their reports; however, in the unusual circumstance that this does occur, physician experts should read that statement carefully to verify that they agree with it fully.

Expert Testimony at Trial

Before providing expert testimony, the medical expert may experience additional scrutiny of his or her qualifications and bases for his or her expert opinion (ie, voir dire, a *Daubert* or *Frye* hearing, or other

pretrial motion). During this period of questioning, the expert will be asked about his or her educational background, current practice, board certifications, any relevant research or publications, membership and activity in professional societies, and previous court recognitions as an expert. The expert must be stringently honest about his or her credentials because they will be carefully checked by the "other side." In addition, the expert could be charged with perjury if he or she is not truthful under oath. The court may delve more closely into the specifics of the expert's rationale for his or her opinion. Because expert opinions presumably carry greater weight in the minds of the jury than lay opinions or fact witnesses, this scrutiny offers the court some greater assurance of reliability in the opinion to be offered before that designation of "expert."

Unique Factors in Pediatric Cases

In cases that reach trial, some authorities note that jurors generally can be effective in assessing expert testimony.⁵⁰ However, in civil cases involving children, some commentators have noted that other aspects of the proceedings, such as sympathy for the child, the gravity or severity of the injury, or altruistic motivations, may unduly influence triers of the case.^{51,52} For example, a jury might be influenced by the needs of a family with an infant with neurologic impairment or a ventilator-dependent teenager. Undoubtedly, patients who experience long-term consequences of injuries attributable to medical negligence should be appropriately and promptly compensated. However, the use of malpractice awards to compensate patients for adverse outcomes not caused by medical negligence is neither the intent nor the proper usage of the system. Assisting families of children with disabilities or injuries may seem

altruistic to the jury, but this is an inappropriate outcome without due regard to the physician's culpability for the injury. Objective expert witness testimony is needed to prevent such unjust outcomes.

IMPROVING THE QUALITY OF EXPERT TESTIMONY

Various branches of organized medicine and some state medical licensure boards have implemented programs to help curb unreliable medical expert testimony.⁵³ There are multiple strategies for regulating expert witness testimony. Historically, the principle of witness immunity has shielded experts from legal reprisal that is based on the nature of their testimony. To bring greater accountability to expert witness testimony in malpractice cases, some legal authorities have sought to have a distinction drawn between expert witnesses and fact witnesses.⁵⁴ These critics postulate that because experts testify voluntarily and receive significant compensation for their services, general witness immunity should not apply to them.

Education

Continuing medical education about the expert witness process is needed at all levels of the pediatric experience. Educating pediatric residents to be cognizant of the ethical obligation of pediatricians to participate in the legal process and have a rudimentary understanding of the guidelines of medicolegal participation is important.

In 2006, the AAP graduating resident survey revealed that only 25% of residents reported that their training program provided adequate education on the expert witness process.²⁸ Medical training programs have been criticized for failing to adequately respond to these results.⁵⁵

One strategy for improving education on this topic is to use false or unscientific testimony from closed cases for teaching purposes. This approach can be particularly effective when biased or false testimony presumably played an important role in the outcome of the case. Another strategy is the use of mock trials or simulated witness testimony scenarios in either the graduate medical education process or continuing medical education venues. As opposed to a more classic didactic method of learning, these experiential learning methods have been reported by learners to have a greater impact and are associated with higher memory retention.⁵⁶

Professional Medical Society Credentialing, Reviewing, and Enforcing Expert Testimony

Despite the critical importance of the expert witness, no uniform standards on the credentialing of experts currently exist. One specialty society has initiated a process to certify experts.⁵⁷ The American Society of General Surgeons (ASGS) has defined certification requirements for its members who desire to be “expert witnesses.” The ASGS has outlined the following minimal requirements for its members:

1. be a member in good standing in the ASGS;
2. abide by the oath of ethics of the ASGS, the fellowship pledge of the American College of Surgeons, the principles of medical ethics of the American Medical Association, and the oath of Hippocrates;
3. have comparable educational, training, and practice experience in the same aspects of general surgery as the defendant/plaintiff physician;
4. have an active surgical practice and or teaching experience within 5 years of the date of the event giving rise to the medical–legal issue;

5. complete an ASGS-approved expert witness course that includes ethical guidelines, professional responsibility, and a thorough review of the tenets of impartial expert witness testimony; have 2 letters of recommendation attesting to the competency, honesty, professional, ethical, and moral character of the expert witness applicant; and be in good standing in the local and or medical community; and,
6. have 50 hours of category I continuing medical education every 2 years.

Other specialty organizations have endeavored to regulate the quality of expert testimony in different manners.⁵⁸ One organization that has been more progressive in the regulation of expert testimony by its members is the American Association of Neurologic Surgeons (AANS). In 1983, the AANS initiated a Professional Conduct Committee whose originating purpose was to evaluate potential violations of the organization’s code of ethics.⁵⁹ Around the same time, the AANS adopted guidelines on the provision of fair and impartial expert testimony. Thus, although not its original design, the conduct committee has been a powerful regulator of and enforcer against negligent expert testimony. To further this objective, the Professional Conduct Committee adopted a set of guidelines allowing the evaluation of unethical testimony in a manner that provided both justice and due process. Aware of the potentiality of legal action by members against the AANS, the work of the committee continued, deeming that the problems of ethics violations and irresponsible medical legal testimony outweigh the potential legal expenses associated with these challenges.

Legal Challenges

In one legal action, in 1991, a neurosurgeon, attempted to enjoin the AANS from charging him with unprofessional conduct in relation to malpractice testimony.⁶⁰ He asserted that only the courts were entitled to determine whether expert testimony was appropriate. The case was brought in New Jersey and appealed all the way to the New Jersey Supreme Court. In dismissing the case, the New Jersey Supreme Court found no impropriety on the part of the AANS and ruled that its procedural rules afforded its members with appropriate due process. In another action, the Professional Conduct Committee suspended another member for irresponsible testimony in a medical malpractice case. The member filed suit in the US District Court in Chicago, alleging that the AANS program violated public policy by discouraging physicians from testifying for plaintiffs in medical malpractice cases. The District Court granted summary judgment to the AANS, and the case was appealed to the Seventh Circuit Court of Appeals. In the Seventh Circuit Court’s decision in favor of the AANS, Judge Richard Posner stated that “this kind of professional self-regulation furthers, rather than impedes the cause of justice.”¹¹

The AANS Professional Conduct Committee is codified in the association’s *Procedural Guidelines of the Profession Conduct Committee*.⁵⁸ The process has evolved its procedures and practices over the past 30 years. Currently, its members are appointed by the AANS president and ratified by the Executive Committee. If a member of the AANS files a complaint against another member, the complaint is publicized to the respondent, who is entitled to submit his or her own response. The committee reviews all documents and decides whether to further pursue the issue. Cases are

dismissed ~35% of the time. The committee will not hear a complaint if there is pending litigation, but will reevaluate the issue when the litigation has concluded. If the committee determines that there has been unprofessional conduct, a hearing is scheduled, during which a court reporter documents the proceedings, and the respondent is entitled to counsel.

After testimony, the committee goes into executive session and makes a recommendation to the AANS Board of Directors. The potential actions include censure, suspension, or expulsion. If an adverse decision is made, the respondent can appeal to the Board of Directors or the general membership. Expulsions and suspensions are reportable to the National Practitioners Data Bank. Censure is reported on the AANS Web site and can be accessed by an institution or another member. Because the committee will not evaluate testimony in cases that are still active, there is no possible claim of harassment of a witness.

Although the AANS has been the most active, other professional medical societies have formed similar committees. These include the American College of Surgeons in 1988, the North American Spine Program in 2002, the American Academy of Neurology in 2002, the American College of Obstetricians and Gynecologists (ACOG) in 2002, the Congress of Vascular Surgery in 2004, the American Association of Orthopedic Surgery in 2005, and the American College of Cardiology in 2006.

Peer review processes by professional medical organizations are not without obstacles. The costs associated with these programs are not insignificant and can run into millions of dollars. They require a major commitment of staff (including legal staff) and volunteer resources. Additionally, despite previous case law validating these programs, the

potential of future lawsuits against the organization remains. As an example, in one case, an orthopedic surgeon provided a “draft” report of his expert opinion to a Pennsylvania law firm in a medical malpractice suit involving another orthopedic surgeon who was a defendant in a malpractice case.⁴² The expert witness had requested additional information, specifically, radiographs of the patient, to complete his expert opinion. The law firm did not supply the radiographs but used the draft report in settlement negotiations for the case. The surgeon, who was sued in the case, then filed a grievance against the expert witness with the American Academy of Orthopedic Surgeons (AAOS) for violation of the organization’s Standards of Professionalism on Orthopedic Expert Witness Testimony.⁶¹ It was during the preparation for the hearing regarding this grievance that the expert witness learned that the law firm had removed the heading “draft report” from the opinion he had provided during the settlement negotiations for the case.

The expert witness was suspended from the AAOS for 2 years. Information regarding the suspension was placed on the AAOS Web site and was available to the public. The expert witness then sued the law firm and the AAOS regarding the matter, claiming that his work as an expert had been negatively affected by dissemination of information of the suspension. A jury trial ended in a verdict in favor of the expert witness. The surgeon settled after the verdict for an undisclosed amount.

Based on the success of many professional medical societies in reviewing and enforcing their standards for expert testimony, this is a worthwhile endeavor for any national specialties society to undertake.

Reviewing at the State Level

Another manner in which expert testimony can be addressed is through the state boards of medicine. This has already occurred in some jurisdictions.

In *Fullerton v Florida Medical Association, Inc.*,⁶² an expert witness testified in a medical malpractice suit in which the defendant doctors were exonerated from liability after the judicial proceeding. The defendant physicians appealed to the Florida Medical Association (FMA) for review of the plaintiff expert’s testimony, alleging that it was below reasonable professional standards. Before providing an opinion, the FMA was sued by the plaintiff’s expert for defamation, tortious interference, and witness intimidation. A lower court found the FMA was immune to the lawsuit. On appeal, however, the appellate court held that a medical association is not immunized from liability in evaluating the testimony of a medical expert. Thus, the medical association can evaluate the testimony, but is not immune to litigation thereof. In another case, in 1997, the Washington State Supreme Court held that the State Board of Psychology could discipline a member who failed to meet professional ethical standards in rendering expert testimony in child custody cases. The defendant expert had asserted witness immunity in providing expert testimony. The court stated that a witness’ immunity in providing expert testimony did not extend to professional disciplinary hearings.⁶³ In 2002, the North Carolina Medical Board revoked a surgeon’s medical license for giving improper expert witness testimony in a medical malpractice suit. The surgeon appealed the state medical board’s decision all the way to the state supreme court. The North Carolina Supreme Court reversed the medical board’s decision on the grounds that the expert had rendered his opinions in good faith.⁶⁴ In

summary, these cases demonstrate that the case law on the authority and scope of state medical associations to discipline medical expert witnesses is inconclusive.

Promulgating Examples of Substandard Expert Testimony

A variant strategy for regulating or minimizing substandard expert testimony is the promulgation of samples of substandard expert testimony by professional medical societies. The American College of Emergency Physicians (ACEP) publicizes examples of false expert testimony as an educational exercise.⁶⁵ This program focuses on the expert's testimony concerning the standard of care and whether it was breached. If the testimony does not meet the ACEP criteria for accuracy, it is published in an ACEP communication vehicle typically without mentioning the name or any identifying information of the witness. The purpose of the program is to educate ACEP members, not to punish. At the request of an ACEP member, questionable testimony is reviewed by a 12-member medical expert standard of care review panel. If the medical literature contradicts the statement of the expert in question, a member of the committee develops an article describing the testimony given and why it does not accurately reflect the standard of care in emergency medicine at the time of the alleged incident.

Enacting State Eligibility or Compensation Requirements

Despite variability in different jurisdictions, another strategy for minimizing or preventing irresponsible testimony may be to impose eligibility or compensation restrictions by the state. Approximately 30 states had measures requiring minimum qualifying standards for physician experts.⁶⁶ Some states have proposed or enacted legislation

or regulations that tighten the qualifications for medical experts to more closely match those of the defendant physician (eg, geographic factors, specialty training, certification, percentage of time spent on direct patient care, etc).^{67,68}

Other preventive measures have included decreasing financial incentives for serving as an expert witness, which is especially applicable to witnesses who travel extensively to provide expert services. Examples have included recommending caps on the percentage of annual revenue that a medical expert can derive from testimony fees, or establishing fee schedules for expert witness testimony that are based on a set hourly rate determined to be reasonable or comparable to other medical consulting services. The medical profession has made it clear that it is unethical for expert witnesses to base their fees for testifying contingent on the outcome of the case.⁶⁹

Exploring Alternative Strategies

Another strategy for mitigating the effect of out-of-state experts is the use of court-appointed medical experts (permitted under FRE 706) and/or professional medical society-sponsored expert scientific panels.⁷⁰ At least one federal judge has suggested that judges may be more willing to use third-party experts if the experts were more easily accessible and their fairness and impartiality could be enforced by professional oversight and discipline.⁷¹ Additional proposals for improving the expert witness system have included specialized health courts⁷²; internal dispute-resolution processes within the hospital⁷³; standardizing and regulating expert medical case review, analysis, and testimony⁷⁴; adopting a "data-based standard of care in allegations of medical negligence"⁷⁵;

use of third-party experts⁷⁶; and encouraging academic institutions to be accountable for the testimony of their faculty members.⁷⁷

The number and diversity of remedies speak to the level of concern surrounding the persistent problem of unreliable expert testimony.

Using Expert Witness Affirmations

To uphold high professional standards, a growing number of professional medical societies (eg, ACOG, American Urological Association, AAOS, ACEP, American Academy of Ophthalmology, American College of Cardiology, American College of Radiology) have gone beyond the mere pronouncement of appropriate behavior for expert witnesses and have enacted "expert witness affirmations."

These voluntary statements are documents by which members affirm their ethical obligations when providing expert witness testimony. The physician pledges that he or she will uphold professional principles in providing expert testimony, consistent with the ethical tenets of the authoring organization. Because many experts list their membership in a specialty society as part of their qualifications to testify, it is reasonable for these organizations to provide such affirmations.⁷⁸ In addition, some medical organizations include a provision in their affirmation that expert witnesses will submit their testimony to peer review, if requested.⁷⁹ Although many of the professional societies imposing this requirement in their affirmations have professional conduct programs, such provisions can be included when the affirmation statement is voluntary and in organizations without review programs.

An important benefit of expert witness affirmation statements

is that attorneys can use these statements to bolster the credibility of experts. Conversely, they may dissuade lawyers from calling experts who are unwilling or ineligible to sign an affirmation statement. Affirmation statements can also be used to impeach experts who fail to abide by the terms.

Recommendations on advocacy, education, research, qualifications, standards, and ethical business practices all aimed at improving expert testimony are found in a companion policy statement titled "Expert Witness Participation in Civil and Criminal Proceedings."⁶

LEAD AUTHORS

Stephan R. Paul, MD, JD, FAAP
Sandeep K. Narang, MD, JD, FAAP

COMMITTEE ON MEDICAL LIABILITY AND RISK MANAGEMENT, 2014–2015

William M. McDonnell, MD, JD, FAAP, Chairperson
Robin L. Altman, MD, FAAP
Steven A. Bondi, JD, MD, FAAP
Jon Mark Fanaroff, MD, JD, FAAP
Sandeep K. Narang, MD, JD, FAAP
Richard L. Oken, MD, FAAP
John W. Rusher, MD, JD, FAAP
Karen A. Santucci, MD, FAAP
James P. Scibilia, MD, FAAP
Susan M. Scott, MD, JD, FAAP

FORMER MEMBERS OF THE COMMITTEE

Jay P. Goldsmith, MD, FAAP
Stephan R. Paul, MD, JD, FAAP

STAFF

Julie Kersten Ake

ABBREVIATIONS

AANS: American Association of Neurologic Surgeons
AAOS: American Academy of Orthopedic Surgeons
AAP: American Academy of Pediatrics
ACEP: American College of Emergency Physicians
ASGS: American Society of General Surgeons
FMA: Florida Medical Association
FRE: Federal Rules of Evidence

POTENTIAL CONFLICT OF INTEREST: The authors have indicated they have no potential conflicts of interest to disclose.

COMPANION PAPER: A companion to this article can be found online at www.pediatrics.org/cgi/doi/10.1542/peds.2016-3862.

REFERENCES

1. American Academy of Pediatrics, Committee on Medical Liability. Guidelines for expert witness testimony. *Pediatrics*. 1989;83(2):312–313
2. American Academy of Pediatrics, Committee on Medical Liability. Guidelines for expert witness testimony in medical liability cases (S93-3). *Pediatrics*. 1994;94(5):755–756
3. Council of Medical Specialty Societies. *Statement on Qualifications and Guidelines for the Physician Expert Witness*. Lake Bluff, IL: Council of Medical Specialty Societies; 1989
4. Committee on Medical Liability. American Academy of Pediatrics. Guidelines for expert witness testimony in medical malpractice litigation. *Pediatrics*. 2002;109(5):974–979
5. American Academy of Pediatrics, Committee on Medical Liability. Guidelines for expert witness testimony in civil and criminal proceedings. *Pediatrics*. 2009;124(1):428–438
6. American Academy of Pediatrics, Committee on Medical Liability and Risk Management. Expert witness participation in civil and criminal proceedings. *Pediatrics*. 2017;139(3):e20163862
7. Legal Information Institute. Federal Rules of Evidence. Available at: www.law.cornell.edu/rules/fre. Accessed October 9, 2015
8. American Medical Association, Council on Ethical and Judicial Affairs. E-6.01: Contingent physician fees. In: *Code of Medical Ethics*. Chicago, IL: American Medical Association; 1994
9. Fla Stat § 766.102(12) (2011). Title XLV-Torts; Chapter-766 Medical malpractice and related matters; 766.102-Medical negligence; standards of recovery; expert witness
10. Fla Stat. §458.3175 (2011). Title XXXII-Regulation of professions and occupations; Chapter 458-Medical practice; 458.3175-Expert witness certificate
11. *Seisinger v Siebel*, 203 P.3d 483 (Ariz 2009)
12. *Austin v American Association of Neurological Surgeons*, 253 F.3d 967 (7th Cir. 2001)
13. Cohen FL. The expert medical witness in legal perspective. *J Leg Med*. 2004;25(2):185–209
14. *Raju v Boylen, et al*, 05-60719 (5th Cir. 2006)
15. American Academy of Orthopaedic Surgeons, American Association of Orthopaedic Surgeons. Standards of professionalism. Orthopaedic expert opinion and testimony. Available at: www.aaos.org/member/profcomp/ewtestimony_May_2010.pdf. Accessed September 4, 2015
16. *Daubert v Merrell Dow Pharmaceuticals, Inc*, 509 US 579 (1993)
17. *Frye v United States*, 293 F 1013 (DC Cir 1923)
18. *General Electric Co v Joiner*, 522 US 136 (1997)
19. *Kumho Tire Co Ltd v Carmichael*, 526 US 137 (1999)
20. Kassirer JP, Cecil JS. Inconsistency in evidentiary standards for medical testimony: disorder in the courts. *JAMA*. 2002;288(11):1382–1387
21. Black B. The Supreme Court's view of science: has Daubert exorcised the certainty demon? *Cardozo Law Rev*. 1994;15(6):2129
22. Lewin JL. The genesis and evolution of legal uncertainty about "reasonable

- medical certainty.”. *MD Law Rev.* 1998;57:380–504
23. *Nunez v Wilson*, 507 P 2d 939 (1973)
 24. *Matott v Ward*, 48 NY2d 455 (1979)
 25. American Medical News. Expert witnesses on trial. August 1, 2011. Available at: <http://www.amednews.com/article/20110801/profession/308019938/4/>. Accessed January 19, 2017
 26. Weintraub MI. Expert witness testimony: a time for self-regulation? *J Child Neurol.* 1995;10(3):256–259
 27. Brent RL. The irresponsible expert witness: a failure of biomedical graduate education and professional accountability. *Pediatrics.* 1982;70(5):754–762
 28. Safran A, Skydell B, Ropper S. Expert witness testimony in neurology: Massachusetts experience. 1980–1990. *Neurol Chronicle.* 1992;2(7):1–6
 29. Donn SM. Medicolegal issues get short shrift in pediatric residency training. *AAP News.* 2006;27(7):16
 30. Narang SK. A Daubert analysis of abusive health trauma/shaken baby syndrome. *Houst J Health Law Policy.* 2011;11:505–633
 31. Jones R, Flaherty EG, Binns HJ, et al; Child Abuse Reporting Experience Study Research Group. Clinicians’ description of factors influencing their reporting of suspected child abuse: report of the Child Abuse Reporting Experience Study Research Group. *Pediatrics.* 2008;122(2):259–266
 32. Narang SK, Melville JD, Greeley CS, Anderst JD, Carpenter SL, Spivack B. A Daubert analysis of abusive health trauma/shaken baby syndrome—Part II: an examination of the differential diagnosis. *Houst J Health Law Policy.* 2013;13:203–327
 33. Garner BA, ed. *Black’s Law Dictionary*, 10th ed. Eagan, MN: Thomson-West Publishing Co; 2014
 34. American Academy of Pediatrics, Committee on Bioethics. Informed consent, parental permission, and assent in pediatric practice [published statement of reaffirmation appears in *Pediatrics.* 2011;119(2):405]. *Pediatrics.* 1995;95(2):314–317
 35. Kinderman KL. *Medicolegal Forms with Legal Analysis: Documentation Issues in the Physician-Patient Relationship.* Chicago, IL: American Medical Association; 1999:120–121
 36. *Blanchard v Kellum*, 975 SW2d 522 (Tenn 1998)
 37. West JC. Medical malpractice/ battery. Various causes of action available in ‘ghost surgery’ case. *Meyers v Epstein*, 282 F. Supp. 2d 151 (S. D. N. Y. 2003). *J Healthc Risk Manag.* 2004;24(1):31–32
 38. *Grondin V Curi*, 262 Conn 637 (2003)
 39. Lewis MH, Gohagan JK, Merenstein DJ. The locality rule and the physician’s dilemma: local medical practices vs the national standard of care. *JAMA.* 2007;297(23):2633–2637
 40. *Dulaney v St. Alphonsus Regional Medical Center*, 137 Idaho 160, 163, 45 P.3d 816, 819 (2002)
 41. Institute of Medicine, Committee on Quality of Health Care in America. Kohn LT, Corrigan JM, Donaldson MS, eds. *To Err Is Human: Building a Safer Health System.* Washington, DC: National Academies Press; 2000
 42. Mackauf SH. Neurologic malpractice: the perspective of a patient’s lawyer. *Neurol Clin.* 1999;17(2):345–353
 43. *Graboff v American Academy of Orthopedic Surgeons et al.* No. 2:2010cv01710 - Document 169 (E.D. Pa. 2013)
 44. Kaufman NL. The demise of medical malpractice screening panels and alternative solutions based on trust and honesty. *J Leg Med.* 2007;28(2):247–262
 45. Florida Birth-Related Neurological Injury Compensation Plan. Fla. Stat. Ann. 766.303, Title XLV (2015). Available at: www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0700-0799/0766/Sections/0766.303.html. Accessed October 9, 2015
 46. New York State Medical Indemnity Fund. Title 4 (2999-G–2999-J). Available at: www.health.ny.gov/regulations/medical_indemnity_fund/docs/medical_indemnity_fund_bill.pdf. Accessed October 9, 2015
 47. Virginia Birth-Related Neurological Injury Compensation Act. §38.2-5000-5021 (1987). Available at: <http://law.lis.virginia.gov/vacodepopularnames/virginia-birth-related-neurological-injury-compensation-act/>. Accessed October 9, 2015
 48. American Medical Association, Advocacy Resource Center. State laws chart I: liability reforms 2015. Available at: www.ama-assn.org/resources/doc/arc/x-pub/state-laws-chart-1.pdf. Accessed September 4, 2015
 49. McAbee GN. Expert medical testimony: responsibilities of medical societies. *Neurology.* 2005;65(2):337, author reply 337
 50. Vidmar N. Expert evidence, the adversary system, and the jury. *Am J Public Health.* 2005;95(Suppl 1):S137–S143
 51. Studdert DM, Mello MM. When tort resolutions are “wrong”: predictors of discordant outcomes in medical malpractice litigation. *J Legal Stud.* 2007;36(S2):S47–S78
 52. Kesselheim AS, Studdert DM. Characteristics of physicians who frequently act as expert witnesses in neurologic birth injury litigation. *Obstet Gynecol.* 2006;108(2):273–279
 53. Marcovitch H. Some relief for expert witnesses. *Arch Dis Child.* 2007;92(2):102–103
 54. *Murphy v AA Mathews*, 841 SW 2d 671 (Mo banc 1992)
 55. Grupp-Phelan J, Reynolds S, Lingl LL. Professional liability of residents in a children’s hospital. *Arch Pediatr Adolesc Med.* 1996;150(1):87–90
 56. Gilbert WM, Fadjo DE, Bills DJ, Morrison FK, Sherman MP. Teaching malpractice litigation in a mock trial setting: a center for perinatal medicine and law. *Obstet Gynecol.* 2003;101(3):589–593
 57. American Society of General Surgeons. Expert witness certification program. Available at: www.theasgs.org/education/education3.html. Accessed October 9, 2015
 58. Kesselheim AS, Studdert DM. Role of professional organizations in regulating physician expert witness testimony. *JAMA.* 2007;298(24):2907–2909

59. Blacket WB, Pelton RM. Two disciplinary actions announced: American Academy of Neurology approves four PCC recommendations. *AANS Bull.* 2006;15(2):36–37
60. *Jacobs v American Academy of Neurological Surgeons*, No. A-2894-91T5 (NJ Super. Ct. App. Div. November 18, 1992)
61. *Graboff v The American Association of Orthopaedic Surgeons*; American Academy of Orthopaedic Surgeons, D.C. No. 2-12-cv-05491 (2014)
62. *Fullerton v Florida Medical Association*, 938 So.2d 587, Fla. Dist. Ct. App., 1st Dist (2006)
63. *Deatherage v Board of Psychology*, 435 85 Wn. App. 434, 932 P.2d 1267 (1997)
64. *Lustgarten*, 629 S.E.2d 886, N.C. App. (2006)
65. American College of Emergency Physicians. Medical legal standard of care review program. Available at www.acep.org/content.aspx?id=32142. Accessed October 9, 2015
66. American Medical Association, Advocacy Resource Center. State laws chart II: liability reforms 2015. Available at: www.ama-assn.org/resources/doc/arc/x-pub/state-laws-chart-2.pdf. Accessed September 4, 2015
67. Gomez JCB. Silencing the hired guns: ensuring honesty in medical expert testimony through state legislation. *J Leg Med.* 2005;26(3):385–399
68. Kan Stat Ann §60-3412 (2005)
69. American Medical Association. AMA code of ethics policy H-265.993. In: *AMA Policy Compendium*. Chicago, IL: American Medical Association; 1998, reaffirmed, 2000
70. Robertson GT. Blind Expertise. *New York Univ Law Rev.* 2010;85(1):174–188
71. Weinstein J. Improving expert testimony. *Univ Richmond Law Rev.* 1986;20(3):473–497
72. Mello MM, Studdert DM, Kachalia AB, Brennan TA. “Health courts” and accountability for patient safety. *Milbank Q.* 2006;84(3):459–492
73. Boothman RC. Apologies and a strong defense at the University of Michigan Health System. *Physician Exec.* 2006;32(2):7–10
74. Guha SJ. “Fixing” medical malpractice. One doctor’s perspective of a non-system in need of national standardization. *N C Med J.* 2000;61(4):227–230
75. Meadow W, Lantos JD. Expert testimony, legal reasoning, and justice. The case for adopting a data-based standard of care in allegations of medical negligence in the NICU. *Clin Perinatol.* 1996;23(3):583–595
76. Rosenbaum JT. Lessons from litigation over silicone breast implants: a call for activism by scientists. *Science.* 1997;276(5318):1524–1525
77. Dodds PR. The plaintiff’s expert. *Conn Med.* 1999;63(2):99–101
78. Freeman JM, Nelson KB. Expert medical testimony: Responsibilities of medical societies. *Neurology.* 2004;63(9):1557–1558
79. Milunsky A. Lies, damned lies, and medical experts: the abrogation of responsibility by specialty organizations and a call for action. *J Child Neurol.* 2003;18(6):413–419

Expert Witness Participation in Civil and Criminal Proceedings

Sandeep K. Narang, Stephan R. Paul and COMMITTEE ON MEDICAL LIABILITY AND RISK MANAGEMENT

Pediatrics 2017;139;; originally published online February 20, 2017;

DOI: 10.1542/peds.2016-4122

Updated Information & Services	including high resolution figures, can be found at: /content/139/3/e20164122.full.html
References	This article cites 41 articles, 12 of which can be accessed free at: /content/139/3/e20164122.full.html#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): Committee on Medical Liability and Risk Management /cgi/collection/committee_on_medical_liability_and_risk_management Administration/Practice Management /cgi/collection/administration:practice_management_sub Medical Liability /cgi/collection/medical_liability_sub
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: /site/misc/Permissions.xhtml
Reprints	Information about ordering reprints can be found online: /site/misc/reprints.xhtml

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2017 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Expert Witness Participation in Civil and Criminal Proceedings

Sandeep K. Narang, Stephan R. Paul and COMMITTEE ON MEDICAL LIABILITY
AND RISK MANAGEMENT

Pediatrics 2017;139;; originally published online February 20, 2017;
DOI: 10.1542/peds.2016-4122

The online version of this article, along with updated information and services, is
located on the World Wide Web at:
</content/139/3/e20164122.full.html>

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2017 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

