

Medicolegal Expert Core Competencies and Professionalism

Michel Lacerte, MDCM, MSc, FRCPC, CCRC, DESS, CVRP(D)

KEYWORDS

• Forensic psychiatry • Medicolegal expert • Core competencies • Professionalism

KEY POINTS

- Most civil claims encountered by psychiatrists pertain to personal injury litigation arising from an accident, medical malpractice, or from workers' compensation claims.
- In civil cases, assessment of personal injury damages, causation, and future medical needs relies heavily on expert evidence.
- Performing independent medicolegal evaluation and report writing involves far more than doing a clinical evaluation and organizing the content using a report format and a particular style proffered to the court.

INTRODUCTION

In the North American context, psychiatrists are commonly asked to provide their medicolegal opinions on a wide scope of issues. As medicolegal experts or simply experts, they must learn to change their work process and product from the clinical setting to the relevant legal contextual framework and mandate. To accomplish this transition, physicians must acquire a medicolegal mindset. Although technically the duty to admit and weigh the evidence falls to a judge¹ and/or a jury, the reality is that most civil claims settle out of court. Medicolegal and scientific evidence that has been developed and communicated effectively and accurately will probably never have its day in court.

In this culture of complaints,^{2,3} physicians enter the uncomfortable world of legal dispute and find themselves subjected to close scrutiny and potential liability. Virtues such as courage and resilience are frequently needed to enter and remain in this litigious world where widespread insurance fraud is often the forgotten reality. In her classic book on junk science, Marcia Angell wrote, "With the astonishing explosion of scientific knowledge over the last century, and particularly in the last 50 years,

Disclosure: The author has nothing to disclose.

Department of Physical Medicine and Rehabilitation, Western University, Box 10, Lambeth Station, London, Ontario N6P 1P9, Canada

E-mail address: mlacerte@uwo.ca

Phys Med Rehabil Clin N Am ■ (2019) ■-■

<https://doi.org/10.1016/j.pmr.2019.03.010>

1047-9651/19/© 2019 Published by Elsevier Inc.

pmr.theclinics.com

expert testimony has become increasingly important in the courts. In particular, there are few product liability suits in which expert testimony is not central.”⁴ A poor medicolegal report or weak expert testimony leads to dissatisfaction and creates distrust toward experts. Analogous to medicine’s complicity with big pharma,⁵ some medicolegal experts choose to testify regarding theories supported simply by their experience, which represents self-interest and/or an advocacy position rather than a generally accepted scientific standard or evidence. Judges and juries must consider potential financial conflicts of interest when assessing scientific testimony.⁶ Although the presence of such financial conflicts is not in itself predictive of bias, such information must nevertheless be carefully considered by the court.

Most civil claims encountered by physiatrists pertain to personal injury litigation arising from an accident, medical malpractice, or from workers’ compensation claims, and this is the focus of this article. In civil cases, assessment of personal injury damages, causation, and future medical needs relies heavily on expert evidence. The American College of Physicians recognized the importance of this and the general lack of medicolegal expertise training for physicians.⁷ Although such training is commonplace in European medical schools, the Université de Montréal is the only North American university offering a comprehensive diploma training program in insurance medicine and medicolegal expertise. North American medicolegal training offered by professional organizations is limited to only a few technical aspects, such as report writing,⁸ expert witnessing, and training in the use of permanent impairment rating schedules such as the American Medical Association (AMA) Guides to the Evaluation of Permanent Impairment.

Performing independent medicolegal evaluation and report writing involves far more than doing a clinical evaluation and organizing the content using a report format and a particular style proffered to the court. This article provides an overview of the core competencies of the medicolegal mindset or *état d’esprit* required by medicolegal experts to produce opinion evidence and succeed in providing solid expert witness testimony.

MEDICOLEGAL CORE COMPETENCIES

Medicolegal Mindset

Before entering the medicolegal minefield and acquiring any medicolegal core competencies, clinicians must first and foremost be recognized as clinical, rehabilitation, or research experts by their peers. To be qualified as an expert in any field by the court, clinicians must possess expertise or special knowledge in a given specific field by the way of education, training, experience, teaching, research, publications, awards, and so forth.

The importance for the physiatrist to accept only mandates that match the qualifications or special knowledge needed by the court cannot be overemphasized. Experts should expect that their professional credentials will be challenged. They should be prepared to justify that they have the necessary qualifications and experience to provide expert testimony on the matter in dispute.

The first hurdle consists of being qualified as an expert by the court. At this stage, the opposing party will try to prevent the expert from testifying or to limit the scope of the proposed testimony. The second hurdle consists of putting to the test the expert’s evidence or testimony. The experts will have to present and justify all their opinions on the relevant issues in an evidence-based, clear, logical, succinct, persuasive, and defensible manner.

Failing, on even just one occasion, to show an adequate understanding of the roles and duties (eg, being impartial and not advocating) and competence in report writing

or to properly address the subject of the case, may not only be prejudicial to the proceedings but could also result in a claim for damages for professional negligence. Such professional negligence puts a quick end to a medicolegal practice as it will spread as a brush fire within the legal community. Such an expert would be viewed as toxic in the legal community for years to come.

To achieve professional competence as an expert, psychiatrists must adopt a mode of thinking or medicolegal mindset that goes far beyond the clinic. In reference to this mode of thinking, Eyre and Alexander⁹ have coined the term medicolegal mind. Psychiatrists must understand the legal context that they are entering, the nature of the claim, the types of damages at issue, and the rules of civil procedure that regulate the civil litigation process and corresponding duties and roles of the expert.

The fundamental purpose of expert evidence is to help the court assess the validity of a civil claim and the quantum of damages to be awarded. To meet this mandate, the experts must follow the federal, state, or local rules of evidence. They must apply, in every case, the civil standard of proof and the appropriate legal tests by providing scientific and medical evidence that will be deemed admissible according to court decisions such as the Daubert trilogy in the United States.

LEGAL CONTEXTUALITY

The core competency that differentiates high-quality experts from their peers is a clear understanding of the legal contextuality of a civil claim for damages for personal injury. The rules of civil procedure and rules of evidence not only affect the instructions given by lawyers to their experts but also the nature and quality of evidence that the experts prepare for the court.

Medical and Legal Terminology

The experts must understand that a simple word, such as the word accident, found in many statutes, can be defined differently within the same jurisdiction and between jurisdictions. The same observation applies for words such as consent, injury, impairment, and disability. Furthermore, contract language, such as in a disability insurance policy, provides the legal definition of total disability for the purpose of contractual indemnification. Case law sets out how the courts have interpreted definitions. Retaining lawyers can assist by pointing to landmark decisions dealing with the definitions or issues at the heart of the dispute.

The United States courts provide a glossary of commonly used legal terms on their Web site: www.uscourts.gov/glossary. The FindLaw Legal Dictionary also provides free access to definitions of legal terms: <https://dictionary.findlaw.com>. Black's Law Dictionary has been around for many years and is a very comprehensive reference for legal terms and common applications.¹⁰

Experts must write in a clear and understandable manner and provide the definitions when necessary because the legal community is generally unfamiliar with the medical jargon. Reference to a definition found in a medical dictionary or in the glossary of an authoritative text¹¹ is highly desirable to prevent any misunderstanding of terms that can have many meanings or definitions (eg, chronic pain syndrome and postconcussive syndrome). Experts should keep in mind that lawyers make their living in the interpretation of statutes, which sometimes focuses on a single word or definition.

Civil Claim: Legal Basis and Damages

The purpose of a civil claim arising out of a personal injury is to achieve financial compensation for what is referred to as damages. Civil litigation is therefore the

method of recovering damages for the plaintiff while the defendant attempts to be absolved from any liability or to limit the level of damages that must be paid. Sometimes there can be nonfinancial issues at stake, such as an apology or acceptance of responsibility by the defendant, but, primarily, it is about money. The litigation process is adversarial. Each side puts forward its case in the best light possible with the goal of obtaining a decision in its favor from the court. This process entails discrediting the other side by cross-examining its witnesses. The goal of each party's lawyer is not to be fair, but to win. Experts must remember that it is not their role to be an advocate and they must therefore be credible and fair in the eyes of the trier of fact.

Breach of duty

Acquiring an injury does not automatically result in damages. Liability for an award for damages is established only when the plaintiff proves, on the balance of probabilities, that the defendant's wrongful act or breach of duty has caused a tangible harm, loss, or injury to the plaintiff. In the tort system, in response to the plaintiff's complaint, petition, or other pleading, the defendant then files a responsive pleading denying some or all of the allegations and setting forth any affirmative facts in defense. In general, the defendant denies any or all of the following points:

- The existence of a legal duty owed to the plaintiff
- The duty has been breached
- Any injury, loss, or damage as a result of the breach of duty
- The nature and extent of the injury, loss, or damages

The defendant argues that the plaintiff was contributorily negligent (partly to blame for the damages resulting from the plaintiff's own acts or omissions). In addition, the defendant may assert that the plaintiff has failed to mitigate the losses/damages by not taking reasonable steps to minimize the loss and/or damage. Failure to seek or comply with medical and rehabilitation care and recommendations could result in further loss for which the defendant is not liable if the defendant can successfully argue this mitigation of damage doctrine.

To claim for damages, the injury, loss, or damage experienced by the plaintiff must be more than minimal or trivial. Medical evidence is required to establish whether the injury should be regarded as trivial.

The quantification of loss arising from an injury, particularly in more serious or catastrophic cases, generally requires the expertise of life-care planners. This topic has been addressed in an earlier issue.¹²

In most workers' compensation systems, a breach of a duty of care does not apply because they are no-fault systems. The injury or disease must nevertheless be found to be workplace related. By giving away the right to sue, workers are provided with income replacement and medical expenses. In some states, the workers are also provided rehabilitation benefits.

Causation

In every claim, the plaintiff must establish a causal relationship between the damages claimed and the action or breach of duty of the defendant or tortfeasor. The legal test used in tort to determine whether a defendant has breached a duty of care is the so-called but-for test. Whether the plaintiff has established the causal relationship between the tortious event and the injury complained of is assessed on a balance of probabilities. Medical evidence is essential to establish medicolegal causation between the injury and the breach of duty. Experts do not comment on liability except in medical negligence cases in which the issue is one of a professional standard of

care. Negligence is referred to as unintentional tort. J. Mark Melhorn and Marjorie Eskay-Auerbach's article, "[Determination of Medicolegal Causation](#)," in this issue addresses the subject of injury causation and excellent textbooks have addressed the subject of injury causation from a medical perspective.^{13,14} In industrial disease claims, the expert may be asked to use the material contribution or substantial factor test when there are multiple tortfeasors at fault.

Once the expert has addressed what injuries, if any, have been probably caused by the accident, the more complex task that follows consists of critically appraising each link (relationship and mechanism) of the causal chain between injury, impairment, activity limitations, and social participation restrictions. Contextual factors (personal and environmental) must also be considered.

Contextuality is the central issue when analyzing medically unexplainable disablement. The disproportionality or the lack of mechanism between the impairment and disablement (loss) must be analyzed carefully. For example, a plaintiff would not be expected to need a power-chair following a grade I whiplash-associated disorder. To that end, along with dealing with the range of expert opinion on the matter, a good starting point consists of addressing the concept of disability¹⁵ and the biopsychosocial determinants of disability, including secondary gains and losses,¹⁶ activity tolerance,¹⁷ and pain disability controversies.¹⁸ In an earlier issue,¹⁹ a medicolegal causal analysis model was proposed to address situations in which there are multiple or complex claims by explaining how to methodologically critically appraise the causal chain, sequence of events, and mechanisms.

Types of Claim for Damages and Quantum

Damages can be defined as the money that a defendant pays a plaintiff in a civil case if the plaintiff has won. The quantum refers to the amount of recovery for that loss. Damages may be awarded for pecuniary (financial) loss and nonpecuniary loss (pain, suffering, or loss of amenities of life), also referred to as general damages. In rare instances, punitive damages may be awarded to punish and deter future misconduct.

The most fundamental of all tort law principles is referred to as the restoration principle (*restitutio ad integrum*), which requires placing the plaintiff in the position the plaintiff would have enjoyed, no more or no less, if there had been no tortfeasor's breach of duty. To determine liability and damages, it must be determined to what extent the defendant's wrongful action worsened the plaintiff's preexisting status. Determining the status quo ante is crucial because it is the standard against which the loss is measured. An expert must determine whether there are any preexisting health and function issues as well as the impact of these preexisting health issues on the plaintiff's vocational and avocational activities.

The defendant cannot avoid liability associated with a loss partially attributable to a preexisting risk or vulnerability to harm (egg-shell or thin-skull legal doctrine) that is applied retrospectively. The second legal doctrine, referred to as the crumbling skull, applies the same reasoning prospectively. In a crumbling-skull situation, in spite of losses caused by the defendant's wrongful act, the defendant does not have to compensate for losses that the plaintiff would have suffered in any event from another causal factor (noncompensable losses).

The expert must also rule out or consider other coexisting or intervening causes or events contributing to the plaintiff's condition but for which the defendant is not liable.

Although the terms injury and loss are commonly used interchangeably, injury refers to physical, psychological, and property damage sustained by the plaintiff, whereas loss refers to nonpecuniary or adverse economic or pecuniary consequences of an injury (eg, loss of earning capacity, medical expenses). The purpose of relief or awards

in tort law is to compensate for losses, not injuries. The valuation of the pecuniary loss is basically a mathematical exercise in which the financial loss consequential to the injury sustained can be compensated for in monetary damages. This calculation includes any loss of earnings to date and into the future while taking into consideration the impact of the injuries on employability, marketability, age of retirement, and/or work life expectancy. For nonearners, restrictions in normal or activities of daily living is the test to establish the quantum of awards for nonpecuniary damages and pecuniary losses related to past and future housekeeping/home maintenance losses and past and future care costs. In more serious cases, future care costs, possible future complications, and reduction in life expectancy are also added. Loss of companionship is a claim for damages experienced by the plaintiff's relatives, generally the spouse and children. If the injury that is the subject of the claim (eg, medical negligence) resulted in a fatality, the immediate family can claim for loss of consortium.

Damages for nonpecuniary or quality-of-life loss are not as easily quantifiable because they are highly dependent on individual circumstances at the time of the loss. A forensic rehabilitation methodology to approach hedonic damages and quality of life across life domains in litigation has been described by Murphy and Williams.²⁰ Throughout the United States, many jurisdictions have defined noneconomic damage caps by statute in an attempt to prevent excessive awards, while keeping in mind the concept that money cannot replace prior health or wellbeing. Traditionally, restrictions on domestic, recreational, social, or sporting activities have been the domains brought into evidence.

Rules of Civil Procedure

Statutes and rules governing expert witnesses vary from court to court. There are state rules and federal rules, rules of evidence and rules of civil procedure. In the United States, the Federal Rules of Civil Procedure govern civil proceedings in the district courts with the purpose of securing a just, speedy, and inexpensive determination of every action and proceeding.

The Current Rules of Practice & Procedures can be readily consulted on the United States Courts Web site: (<http://www.uscourts.gov/rules-policies/current-rules-practice-procedure>). This Web site also provides access to the Federal Rules of Evidence, the Supreme Court of the United States proposed amendments to Federal Rules of Civil Procedure, and to local court rules governing practice and procedure prescribed by the United States district courts and courts of appeals. If applicable, the retaining lawyer can provide guidance on the local court rules that apply.

The Federal Rules of Evidence governing expert witnesses that should be consulted are as follows:

- Rule 702: testimony by experts
- Rule 703: bases of opinion testimony by experts
- Rule 704: opinion on ultimate issue
- Rule 705: disclosure of facts or data underlying expert opinion
- Rule 706: court-appointed experts
- Rule 803(18): hearsay exceptions: statements in learned treatises, periodicals, or pamphlets

Expert Roles and Duties

The expert's role, once qualified as possessing a special knowledge, is to assist the trier of fact. When reporting to the court, experts owe an overriding duty to assist

the court beyond any contractual duty they may have with the plaintiff or the lawyers who retained them.

As stated in the Federal Rules of Evidence, Rule 702, “A witness who is qualified as an expert by knowledge, skill, experience, training or education may testify in the form of an opinion or otherwise if:

- a. The expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- b. The testimony is based on sufficient facts or data;
- c. The testimony is the product of reliable principles and methods; and
- d. The expert has reliably applied the principles and methods to the facts of the case.”

To fulfill their roles and duties, the experts must conduct a specialized inquiry and fact analysis in order to have sufficient facts or data to reliably address the subject matter of their mandate. For example, addressing a loss necessitates a detailed review of the plaintiff’s preexisting health, activity limitations, and social participation restrictions. Most individuals are like used cars: they come with known and hidden defects.

LEGAL TESTS, PROOF, AND BURDEN OF PROOF

It can be argued that, in many instances, lawyers unwittingly surrender to experts the task of assessing the validity and the value of a claim. However, these same experts have little understanding of what the legal test is and how this legal test informs the scope of work they undertake. It is therefore an urgent imperative for experts to acquire the necessary forensic skills when such a responsibility is placed on them.

In civil claims, the plaintiffs have the burden of proof, which simply means that they must prove their cases to the civil standard of proof. The civil standard of proof is based on the balance of probabilities; the plaintiff must satisfy the court that it is more probable than not that the injuries and the consequential claimed losses were caused by the defendant’s negligence or other breach of duty. The civil standard of proof or preponderance of the evidence is the requirement that more than 50% of the evidence points to something.²¹ To avoid any misinterpretation, opinion should use only 1 of 4 terms: certain, probable, probably not, and impossible. The word possible is best avoided because it refers to a probability of 50% or less. Its meaning is frequently misunderstood and misused by experts, to the detriment of the legal proceedings.

As a general rule, a medicolegal opinion must be one of reasonable medical certainty, which should not be interpreted using the scientific statistical significance of 95% to 99% probability. Experts must understand that the court is not searching for absolute scientific truth but for the application of human-made rules to resolve disputes.

Another commonly misused concept is that of giving the benefit of doubt to a party. This concept is inappropriate because giving the benefit of doubt is generally reserved to criminal cases and is the sole responsibility of the judge or jury. The concept of giving the benefit of doubt is also used for workers’ compensation administrative or claim adjudication purposes. When evidence for and against is of equal weight, preponderance is given to the injured worker. The expert should not usurp the role of the trier of fact in the application of what is an administrative or legal responsibility. When addressing future care that requires a valid medical foundation, reasonableness is addressed.

OPINION EVIDENCE AND ADMISSIBILITY

The Federal Rules of Evidence govern the admission or exclusion of evidence in most proceedings in the United States courts. The Supreme Court submits proposed Federal Rules of Evidence to Congress. The most recent amendments to the Federal Rules of Evidence were adopted in 2017.

In 1993, in the case *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, the US Supreme Court instructed trial judges to serve as gatekeepers in determining whether the opinion of a proffered expert is based on sound and valid scientific reasoning and methodology. *Daubert* restricts the use of “junk science”. Since *Daubert*, scientific and technical information has become increasingly important in all types of decision making, including litigation. At present, the admissibility of evidence in court is based on decisions known as the *Daubert* trilogy (*Daubert*²² in 1993, *General Electric*²³ in 1997, and *Kumho*²⁴ in 1999). Earlier the courts had used the general-acceptance test formulated in the *Frye* decision²⁵ as the standard for determining the admissibility of novel scientific evidence at trial.

In *Frye*, the court looked for more than just the qualifications of the expert by also assessing the methods and procedures relied on to reach an opinion: “... the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.”²⁵ In *Daubert*, the court defined scientific methodology as the process of formulating a hypothesis and then conducting experiments to prove or falsify the hypothesis, and provided a set of illustrative factors in determining whether these criteria are met:

- Whether the theory or technique used by the expert is generally accepted in the scientific community
- Whether it has been subjected to peer review and publication
- Whether it can be and has been tested
- Whether the known or potential rate of error is acceptable
- Whether the research was conducted independent of the particular litigation or dependent on an intention to provide the proposed testimony

Since the *Daubert* decision, the Federal Judicial Center has published the Reference Manual on Scientific Evidence, which is the leading reference source for federal judges for difficult issues involving scientific testimony. The Reference Manual on Scientific Evidence, third edition, is accessible on its Web site: <https://www.fjc.gov/sites/default/files/2015/SciMan3D01.pdf>. This manual also contains a valuable article entitled Reference Guide on Medical Testimony.

Experts must strive to produce the best-quality evidence possible in the specific circumstances. To accomplish this essential task, the experts must understand what constitutes good medicolegal evidence.

MEDICOLEGAL REPORT WRITING, CRITICAL THINKING, LOGIC, AND RHETORIC

The most carefully crafted and evidence-based medicolegal evidence from the leading authority in a given field is rendered useless in the litigation process unless it can be easily understood by a lay audience. The ability to communicate complex medical or scientific facts and evidence in a clear manner is an essential skill that experts must possess. If technical language must be maintained for accuracy, the expert must provide explanation and possibly illustrations or tables to aid comprehension. Experts would do well to adopt a style book to guide medicolegal writing and editing.

Although experts must be diligent in sifting through the available facts, the court is only interested in the results of the sifting process and whether it has been conducted

appropriately. Analytical and critical thinking skills are essential to this process.²⁶ Document management software used by litigators can also be shared with experts facilitating the review of the documentary brief for the corroboration of evidence and inconsistencies. The expert's proficiency in the use of such electronic tools facilitates the analytical process, particularly when confronted with voluminous briefs.

Experts need to address the relevant issues in a clear, concise, and reliable way. They should also know which terms to avoid, such as "I believe," "plausible," and "very probable."²⁷ Experts must strive to provide scientific evidence-based opinion and avoid any ambiguity. There are several legal books on writing that could be of benefit to experts.²⁸⁻³⁰

Relevant facts and analytical methodology used to produce opinion evidence should be described and follow a clear and logical thought process.³¹ Familiarity with legal reasoning and argumentation is a definite asset to experts.^{32,33}

In some cases, experts fail a basic tenet for expert opinion evidence by not providing any rationale or justification for their opinions, which represents a form of fallacy referred to as *argumentum ad verecundiam*, or the appeal to authority. Experts should recognize and avoid logical fallacies in their reports and recognize them when used by others. Experts need to possess the skill of writing fallacy-free arguments and use concrete methods to challenge the faulty reasoning of others.³⁴ In addition, experts possessing rhetorical skills are clearly at an advantage because they can present persuasive arguments both in their reports and during testimony. Experts should be cautious of not crossing the line into advocacy. Relevant but concise storytelling to make a point can be highly effective during testimony.

In cases in which a medicolegal report is the only expert evidence, it is essential that all the issues in the mandate be addressed adequately. It is ill-advised for experts to address issues that were not part of the mandate unless having received additional direction. The same applies when asked to clarify issues in the form of an addendum or letter.

In more serious cases in which the medicolegal report serves as the medical foundation for the quantification of costs in a life-care plan, the experts must provide clear and comprehensive details on all aspects of future care needs, consequences of injuries, potential complications, and prognosis. The experts must address the medical aspects of causation and apply the appropriate legal test to the evidence.

Experts beginning in the field frequently experience difficulties writing reports because of the lack of understanding of the medicolegal expert report format.³⁵ Using a general template for data collection and medicolegal report writing is appropriate provided that all the issues from the mandate are addressed. Best-practice checklists are particularly helpful to ensure that the essential elements have been covered.^{36,37} In more complex cases, experts must go beyond any available template to adequately address the issues.

Experts should not include reference to specific case law in their reports because it is best addressed by lawyers in the table of authorities (includes the statutes, precedents, and secondary authorities relied on). Experts venturing in the legal arena do so at their own peril. Conducting basic legal research is of great assistance in understanding how the court has decided similar issues. Several Web sites used to conduct legal research are available to the public.³⁸⁻⁴¹

EXPERT WITNESSING AND PROFESSIONALISM

Coming forward as an expert witness requires more than clinical experience and knowledge. Great expert witnesses are recognized by their peers as true clinical

experts or authorities in their chosen fields. The experts come to court thoroughly prepared and insist on being properly prepared by the retaining lawyers. They master effective medical testifying⁴¹ skills and are cognizant of the cross-examination process, techniques, and pitfalls.⁴¹

The experts know the medical brief in detail and their opinions are based on corroborated and validated evidence and up-to-date scientific literature. They act professionally when facing a difficult plaintiff or situation. They know which medicolegal mandates to decline because they do not match their expertise. They are aware of their own cognitive bias when collecting and analyzing facts and findings. They are able to recognize and address omissions, uncertainties, discrepancies, and ambiguities during the evaluation and report. They understand the importance of objective, reliable, and valid measurements and perform symptoms validity testing during their evaluations. They are competent in the use of the AMA Guides to the Evaluation of Permanent Impairment. They can knowledgeably speak to the topics of impairment, apportionment, activity limitations, medical restrictions and precautions, and needless disability.⁴²

They can discuss the range of opinions present in the brief and remain respectful toward other health care professionals but impartial and objective with the evidence. They have addressed all the issues in their mandate and have applied the relevant legal test. They are humble, not overconfident or pretentious, and readily admit when a subject falls outside of their areas of expertise. They are comfortable admitting to not knowing everything and to changing their opinions when presented with new evidence. They concede gracefully when finding they were wrong. They are articulate and can give their testimony in a professional, clear, concise, and persuasive manner. Being good storytellers, they get their point across but know they are not there to entertain. They are cognizant of the Daubert trilogy. They are prepared to address any questions regarding their methodologies and statistics. Knowing that court dislikes long, rambling, vague, or irrelevant academic answers, they keep their answers short and to the point. They do not venture outside of what they have been asked.

Credibility being everything, they never lie or attempt to deceive. Under attack, they do not argue, use sarcasm, or personally attack the lawyer who is doing a vigorous cross-examination. They keep their emotions in check and remain respectful and composed, even when scolded by the judge. They are not there to make friends. They have the courage to provide a truthful opinion regarding the plaintiff even when that opinion will not sit well with either party. They follow medicolegal business best practice and understand the economic reality.

Experts follow a set of forensic practice principles referred as the 4 Ds (dignity, distance, data collection, determination) as proposed by Young and Brodsky⁴³ in 2016. Experts conduct themselves with dignity through all the phases of their mandates. They maintain a prudent distance from the adversarial divide by remaining impartial and unbiased. Experts are comprehensive in data and evidence collection and analysis, and judicious in the determination or interpretation of its significance. They know that by adopting these 4 principles that form the core of professionalism and forensic ethics for physiatrists, they will remain good medicolegal experts.

SUMMARY

This article provides an overview of medicolegal core competencies that experts must acquire when entering the civil litigation arena. A basic understanding of the civil claim legal basis, terminology, rules of procedures, standard of proof, and the specific requirements of expert evidence is the starting point. With this basic knowledge, experts

are on the path of fulfilling their roles and duties to the court. Medicolegal evaluations, expert report writing, and expert witness skills can only be gained over time. Medicolegal experts will be reminded that people learn more from their bad experiences. Over the years, a medicolegal mindset will gradually set in and more weight will be given to the experts' opinion evidence by the courts.

REFERENCES

1. Foster KR, Huber PW. *Judging science: scientific knowledge and the federal courts*. Cambridge (MA): The MIT Press; 1999.
2. Hughes R. *Culture of complaint: the fraying of America*. New York: Oxford University Press; 1993.
3. Sykes CJ. *A nation of victims: the decay of the American character*. New York: Macmillan; 1992.
4. Angell M. *Science on trial: the clash of medical evidence and the law in the breast implant case*. New York: WW Norton & Company; 1997.
5. Kassirer JP. *On the take: how medicine's complicity with big business can endanger your health*. New York: Oxford University Press; 2004.
6. Federal Judicial Center. *Reference manual on scientific evidence*. 3rd edition. Washington, DC: National Academy Press; 2011.
7. Guidelines for the physician expert witness. American College of Physicians. *Ann Intern Med* 1990;113(10):789.
8. Barnes M, Braithwaite B, Ward AB. *Medical aspects of personal injury litigation 1997*. Cornwall (UK).
9. Eyre G, Alexander L. *Writing medico-legal reports in civil claims: an essential guide*. London: Professional Solutions Publications; 2015.
10. Garner BA, Black HC. *Black's law dictionary*. 10th edition. St Paul (MN): Thomson Reuters; 2014.
11. Rondinelli RD, Genovese E, Katz RT, et al. *Guides to the evaluation of permanent impairment*. 6th edition. Chicago: American Medical Association; 2009.
12. Lacerte M, Johnson CB. *Life Care Planning: an issue of physical medicine and rehabilitation clinics*, vol. 24. Philadelphia: Elsevier Health Sciences; 2013.
13. Association AM. *AMA guides to the evaluation of disease and injury causation*. 2nd edition. Chicago: American Medical Association; 2014.
14. Guidotti TL, Rose SG. *Science on the witness stand: evaluating scientific evidence in law, adjudication, and policy*. Beverly Farms (MA): Oem Health Information Inc; 2001.
15. Schultz IZ. Determining disability: new advances in conceptualization and research. *Psychol Inj Law* 2009;2(3):199–204.
16. Schultz IZ, Gatchel RJ. *Handbook of complex occupational disability claims: early risk identification, intervention, and prevention*. New York: Springer; 2005.
17. Talmage JB, Melhorn JM, Hyman MH. How to think about work ability and work restrictions: risk, capacity, and tolerance. In: *AMA guides to the evaluation of work ability and return to work*. 2nd edition. Chicago: American Medical Association; 2011. p. 10–21.
18. Schultz IZ, Chlebak CM. Disability and impairment in medicolegal settings: pain disability controversies. In: Gatchel RJ, Schultz IZ, editors. *Handbook of musculoskeletal pain and disability disorders in the workplace*. New York: Springer Science+Business Media; 2014. p. 251–72.
19. Lacerte M, Forcier P. Medicolegal causal analysis. *Phys Med Rehabil Clin N Am* 2002;13(2):371–408, x.

20. Murphy PA, Williams JM. Assessment of rehabilitative and quality of life issues in litigation. Boca Raton (FL): CRC Press; 1999.
21. Jurkowski S. Preponderance of the evidence 2017. Available at: https://www.law.cornell.edu/wex/preponderance_of_the_evidence. Accessed August 14, 2018.
22. Daubert v. Merrell Dow Pharmaceuticals, Inc, 509 579(Supreme Court 1993).
23. General Electric Co. v. Joiner, 522 136(Supreme Court 1997).
24. Kumho Tire Co. v. Carmichael, 526 137(Supreme Court 1999).
25. Frye v. United States, 293 1013(Court of Appeals, Dist. of Columbia 1923).
26. Levy DA. Tools of critical thinking: metathoughts for psychology. 2nd edition. Long Grove (IL): Waveland Press; 2010.
27. Forcier P, Lacerte M. Quelques termes à risques en expertise médico-légale. In: *Traité d'expertise médico-légale*. Cowansville (Quebec): Les Éditions Yvon Blais Inc.; 2006. p. 73–105.
28. Stark SD. Writing to win: the legal writer. New York: Three Rivers Press; 2012.
29. Wydick RC. Plain English for lawyers. vol 5 2005.
30. Parrish AL, Yokoyama DT. Effective lawyering: a checklist approach to legal writing and oral argument. 2nd edition. Durham (NC): Carolina Academic Press; 2012.
31. Jenicek M, Hitchcock DL. Evidence-based practice: logic and critical thinking in medicine. Chicago: American Medical Association; 2004.
32. Savellos EE, Galvin RF. Reasoning and the law: the elements. Belmont (CA): Wadsworth Publishing Co; 2001.
33. Vandevelde KJ. Thinking like a lawyer: an introduction to legal reasoning. 2nd edition. Boulder (CO): Westview Press; 2011.
34. Damer TE. Attacking faulty reasoning: a practical guide to fallacy-free arguments. 7th edition. Boston: Cengage Learning; 2011.
35. Babitsky S, Mangraviti J. Writing and defending your expert report: the step-by-step guide with models. Falmouth (MA): Seak, Inc.; 2002.
36. Brigham C, Direnfeld LK, Feinberg S, et al. Independent medical evaluation best practice. *AMA Guides Newsletter*; 2017. p. 3–18.
37. Lacerte M, Forcier P, Hall MC. Independent medical examinations for insurance and legal reports. 2nd edition. Toronto: LexisNexis Butterworths; 2004.
38. FindLaw. Cases and codes. Available at: <https://caselaw.findlaw.com/>. Accessed August 14, 2018.
39. World Legal Information Institute. World Legal Information Institute 2018. Available at: <http://www.worldlii.org/>. Accessed August 14, 2018.
40. JUSTIA. US law 2018. Available at: <https://law.justia.com/>. Accessed August 14, 2018.
41. Canadian Legal Information Institute. Canadian Legal Information Institute 2018. Available at: <https://www.canlii.org/>. Accessed August 14, 2018.
42. ACOEM. Preventing needless work disability by helping people stay employed. *J Occup Environ Med* 2006;48(9):972–87.
43. Young G, Brodsky SL. The 4 Ds of forensic mental health assessments of personal injury. *Psychol Inj Law* 2016;9(3):278–81.