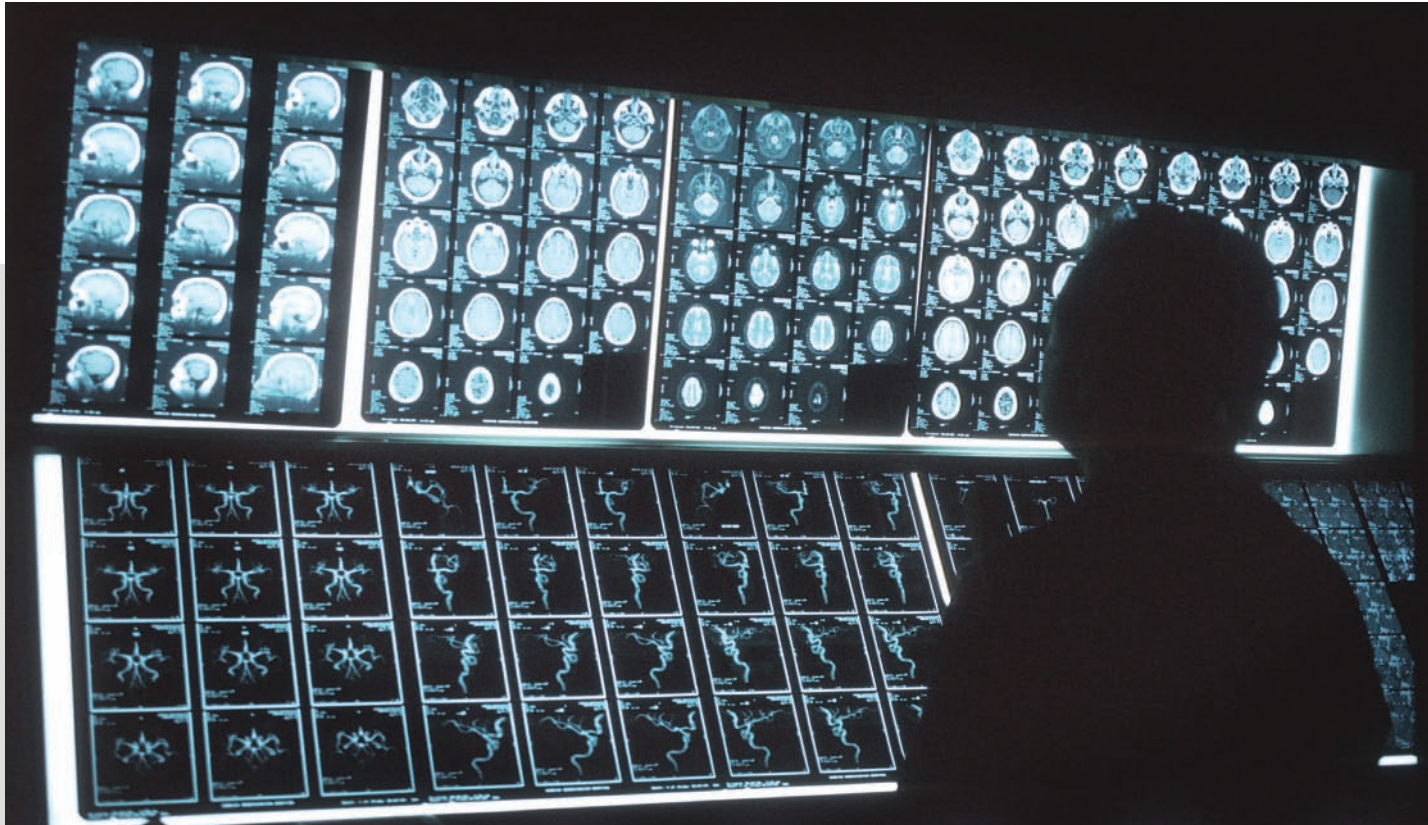


BY JEFFREY
ROBINSON, MD

Minimizing Bias in Interpreting Plaintiffs' X-rays



In a recent issue of this magazine, Dwight Golann¹ examined the issue of abandoned medical professional liability (MPL) claims. According to data from PIAA, 64% of MPL claims were dropped or abandoned over a 27-year period, a finding supported by Golann's own five-year study in Massachusetts. In his analysis, major reasons why claims are dropped or abandoned included:

- Plaintiff's frustration with the length of the process
- Unforeseeable events occurring while the case is pending
- Tactical claim filing to facilitate discovery or avoid the "empty chair" defense
- Weakening of the plaintiff's case during discovery.

Jeffrey Robinson, MD, is President and Founder, Clear Review, Inc., Seattle, Washington.

To lower the cost of dropped claims, Golann outlines a process that would unfold before a claim is filed. In this system, plaintiff and defense would “work cooperatively to develop information about the cause of the event and its effect on the patient.”

Radiology represents the sixth most frequently sued specialty and the sixth highest in terms of dollars paid in claims.² Any changes in procedure that reduce the expenses associated with these claims should therefore be welcome. The primary mechanism of adjudicating radiology claims involves the testimony of expert witnesses who opine that the defendant radiologist did, or did not, meet the standard of care when performing his duties. While a few cases are clearly meritorious and a few clearly frivolous, most cases involve arguable interpretations of findings and actions. In these cases, the persuasiveness of the expert carries as much or more weight than the actual evidence from the imaging studies in determining the outcome of the case. Ethical practitioners on both sides of the bar should welcome a process that relies more on reproducible decisions, unbiased by circumstance like the current one.

Expert bias: causes

Expert biases take many forms. “Framing bias” occurs when the circumstances around an event shape the observer’s perception of the event.^{3,4} When an attorney approaches a radiologist with a CD of patient images, the radiologist knows ahead of his examination of it that there is something wrong with the studies on the disk, or the attorney would not have passed it along to the radiologist. This heightened level of scrutiny far exceeds what any practitioner would bring to his tasks in day-to-day practice.

“Hindsight bias” and “outcome bias” share in shaping the reviewer’s perception of the significance of a finding, once it is made.⁵ Finally, because of the way our brain learns, once a reviewer (or any other observer) discerns an abnormal finding, there is simply no way to “un-see” it. The abnormality will be forever obvious to one who knows that it is there.

To address these issues, we need a better review process—one where the expert would not know that the exam he is reviewing is the focus of a liability claim, and would therefore treat it just like any other exam in daily practice. In an ideal world, such a contentious case would be renamed and dated, to make it look like just another current case from the reader’s institution. The patient’s prior exams would have to be similarly altered, as well as the names of any referring providers or facilities noted in any of the reports. Also, if the contentious case could possibly be interpreted as having a significant abnormal finding, there would need to be some mechanism for contacting a “pseudo-provider.” The un-blinding could occur at the time of the call (e.g., “Thank you, Dr. Smith, but that hemorrhage was a Quality Assurance case.”).

In a more practical, but slightly less stringent scenario, a reviewer is given a stack of exams to over-read, knowing that that one or more of the exams is the subject of litigation, and is asked to review the

entire group. At its simplest, this method can simply reveal that the expert reviewer did or did not identify the case in question as the subject of the litigation.


Fleshing out the scheme

There are several considerations in fleshing out this scheme. In the first place, since the reviewer is asked to review many more exams than he otherwise would in current practice, there has to be some way to make the process more time-efficient. The current format of CD-ROM and paper (or disk-based) reports is simply too cumbersome to scale. In addition, the toolset available on the clinical viewers is not comparable to that of the diagnostic workstation. The review set must be available on a true PACS, along with the reports, in a “production” environment that is as close to regular practice as possible.

The reporting system that the reviewer uses can also be optimized, to increase efficiency as well as the usefulness of the resulting information. Rather than picking the litigation case out of the stack, as in a police lineup, the reviewer should be asked to provide an evaluation of each exam. A simple, reproducible validated scoring system would make the evaluation process faster, and also, a data analysis can be performed using database methods, rather than human analysis of free-form text. The reviewer’s evaluations of the “foil” exams can be compared to that of a reference group of readers, to get a sense of the reviewer’s actual degree of neutrality in interpretation.

Finally, with such a system in place, expert witnesses could be organized into a pool. In the event of litigation involving a radiologist, the attorney for either side could contact the organization to engage a qualified expert. That expert would not know whether he was being retained by the plaintiff or the defendant, further increasing the degree of objectivity he brings to the evaluation.

This sort of system would appeal to the defense as well as plaintiff’s bar, since both are engaged in the same search for truth—what actually happened between the patient and the provider in a case. With a process that can be supported by both sides, cooperation is possible to reduce unnecessary claims, and

to quickly resolve meritorious ones. 

For related information, see www.clear-review.com.



References

1. Golann D. Abandoned medical professional liability claims: Their surprising frequency, apparent causes, and potential remedies. *Physician Insurer*, second quarter 2013, 41-44.
2. Thomson NB III, Patel M. Radiology liability update: review of claims, trends, high-risk conditions and practices, and tort reform alternatives. *J Am Coll Radiol*. 2012 10:729-33.
3. Gong J, Zhang Y, Yang Z, Huang Y, Feng J, Zhang W. The framing effect in medical decision-making: a review of the literature. *Psychol Health Med*. February 6, 2013.
4. Tversky A, Kahneman D. The framing of decisions and the psychology of choice. *Science*. 1981 211(4481):453-58.
5. Gunderman RB. Biases in radiologic reasoning. *AJR Am J Roentgenol*. 2009 192(3):561-64.