The use of algorithms in medicine is pervasive, particularly in emergency medicine, where decision tools decrease error when life-saving decisions need to be made quickly. Evidence-based, protocol-driven pathways for adult and pediatric cardiopulmonary resuscitation, stroke, and rule-out neonatal sepsis algorithms are a few examples of clinical practice guidelines that have proven effective in managing such emergency medical conditions. Originally, guidelines were derived from evidence-based medicine and were intended to aid providers in making sound clinical decisions and ensure the delivery of quality care. (Health Matrix 1995;5[2]:300.)

Clinical practice guidelines promulgated by physician organizations that rely on expert consensus opinion and outcomes research have the air of authority, and tend to aid attorneys and physician experts in court in establishing the medical standard of care.

As medicine moves away from the fee-for-service model to a pay-for-performance model, managed care organizations, hospitals, and insurance companies may use clinical practice guidelines for cost-containment purposes to encourage providers to order the “right” (less expensive) test, procedure, or medication. (Health Matrix 1995;5[2]:300.) This shift toward cost containment should cause the medical community to scrutinize guidelines because those that focus too much on cost containment may lose sight of quality and may not reflect the current standard of care. Pay-for-performance data, based on clinical practice guidelines that necessarily focus on cost containment, should not be used to prove medical negligence.

Expert witnesses often refer to clinical practice guidelines in describing the relevant standard of care. An expert’s statements during testimony are admissible, but written treatises (and clinical practice guidelines) are inadmissible hearsay because they are statements made out of court that are offered for their truth. The hearsay rule renders inadmissible statements made by persons unavailable because cross-examination would be impossible. Some states allow the admissibility of guidelines by applying the learned treatise hearsay exception, where an attorney’s expert establishes the authority of a guideline by asserting he relies on the guideline to formulate his expert opinion or by referring to the guideline when being cross-examined. The learned treatise exception limits the effectiveness of the clinical practice guideline to some extent because the expert may read directly from it, but the written version itself is not admissible as evidence for the jury to review.

Well-founded clinical practice guidelines could provide a plaintiff’s attorney with a sword to attack the defendant-physician: he could argue that a defendant-physician is negligent because the harm would have been prevented if the physician had complied with an evidence-based, universally followed guideline. Defense attorneys may use clinical practice guidelines in the opposite manner, as a shield to prove their client met the standard of care. A defense attorney’s expert could assert that a physician who performed a full septic work up on a 5-day-old, including LP, antibiotics, and admission, met the standard of care by complying with nationally published guidelines for managing neonatal sepsis. The effectiveness of a clinical practice guideline often depends on whether the expert witness finds the guideline trustworthy based on research that demonstrates superior patient outcomes. (Ann Health Law 2007;16[1]:163.)

Attorneys attack the trustworthiness of clinical practice guidelines in a variety of ways: they (through the use of their expert) may argue that the guideline is not the standard of care, but merely one acceptable practice among several options available to physicians (the so-called “two schools of thought” doctrine). Alternatively, experts can testify that a particular guideline was based on studies that have been discredited by further research, and may even result in improper care. The practice of using steroids for spinal cord injury, for example, has been discredited using evidence-based medicine, and may represent a substandard care given that studies now demonstrate increased risk of infection with no real benefit to the patient. (Neurosurgery 2013;72[3]:93.)

An expert may contend that a clinical practice guideline does not represent what is actually done in the community. The core measure by the Centers for Medicare & Medicaid Services requiring hospitals to deliver antibiotics within four hours for pneumonia has been “re-tired.” Not only was this “standard” too difficult to follow, any attempt to follow it caused physicians to order antibiotics hastily for patients without pneumonia for fear of “falling out” of the core measure, resulting in unnecessary antibiotic administration, delayed diagnosis, and worse patient care.

Does non-compliance mean negligence? Recognizing that plaintiff attorneys may improperly use poor performance scores as a sword against physicians in negligence actions. Pay-for-performance initiatives not properly focused on delivering high-quality patient care, such as those designed to cut cost, may actually reduce quality, and as a result, do not represent the medical standard of care.