THE PROCESS OF MANAGING MEDICAL MALPRACTICE CASES: THE ROLE OF STANDARD OF CARE*

*Ralph Peeples***

*Catherine T. Harris****

*Thomas B. Metzloff*****

In medical malpractice litigation, how the standard of care is determined is of obvious importance, since failure by a defendant-physician to meet the relevant standard of care constitutes negligence. Any effort to reform how standard-of-care determinations are made should start with an understanding of the entire claims resolution process. The usual image—that of opposing experts testifying at trial—is both incomplete and misleading. Most cases are either settled by the parties or abandoned by the plaintiff, short of trial. We reviewed insurers' closed claims files, representing a sample of medical malpractice lawsuits filed in North Carolina between 1991 and 1995, as well as the matching court files. As a result, we obtained unique and highly detailed information about these cases. In this Article we report on our findings, as they relate to the insurer's assessment of the standard of care. We conclude that a shift in standard-of-care determinations to a more empirical, scientifically-based inquiry would not be likely to change the dynamics of the settlement process, where the emphasis is on bargaining and negotiation, rather than on reaching conclusions about the standard of care.

I. INTRODUCTION

"Standard of care" is the eight-hundred-pound gorilla in medical malpractice litigation. Everyone agrees it is important, and a num-

* This research was supported with funding from the Robert Wood Johnson Foundation, Princeton, New Jersey, Grant I.D. #027071.

** Professor of Law, Wake Forest University.

*** Professor of Sociology, Wake Forest University.

**** Professor of Law, Duke University.

ber of observers believe that the key to reform of the medical malpractice system¹ lies in altering the way in which "standard of care" is determined.² Nonetheless, like our gorilla, no one seems to know quite what to do about it.

In medical malpractice cases, the liability of a defendant-physician is a function of negligence and causation. If the defendant-physician has been negligent, and if proximate cause can be established, then the defendant-physician will be held liable for the plaintiff-patient's injuries.³ "Negligence," in turn, is a function of standard of care; failure by a defendant-physician to meet the relevant standard of care constitutes negligence.⁴ The standard of care expected of physicians is usually described in terms of "custom": what is the accepted practice among other physicians practicing in the same specialty?⁵

Rethinking how standard-of-care determinations are made as a

1. See, e.g., Tanya Albert, *House Bill Recognizes Crisis, Revitalizes Tort Reform*, AM. MED. NEWS, May 13, 2002, at 1; Richard F. Corlin, *Tort Reform: An Idea Whose Time Has Come Again*, AM. MED. NEWS, February 18, 2002, at 23; David M. Studdert & Troyen A. Brennan, *No Fault Compensation for Medical Injuries*, 286 JAMA 217 (2001). Reform of the medical malpractice system, while never completely absent as a subject of national debate, has become more topical of late.

2. See, e.g., Tim Cramm et al., *Ascertaining Customary Care in Malpractice Cases: Asking Those Who Know*, 37 WAKE FOREST L. REV. 699 (2002); Clark C. Havighurst, *Practice Guidelines as Legal Standards Governing Physician Liability*, 54 LAW & CONTEMP. PROBS. 87, 96-99 (1991); William Meadow, *Operationalizing the Standard of Medical Care: Use and Limitations of Epidemiology To Guide Expert Testimony in Medical Negligence Allegations*, 37 WAKE FOREST L. REV. 675 (2002).

3. DAN B. DOBBS, THE LAW OF TORTS § 242 (2000); see, e.g., *Mozingo v. Pitt County Mem'l Hosp., Inc.*, 331 N.C. 182, 187, 415 S.E.2d 341, 344 (1992) (quoting *Waltz v. Wake County Bd. of Educ.*, 104 N.C. App. 302, 304-05, 409 S.E.2d 106, 107 (1991)); *Clark v. Perry*, 114 N.C. App. 297, 304-05, 442 S.E.2d 57, 61 (1994).

4. See, e.g., N.C. GEN. STAT. § 90-21.12 (2001), which provides in pertinent part:

In any action for damages for personal injury or death arising out of the furnishing or the failure to furnish professional services in the performance of medical, dental, or other health care, the defendant shall not be liable for the payment of damages unless the trier of the facts is satisfied by the greater weight of the evidence that the care of such health care provider was not in accordance with the standards of practice among members of the same health care profession with similar training and experience situated in the same or similar communities at the time of the alleged act giving rise to the cause of action.

Id.; see also PAUL C. WEILER, MEDICAL MALPRACTICE ON TRIAL 19 (1991) [hereinafter WEILER, MEDICAL MALPRACTICE ON TRIAL]; PAUL C. WEILER ET AL., A MEASURE OF MALPRACTICE: MEDICAL INJURY, MALPRACTICE LITIGATION, AND PATIENT COMPENSATION 14 (1993).

5. PATRICIA M. DANZON, MEDICAL MALPRACTICE 139-43 (1985); WEILER, MEDICAL MALPRACTICE ON TRIAL, *supra* note 4, at 19; see, e.g., *Tice v. Hall*, 63 N.C. App. 27, 303 S.E.2d 832 (1983), *aff'd*, 310 N.C. 589, 313 S.E.2d. 565 (1984).

starting point for legal reform must be understood in the context of the claims resolution process, broadly defined. The common picture is that of opposing experts testifying before a jury. This imagery is appropriate for the relatively small percentage of malpractice cases that are tried, given that proving standard of care and its breach by the defendant-physician does indeed almost always require expert testimony.⁶ But the imagery of battling experts presents an incomplete picture of the role standard-of-care analysis plays in the litigation process more broadly, and accurately, defined. That picture tells us very little about the role standard of care plays in the resolution of those cases that do not go to trial: the large majority of cases that are either settled or abandoned by the plaintiff.

This Article is an attempt to make the picture more complete. Using data drawn from a combination of closed insurer claims files and court records, it explores the way standard of care is determined in medical malpractice cases, as well as its function in the overall system of malpractice claims resolution. In particular, we analyze the role of standard of care as a determinant in the formulation of settlement positions from the perspective of the insurer. Our evidence suggests that insurers' settlement positions are formulated with a principal emphasis on their assessment of standard of care.⁷ Thus, expert testimony is not usually filtered through a lay jury based upon adversarial presentations. Rather, in most cases, the standard of care is assessed by insurers primarily through the views of their own selected consultants. In thinking about what the impact of new or revitalized approaches to determining standard of care might be, one must consider how such approaches would be used by insurers as they process cases in a system largely dependent upon settlement.

II. THE MEDICAL MALPRACTICE CLAIMS RESOLUTION SYSTEM: AN OVERVIEW

A. *The Insurer's Role*

The malpractice insurer plays a central role in virtually all medical malpractice cases. The vast majority of physicians carry professional liability insurance. Unless an amount is paid that exceeds the limits of the policy, any money paid to the plaintiff in set-

6. DOBBS, *supra* note 3, at 639; WEILER, MEDICAL MALPRACTICE ON TRIAL, *supra* note 4, at 19; *see, e.g., Mozingo*, 331 N.C. at 190, 415 S.E.2d at 345; *Tice*, 63 N.C. App. at 28, 303 S.E.2d at 833.

7. *See generally* Eleanor D. Kinney, *The Brave New World of Medical Standards of Care*, 29 J. L. MED. & ETHICS 323 (2001). We are concerned only with "standard of care" as it functions in the context of medical malpractice litigation. We do not address the various "standards of care" used in the delivery of health care generally, such as medical review criteria or performance measures.

tlement, or after a judgment for the plaintiff following trial, will be paid by the insurer. Most professional liability insurance policies call for the insurer to select and retain defense counsel. Although many professional liability policies give the insured physician the right to "veto" any proposed settlement of the case, it will be the insurer that takes the lead in defending the case, and in conducting settlement negotiations (if any) with the plaintiff. The insured's consent to settle is typically not sought until a settlement seems likely. As a result, in practice the insurer makes at least two key decisions: the insurer selects defense counsel and determines if an offer of settlement will be made, and if so, in what amount.

B. The Claims Process

A claim can be made prior to a lawsuit, or the filing of the lawsuit may itself constitute the first notice of a claim against the insured. When a claim is made against an insured physician, the insurer opens a file, and assigns the claim to an adjuster whose job it is to investigate the merits of the claim. Shortly after a claim is made, an initial, albeit tentative, determination is made regarding liability, based on the adjuster's investigation. The adjuster will typically seek reviews of the claim from physicians practicing in the same specialty as the insured physician. These "outside reviewers" are normally sent a copy of the relevant medical records, and are asked to give their opinion as to whether or not the insured physician's conduct satisfied the standard of care expected in that medical specialty.⁸ If a lawsuit has been filed, the insurer will retain the services of a defense counsel, with whom the adjuster will work to develop the case for a potential trial. Usually the insurer works with a relatively short list of attorneys who have developed an expertise in the area of malpractice defense. As the adjuster (and his or her superiors) receive additional information, the insurer's assessment of the merits of the claim sometimes changes. This additional information may take the form of opinions received from outside physician reviewers, or it may take the form of pretrial discovery if a lawsuit has been filed. As a case is prepared for trial, it is common for depositions of the plaintiff-patient and the defendant-physician to be taken, and often other witnesses are deposed, as well. In addition, both plaintiff and defendant will identify the experts they expect to use as witnesses, and opposing counsel typically will depose the experts identified by the other side. Quite often, the insurer uses the outside reviewers as a source of expert witnesses.

C. Possible Litigation Outcomes

As with other personal injury torts, there are three potential

8. The reviews are almost always "blind" reviews; the outside reviewers are not told the identity of the insured physician.

outcomes for medical malpractice lawsuits. First, the plaintiff may decide at some point prior to a verdict not to pursue the claim. That decision is unilateral, and usually takes the form of a voluntary dismissal without prejudice.⁹ Although a voluntary dismissal without prejudice leaves open the possibility of a later refiling,¹⁰ most such dismissals effectively end the case.¹¹ Second, the case may be resolved involuntarily, by entry of a judgment in favor of either the defendant or the plaintiff. This outcome usually takes the form of a verdict following trial. It also includes, however, the entry of summary judgment, as well as a court order dismissing the complaint for lack of prosecution or failure to comply with court orders. The third possible outcome—and the most common¹²—is a voluntary settlement involving the payment of money to the plaintiff by the insurer on behalf of the defendant-physician.¹³

III. METHODS

We reviewed eighty-one closed claims files representing malpractice lawsuits filed in North Carolina between 1991 and 1995. We were given access to these data by the risk management office of a major teaching hospital and from a principal liability insurer of physicians in North Carolina. The files were not randomly selected. Selection of cases was based on the existence of a court order directing the case to mediation prior to trial. This criterion probably resulted in an oversampling of “durable” cases—i.e., lawsuits that had progressed at least beyond complaint and answer. Thus, our sample may not reflect accurately the number of “nuisance” or purely speculative malpractice cases filed in the trial courts.

The insurer files contained handwritten insurance adjusters’

9. See, e.g., N.C. R. Civ. P. 41(a)(1). A voluntary dismissal with prejudice is also a possibility. However, the “with prejudice” stipulation usually is given only in exchange for a promise by the defendant not to seek reimbursement of costs.

10. See, e.g., N.C. R. Civ. P. 41(a)(1) (stating that a complaint may be refiled within one year of dismissal).

11. Because we reviewed both insurance claims files and the corresponding court records, we were able to determine, for each case, whether or not the complaint was refiled.

12. See, e.g., DANZON, *supra* note 5, at 41; Patricia M. Danzon & Lee A. Lilard, *Settlement Out of Court: The Disposition of Medical Malpractice Claims*, 12 J. OF LEGAL STUD. 345, 347-48 (1983); Frank A. Sloan & Chee Ruey Hsieh, *Variability in Medical Malpractice Payments: Is the Compensation Fair?*, 24 LAW & SOC’Y REV. 997, 1005 (1990). For example, in the present study: 44.0% (n=36) of the cases settled with money paid to the plaintiff; 30.9% (n=25) of the cases were resolved involuntarily; and 23.5% (n=19) of the cases were abandoned by the plaintiff.

13. There were several cases in our study in which the plaintiff filed a “voluntary dismissal with prejudice,” usually a sign of a negotiated settlement, in exchange for a promise by the defendant not to seek reimbursement of costs. We did not classify such agreements as “settlements.” They are more in the nature of “negotiated surrenders.”

logs as well as paperwork and correspondence associated with specific events in the claims resolution process. The logs chronicled the process that the insurer went through to manage the cases, and often included unvarnished opinions about the case, the parties, and the potential witnesses. Medical records (or excerpts), expert and physician review summaries, and witness deposition summaries were also commonly included in the claims files, as was information about the cost of settlement (if any), jury verdict (if any), and the costs of defense. In short, insurer claims files offer a highly detailed and reliable picture of the entire malpractice litigation process.¹⁴ No other set of records provides such a wealth of data. Indeed, insurer claims files have been described as "the gold standard" for conducting empirical medical malpractice research.¹⁵

We chose to review the complete insurance file. This approach was often tedious, but it yielded data of a type rarely discussed and analyzed. In addition to reviewing the insurance files, we also identified and reviewed the court files for the cases the insurer files represented. As a result, we obtained very detailed data about each case.

We were interested in the process through which case resolution took place, not just the final outcomes of the cases. Our approach builds on the work of previous researchers such as Sloan et al.,¹⁶ Cheney et al.,¹⁷ Taragin et al.,¹⁸ Brennan et al.,¹⁹ and Farber and White,²⁰ whose approaches were more limited in scope. Sloan et al. analyzed insurer claims summaries submitted by insurers to the Florida Department of Insurance.²¹ Taragin et al. used information entered by the insurer in a standardized database.²² Cheney et al. had access to the complete insurer files but focused on a single variable, compliance with the standard of care, as determined by an after the fact review. In addition, the study by Cheney et al. was lim-

14. See, e.g., Frederick W. Cheney et al., *Standard of Care and Anesthesia Liability*, 261 JAMA 1599 (1989).

15. Troyen A. Brennan et al., *Relation Between Negligent Adverse Events and the Outcomes of Medical Malpractice Litigation*, 335 NEW ENG. J. MED. 1963, 1965 (1996).

16. FRANK A. SLOAN ET AL., *SUING FOR MEDICAL MALPRACTICE* (1993).

17. Cheney et al., *supra* note 14.

18. Mark Taragin et al., *The Influence of Standard of Care and Severity of Injury on the Resolution of Medical Malpractice Claims*, 117 ANNALS INTERNAL MED. 780 (1992).

19. Brennan et al., *supra* note 15.

20. Henry S. Farber & Michelle J. White, *A Comparison of Formal and Informal Dispute Resolution in Medical Malpractice*, 23 J. LEGAL STUD. 777 (1994) [hereinafter Farber & White, *Dispute Resolution*]; see also Henry S. Farber & Michelle J. White, *Medical Malpractice: An Empirical Examination of the Litigation Process*, 22 RAND J. ECON. 199 (1991) [hereinafter Farber & White, *Medical Malpractice*]; Michelle J. White, *The Value of Liability in Medical Malpractice*, 13 HEALTH AFF. 75 (1994) [hereinafter White, *Value of Liability*]; SLOAN ET AL., *supra* note 16, at 20-21.

22. Taragin et al., *supra* note 18, at 780.

ited to anesthesiologists who had been sued.²³ Brennan et al. reviewed "litigation summaries" obtained from the insurer for fifty-one claims.²⁴ Farber and White obtained data on expert review, severity of injury, and compensation, but not on the process through which case resolution took place or on factors other than quality of care and severity of injury.²⁵ Farber and White's data were also limited to the claims filed against a single hospital.²⁶ Our approach was different. We read and took notes on the entire, unedited file, and subsequently coded each significant event into standardized categories.

In this analysis, we focus on the following variables: initial and last assessment of liability by the insurer (coded as probable, uncertain, or unlikely); consensus of the outside reviewers (coded as probable, uncertain, or unlikely); whether the insurer believed the standard of care had been breached (coded as yes, no, or uncertain); and whether the insurer believed that causation existed between the defendant's conduct and the alleged injuries (coded as yes, no, or uncertain). Outcome variables included: did the insurer make any offer at all (coded as yes or no); did the case settle (coded as yes or no); did the case go to trial (coded as yes or no); if the case went to trial, who won (coded as defendant or plaintiff); and was money paid to the plaintiff (coded as yes or no).

Data were gathered on each attorney for plaintiff and defendant, using court files related to the cases. Following Sloan et al.,²⁷ attorneys were categorized as "more experienced" if they had handled four or more cases during the study period, or as "less experienced" if they had handled from one to three cases.

Our purpose was to look at these variables in context, sorting out their impact on each other. We relied on tabular analysis and report percentages, however, we recognized that in most of the tables, small numbers make the reporting of statistical significance problematic. It should be noted that missing values for some variables result in slight variation in total numbers from table to table. When univariate analyses are reported, valid percentages (those computed without the missing values) are presented.

Bivariate analyses (i.e., looking at the relationship between just two variables) are presented in Tables 1 through 7. In Table 8 and Figure 1, we look at the closed insurer case files step-by-step, from assessment of the standard of care to case outcome, thus outlining the "life-cycle" of these cases.

IV. FINDINGS

Our findings show that the traditional view of settlement as a

23. Cheney et al., *supra* note 14, at 1599.

24. Brennan et al., *supra* note 15, at 1964.

25. Farber & White, *Dispute Resolution*, *supra* note 20, at 787.

26. *Id.* at 786.

27. SLOAN ET AL., *supra* note 16, at 169-70.

product of bilateral negotiation, between two parties, under no constraint to reach agreement, is of limited relevance in medical malpractice cases. The role the insurer plays is the key factor in the settlement process. Further, the roles of the insurer and that of experienced plaintiffs counsel mirror each other in a rational way. The process is rarely a "battle of experts" at trial, or even in settlement negotiations.

A. The Role of Reviewers in the Assessment of Liability

Our findings suggest that the outside reviews obtained by the insurer play a critically important role in the claims resolution process. The process is instigated by the claims adjuster who contacts other physicians who practice in the same specialty as the defendant-physician. The reviewers are thus themselves physicians, usually from North Carolina. These physicians are asked if they would be willing to review a case in return for a modest amount of compensation.

Two initial observations about the outside review process are worth highlighting. First, the number of reviewers varies from case to case. A comparison of the mean number of reviewers provides evidence that the insurer will solicit more reviewers in a case where standard of care is eventually determined to have been breached. The mean number of reviewers if the insurer ultimately determined that the standard of care had been breached was 4.43, compared to 3.07 if the insurer concluded that the standard of care was not breached, and 3.27 if the insurer was uncertain about the standard of care. This suggests that the insurer proceeds more carefully in those cases in which liability appears likely (and therefore that settlement offers will be made). Second, the reviewers are often not consistent in their assessments of liability for a given case. For example, we found that in 34.3% of the cases, reviewers disagreed. Disagreement is usually a signal for the claims adjuster to seek additional reviews or to clarify factual uncertainties.

Table 1 is persuasive evidence that the opinions of the reviewers are heeded by the insurer. There was considerable confirmation by reviewers of the insurers' initial assessment. The reviewers in 80% of the cases (n=12) initially assessed by the insurers as "probably liable" also found liability probable; the reviewers in 65.4% of the cases (n=17) assessed by the insurers as "unlikely liability" also found liability unlikely. There were several cases in which changes in the insurers' assessment occurred (e.g., cases going from unlikely to uncertain liability). The changes in assessment can almost always be explained by reference to the outside reviewers' evaluations. In fact, of the twenty-seven cases in which the initial assessment of liability changed, nineteen (70.4%) did so in light of the outside reviews. The insurers' assessment consistently moved in the direction of the outside reviewers' conclusions. By the time of the insurers'

last assessment, 100% (n=16) of those cases in which liability was assessed as "probable" by the outside reviewers were so assessed by the insurer.²⁸ Seventy-six percent of the cases in which liability was assessed as "unlikely" by the outside reviewers were similarly assessed by the insurers. The divergence here suggests that insurers take at full face value the determination by outside reviewers when they are critical of another physician's care, but discount to some extent those outside reviewers who exonerate a physician's conduct.

The real importance of the outside reviewers' evaluation, however, is its close connection to another variable: the insurer's assessment of standard of care, and, to a lesser extent, causation. In 100% (n=15) of the cases in which the outside reviewers evaluated the defendant-physician as probably liable, the insurer concluded that the standard of care had been breached.²⁹ It is hard to escape the conclusion that the insurer's opinion about standard of care is formed primarily by the outside reviewer's evaluations. The determination of the existence of causation followed a similar, but less dramatic, pattern. If the reviewers assessed the defendant-physician as liable, causation was found to exist in 73.3% of cases.³⁰

The claims resolution process is driven by the insurer's determination regarding standard of care, based on the consensus of the outside reviewers. If the insurer believed that the standard of care had been breached, the last assessment of liability was "probable" in 96.3% of cases (n=26).³¹ On the other hand, if the insurer believed that the standard of care was not breached, 96.2% of cases were assessed as being of uncertain or unlikely liability. The existence of causation followed the same, yet less apparent pattern.³² If causation was determined to exist, the insurer assessed the defendant-physician as liable in 65.6% of the cases.

The relationship between the insurer's assessment of liability and plaintiff counsel's choice of cases suggests that the system is "rational" from the perspectives of both defendant and plaintiff. In fact, 86.4% of "more experienced" plaintiff's counsel³³ handled cases in which the insurer had evaluated liability as probable or uncertain, compared to only 41.7% of "less experienced" plaintiff's counsel. In general, it does appear that experienced plaintiff's counsel are able to rate cases in a way consistent with the insurer's assessment. The fact that experienced plaintiff's counsel routinely picked more "winners" is no accident.

28. See *infra* Table 2.

29. See *infra* Table 3.

30. See *infra* Table 3.

31. See *infra* Table 4.

32. See *infra* Table 5.

33. See *supra* text accompanying note 27. We defined plaintiff's counsel as "more experienced" if they had handled four or more cases during our study period.

B. *The Dynamics of Offer Patterns*

Looking at the process from the perspective of the plaintiff's counsel provides additional evidence that the system is rational. If plaintiff's counsel made an offer first, the case settled less than half the time (47.8%, n=22). If defense counsel made the first offer the case always settled (100%, n=6) of the time. However, of those cases in which the plaintiff's counsel made the first offer, 64.75% of "more experienced" plaintiff's counsel settled the case, compared to 35.3% of "less experienced" plaintiff's counsel. Again, this finding suggests that both the insurer and more experienced plaintiff's counsel evaluate cases using the same criteria.

An additional dimension of the settlement process is revealed by considering the consequences for case outcome if the plaintiff's counsel makes both the first *and* second offers. When that happened, settlement occurred in only 21.4% of cases (3 of 13), suggesting the wisdom of the expression "I won't bid against myself." Put simply, a pattern of two consecutive offers operates as a signal to the insurer of desperation. Lowering an offer in a non-liability case does not increase the likelihood of settlement.

The dynamics of the insurer's behavior also fit a pattern. Even in cases where the insurer concluded the standard of care was breached, the insurer routinely required proof and corroboration. In cases in which the insurer made an offer, the plaintiff was always deposed (100%, n=14), and an expert for the plaintiff was almost always identified (96.8%, n=30) and almost always deposed (91.3%, n=21).³⁴

C. *Outcomes*

As we move toward a description of the life-cycle of the cases in the insurance files, we present an overview of the impact of standard of care and the existence of causation on settlement, trial, and the payment of money. These analyses are bivariate and do not look at the events in sequence or in relation to each other.

1. *Settlement*

If the insurer determined that the standard of care had been breached, an offer was made by the insurer in 96.3% of cases (n=26), 86.2% of cases (n=25) settled, and money was paid to the plaintiff in 93.1% of the cases (n=27).³⁵ Only two cases of "probable liability" (6.9%) went to trial, with one physician/defendant winning and one

34. As noted previously, missing values for some variables result in slight variation in total numbers. When univariate analyses are reported (as here) valid percentages (those computed without the missing values) are presented.

35. Cases in which money was paid include cases in which a monetary settlement was reached, as well as cases in which the plaintiff recovered a money judgment.

physician/defendant losing.³⁶

When the insurer made an offer—any offer—the case almost always settled. In the present study, when the insurer made an offer (regardless of how it assessed standard of care) the case settled 94.4% of the time (n=34). The insurer consistently made an offer when it concluded that the standard of care was breached, and only once made an offer when it had concluded that the standard of care had not been breached.³⁷ When the insurer was uncertain regarding breach, an offer was made in only six of seventeen cases (35.3%).

If the insurer believed that causation existed, a similar pattern emerged, though the pattern was not as clear.³⁸ An offer was made in 71.9% of cases (n=23) in which the insurer believed causation existed, while a trial occurred in only 6.3% of such cases (n=2), with the defendant-physician winning 100% of the time. Settlement occurred in 68.8% of the cases (n=22) in which the insurer determined that causation existed, and money was paid in 68.8% of such cases (n=22).

It is the plaintiff who usually makes the first offer—87% of the time (47 of 54), compared to 13% by the defendant (7 of 54). Seldom does the insurer make an offer that the plaintiff will find completely unacceptable. Additional bargaining over the amount to be paid may result, but the outcome is invariably settlement. Only rarely does it happen that the plaintiff will spurn the insurer's offer and proceed to trial. In addition, although the plaintiff usually made an offer at some point in the process, the insurer was choosier. The plaintiff made an offer in 98.4% (n=53) of cases compared to 50% (n=36) for the defense. The inference from these observations is simple. It is the insurer who decides what cases will be settled, and what cases will be tried. The system is dominated by the insurer. Those cases that the insurer wants to settle are settled.³⁹

2. Trial

Trial is an infrequent event in medical malpractice litigation.⁴⁰ For example, in North Carolina fewer than 15% of medical malpractice cases go to trial.⁴¹ When a trial does happen, the defendant usually wins.⁴² Trial almost never happened (6.9%, n=2), however, when the insurer had concluded that the defendant-physician had

36. See *infra* Table 6.

37. See *infra* Table 6.

38. See *infra* Table 7.

39. See *infra* notes 54-55 and accompanying text; see also Danzon & Lilard, *supra* note 12, at 369.

40. DANZON, *supra* note 5, at 42; SLOAN, ET AL., *supra* note 16, at 165-67; Farber & White, *Dispute Resolution*, *supra* note 20, at 799-802.

41. Thomas B. Metzloff, *Resolving Malpractice Disputes: Imaging the Jury's Shadow*, 54 LAW & CONTEMP. PROBS. 43, 49 (1991).

42. See *infra* Tables 6 & 7.

breached the standard of care.⁴³ In only two cases in which standard of care was determined to have been breached did a trial follow. The plaintiff won one, and the defendant won one. In contrast, when the insurer determined that the standard of care had not been breached, the case went to trial 40.7% of the time (11 out of 27). The defendant won 90% of the time (9 out of 10).⁴⁴ When the insurer was uncertain about the standard of care, the case went to trial 31.6% of the time (6 of 19). The defendant won 83.3% of the tried cases (5 of 6) and the plaintiff won 16.7% of the cases (1 of 6).

3. *Was Money Paid?*

Money is paid to a plaintiff either in settlement of the case, or as the result of a favorable verdict at trial. Thus, this variable measures the overall success rate of plaintiffs, expressed in terms of recovering at least some amount of money from the insurer. In practical terms, the simple fact that money was paid is important, due to the reporting requirements of the National Practitioner Data Bank. Any amount paid by an insurer on behalf of a physician triggers the reporting requirement; whether liability was ever established is simply not relevant.⁴⁵

If the insurer believed that the standard of care was breached, money was paid (again, whether in settlement or as the result of a verdict) in twenty-seven out of twenty-nine cases (93.1%).⁴⁶ However, money was also paid in 14.8% of cases (4 out of 27) in which the insurer evaluated the standard of care as not breached.⁴⁷ Finally, money was paid in 36.8% of cases in which the insurer was uncertain as to whether the standard of care had been breached.

In terms of causation, money was paid in 68.8% of cases in

43. See *infra* Table 6.

44. Of the eleven cases that went to trial, only ten actually went to verdict. One case ended when the plaintiff took a voluntary dismissal without prejudice in the middle of the trial.

45. Health Care Quality Improvement Act of 1986, 42 U.S.C. § 11131 (1994). The National Practitioner Data Bank was established by Congress in Title IV, section 421 of Public Law 99-660. For a description of the National Practitioner Data Bank, see Ilene D. Johnson, *Reports to the National Practitioner Data Bank*, 265 JAMA 407 (1991). For an assessment of the Data Bank's operation, see Robert E. Oshel et al., *The National Practitioner Data Bank: The First 4 Years*, 110 PUB. HEALTH REP. 383 (1995).

46. See *infra* Table 6.

47. Of these four cases, one resulted in a very modest (<\$20,000) verdict for the plaintiff. The other three cases were settled by the insurer even though the insurer did not believe the standard of care was breached. In the first of these three cases, the file contains numerous references to the plaintiff's counsel's high level of expertise. In the second case, the insurer was faced with a potentially embarrassing allegation of sexual misconduct by one of its insureds. A review of the file of the third case does not disclose why the insurer chose to settle; however, the case did involve the death of the elderly plaintiff-patient, and the amount paid in settlement was not substantial.

which causation was determined to exist.⁴⁸ Money was also paid in 20% (n=3) of cases in which causation was determined not to exist and in 60% (n=12) of cases with uncertain causation. These results suggest that the claims resolution system, while for the most part "rational," nonetheless has an ambivalent side. In other words, outcomes are generally predictable, but not inevitable.

D. Standard of Care and Causation in Combination

How do the assessments of standard of care and causation come together? When standard of care was determined to be breached, and causation was found to exist, settlement occurred in 94.4% (n=17) of cases. Settlement in these cases is close to a forgone conclusion. When neither existed, settlement still occurred in 15.4% (n=2) of cases. Surprisingly, there were no cases in which standard of care was breached but causation was found lacking. There were five cases in which the standard of care was not breached but causation was determined to exist. None of those five cases settled, and no offers were made.

E. An In-Depth Look at the Cases in which the Standard of Care is Evaluated as Uncertain

Table 4 reveals that the insurers' first assessment of liability and standard of care as uncertain did not change from the first to the last assessment. The uncertain cases remained uncertain in terms of assessment of liability and standard of care. A detailed look at these "toss-up" cases in which money was not paid shows that six⁴⁹ out of twelve cases went to trial.⁵⁰ The defendant won five out of six of these cases (83.3%). The trial rate for these toss-up cases was 50% compared to a 24.7% trial rate for the total sample.

Money was paid in seven cases, and not paid in twelve.⁵¹ In ten of the twelve cases, the fact that no money was paid can be explained by one or more of the following factors found in the file: (1) strong defense experts; (2) plaintiff's counsel perceived as being weak; (3) a perception of the poor witness potential of the plaintiff; and (4) a perception of the very strong witness potential of the defendant-physician. We argue that these factors constitute "strategic variables." They appear to be crucial in uncertain cases.

The importance of strategic variables is further illustrated and supported by the factors associated with the payment of money. All seven cases involved a voluntary settlement by the insurer and, notably, no trials. Five of the seven cases involved one or more of the following factors found in the file: (1) concern about the poor witness

48. See *infra* Table 7.

49. One of the six was an arbitration in which liability was contested.

50. See *infra* Table 6.

51. See *infra* Table 6.

potential of the defendant-physician; (2) plaintiff's witness potential rated as very strong; and (3) effective plaintiff's counsel. Once again strategic variables played a major role in the settlement process.

F. The Life-Cycle of the Cases in the Insurance Files: What Are the Relationships Among Assessment of Standard of Care, Insurer's Offer and Case Outcome?

How do the variables—assessment of standard of care and whether the insurer made an offer—come together in case outcome? Figure 1 shows step-by-step what happens to cases when the standard of care was determined to be breached, compared to if it had not been so evaluated. This Figure shows a striking pattern. The left side of the flow chart (standard of care breached) shows that almost always an offer was made and the case settled. That is, of the twenty-seven cases, an offer was made in twenty-six (96.3%) of them and twenty-four (92.3%) of those cases settled, for an overall settlement rate of 88.9%. On the other hand, on the right side of the flow chart (standard of care not breached) ($n=22$), no offer was made in 95.5% ($n=21$) of the cases. None of them settled.

If the standard of care was determined to have been breached, and the insurer made an offer, money was paid in 96.2% ($n=25$) of such cases.⁵² A trial occurred in only one such case (3.8%), and in that one case the defendant still won. In only one case did the insurer evaluate standard of care as not breached, yet still made an offer.

When the insurer did *not* make an offer, what happened to the case? The two most likely outcomes were either (1) abandonment of the case by the plaintiff without compensation (usually taking the form of a voluntary dismissal without prejudice, and not later re-filed) ($n=11$); or (2) a trial ($n=9$). If the insurer believed that the standard of care had not been breached, and the case proceeded to trial, the insurer prevailed 87.5% of the time ($n=7$).⁵³ If the insurer was uncertain about standard of care and made no offer, the defendant prevailed at trial 100% of the time ($n=4$). The conclusion is simply stated: the plaintiff's best chance for compensation is to obtain a settlement from the insurer. If no offer is forthcoming, the plaintiff faces very long odds.

When the insurer determined that the standard of care was breached and made an offer, there was only one trial. If the standard of care was not breached, as assessed by the insurer, and the insurer made an offer, there were no trials, but this rarely happened. If the insurer was uncertain about whether the standard of care had been breached, but made an offer, only one trial occurred. The plaintiff won.

52. See *infra* Table 8.

53. See *infra* Table 8.

V. DISCUSSION

Settlement and trial are simply two aspects of the same system and are reciprocals of each other. One defines the other. Because the insurer settles almost all cases in which it believes the standard of care has been breached, the insurer can expect to win most of the remaining cases at trial—provided that its assessment of standard of care accurately predicts the jury's later conclusion. The data reflect this pattern, and indicate that the insurer's predictions are indeed highly accurate. Settlement affects trial, and trial affects settlement. The high success rate at trial is a fact known to experienced plaintiff's counsel, as well as to the insurer. Knowing that his or her client will face long odds at trial, plaintiff's counsel will be motivated to accept the insurer's offer for settlement, if and when that offer comes. The tendency to behave in risk-averse fashion when confronted with a modest, but certain, gain exerts additional pressure on plaintiff's counsel to settle.⁵⁴ Knowing that its offers will likely be accepted, the insurer is able to continue its practice of case selection, settle the likely losers, and try the likely winners. One might also wonder if a "discount" is also being applied to the amount of the insurer's offer, reflecting the insurer's awareness of its superior bargaining position.⁵⁵

A. *What Does It Mean?*

We have described a claims resolution system that turns on the "standard-of-care" determination, and we have identified the outside reviewers as the means by which the insurer decides if the standard of care has been breached. The opinions of these reviewers, then, are of obvious importance. What do we know about them, and about the process of obtaining outside reviews?

First, the process is not at all "scientific"; opinions are sought from several physicians, and then a determination is made by the insurer regarding liability.⁵⁶ Second, it is often not easy to determine if the standard of care in a particular case has been met; re-

54. See Farber & White, *Medical Malpractice*, *supra* note 20, at 208; Sloan & Hsieh, *supra* note 12, at 998.

55. See SLOAN ET AL., *supra* note 16, at 206-08. It is widely understood that medical malpractice cases settle for less than their potential verdict at trial. See, e.g., DANZON, *supra* note 5, at 43-44; Danzon & Lillard, *supra* note 12, at 365. The discrepancy between the settlement amount and the potential verdict is often attributed to the probability of the plaintiff prevailing at trial; cases of likely liability have a higher settlement value than cases of uncertain and unlikely liability. See, e.g., DANZON, *supra* note 5, at 43; Farber & White, *Medical Malpractice*, *supra* note 20, at 204-06; White, *Value of Liability*, *supra* note 20, at 84. However, in our study very few cases of unlikely or uncertain liability actually settled, or even received an offer of settlement from the insurer. It may be that discounting still occurs.

56. See *supra* text accompanying notes 27-28.

viewers disagree.⁵⁷ In any system based on review of medical records, we should recognize that physician reviewers will often reach inconsistent conclusions. Many of the "calls" that have to be made are neither obvious nor easy. Third, it is physicians who are, in reality, making the critical standard-of-care determinations in this system. There is certainly much logic to this, but there is also a certain amount of irony as well. For example, in an earlier survey we asked North Carolina physicians who had been sued what changes they would like to see made to the current system. The most frequent response was a desire for some sort of expert review system, presumably by fellow physicians.⁵⁸ In fact, peer review is what already happens, although it is perhaps unacknowledged. The outside reviewers function as a de facto system of peer review, but with only a limited amount of feedback provided to the defendant-physician. Furthermore, whether those defendant-physicians were aware of how the outside review process works, as often as not they expressed disagreement with the conclusion of their insurer that compensation should be paid to the claimant; fifty percent of the respondents for whom money was paid thought they were not liable.⁵⁹ This, of course, contrasts sharply with the insurer practice we have described.

There is more to the story than this, however. If standard of care, by itself, predicts payment, what is the need for lawyers and expert witnesses? Indeed, this very question was raised by Taragin et al. in their New Jersey study.⁶⁰ There are several answers. First, an examination of the case files indicates that it is necessary, but not sufficient, for standard of care to have been breached, in order for the plaintiff to recover. As previously described, the plaintiff must identify experts, who are then deposed by defense counsel.⁶¹ If the standard of care was all that mattered, there would be no need for depositions. In the case resolution process, the insurer routinely puts the plaintiff to its proof, even in cases where the insurer has, or will, determine, that the standard of care has been breached.⁶² The plaintiff must identify at least one expert, and the plaintiff and that expert must be deposed. If the depositions indicate that the plaintiff will, in fact, be able to prove his or her case, an offer will likely follow.⁶³

There is a second answer, related to the first, and it has to do with the nature of standard-of-care determinations. The determination is not always straightforward. Reasonable minds may dis-

57. See *supra* text accompanying notes 27-28.

58. Ralph Peeples et al., *Settlement Has Many Faces: Physicians, Attorneys and Medical Malpractice*, 41 J. HEALTH & SOC. BEHAV. 333, 342 (2000).

59. *Id.* at 341-42.

60. Taragin et al., *supra* note 18, at 783.

61. See *supra* Part II.B.

62. See *supra* Part II.B.

63. See *supra* Part II.B.

agree.⁶⁴ In situations where the determination is difficult, other factors, unrelated to standard of care, may take on greater importance. We have demonstrated, for example, that in uncertain cases factors such as the witness potential of the plaintiff and of the defendant, as well as the perceived competence of the lawyers, become significant.⁶⁵ If that is so, then the role of lawyers becomes increasingly more important.

B. Does Causation Matter?

In tort law, a breach of the standard of care is not enough to establish liability; proximate cause must also be shown.⁶⁶ Logically, then, one might suppose that the insurer would insist on evidence of both breach and causation, as preconditions to making an offer in settlement. Such does not appear to be the case, however. There does appear to be a connection between causation and the decision to seek a settlement.⁶⁷ However, the connection between standard of care and settlement is much stronger. For example, 68.8% of cases in which the insurer believed causation existed, settled (n=22), compared to 89.3% of cases in which the insurer believed the standard of care had been breached (n=25). There were no cases in which the insurer determined that standard of care had been breached, but found causation lacking, although there were cases (n=5) in which causation was found, but the insurer concluded that the standard of care had not been breached. These cases did not settle. The more common outcome, however, was that causation generally tracked standard-of-care analysis. This suggests a question worthy of additional study: In practice, is it possible to separate the two components in a systematic way?

VI. A RESTATEMENT

What then is the significance of the insurer's assessment of standard of care? Simply put, it is the linchpin of the system. An examination of both settlement and trial dynamics makes this point clear. In addition, our analysis demonstrates that the system is rational, both from the perspective of the insurer and experienced plaintiff's counsel. The much discussed "battle of experts" simply does not occur in the way commonly thought.

The claims resolution process is a system dominated by the in-

64. See e.g., SLOAN ET AL., *supra* note 16, at 107 (77 of 127 birth injury cases judged uncertain); Cheney et al., *supra* note 14, at 1601 (13% of cases deemed impossible to judge); Taragin et al., *supra* note 18, at 781 (13% of cases rated "unclear"). Most empirical studies of medical malpractice claims, including studies with after-the-fact review of the insurer files, have reported a substantial percentage of "uncertain liability" cases.

65. See *supra* notes 50-52 and accompanying text.

66. See *supra* note 3.

67. See *infra* Table 6.

suror. If the insurer thinks the defendant has violated the standard of care and is liable, the case settles and there is no trial. Trials and settlement mirror each other. Trials, on the other hand, occur when two conditions exist: (1) the insurer does not believe that the standard of care has been violated and the defendant is therefore not liable; and (2) the plaintiff, unable to extract an offer from the insurer, chooses not to drop the case. Although the system is rational, there are elements of non-rationality. Uncertainty about standard of care often occurs. Some of these cases settle and some do not. Finally, especially in uncertain cases, strategic variables, such as witness potential of the defendant and plaintiff and evaluation of the plaintiff's counsel play a crucial role in determining the case outcome.

VII. IMPLICATIONS FOR SCIENTIFICALLY-BASED STANDARD-OF-CARE DETERMINATIONS

How would wider acceptance of a more "scientifically-based" approach to standard-of-care determinations impact the litigation process as described above?

In the average case, it would not appear that insurers would greatly value a more empirically-based method for determining the standard of care. The current system of external reviews, which is accomplished with relative ease, appears to be regularly providing high quality and useful assessments of defendant-physicians' liability. Such a process could perhaps be valuable in the cohort of cases deemed by outside reviewers or the insurers as "uncertain." It is, however, unclear in what kind of malpractice disputes the empirically-derived standard-of-care assessments will be most beneficial. The uncertainty that currently exists in some cases can be a function of a variety of factors, some of which may not be easily addressed by the suggested approach. For example, if the external reviewers' uncertainty is a function of inadequate medical records or factual questions, an empirically-based examination of standard of care will not help resolve the issue. If, on the other hand, the uncertainty is a function of imperfect understanding of medical practice, new approaches to understanding standard of care could be beneficial.

Nor will scientifically-based standard-of-care assessments in and of themselves change the dynamics of the settlement process described above. Currently, even in cases where the insurer assesses liability as probable, it often puts the plaintiff to the test of demonstrating an ability to "make the case" through the deposition of the plaintiff's key witnesses and experts.⁶⁸ Unless scientifically-based standard-of-care determinations were somehow self-proving, it would seem that insurers would continue to require plaintiffs, es-

68. See *supra* note 34 and accompanying text.

pecially those represented by less experienced attorneys, to "show their stuff."⁶⁹

Thus, from the key perspective of the insurer, in the analysis of liability and in the formulation of settlement strategy, revamping how the system conceptualizes the process of assessing standard of care does not appear to be of significant utility in most cases. Insurers already appear able to obtain quality information about standard-of-care issues and to shape effective litigation strategy accordingly. Greater use of empirically-based methods for determining standard of care would, of course, be of possible use as a way of providing an additional means of refuting plaintiff's expert testimony at trial in those cases where plaintiffs insist upon having a jury resolve the issue (most of which are cases of predicted non-liability).

From the perspective of the plaintiff's attorney, a new approach to determining liability would seem more valuable. Empirical evidence suggests a significant number of cases in which the defendant's conduct did not violate the applicable standard of care, but in which the plaintiff's attorney nevertheless has filed suit and proceeds to trial. Given the fact that many of these cases are filed by less experienced plaintiff's attorneys, it may be that such attorneys have greater difficulty obtaining or interpreting expert opinions. Pursuing non-meritorious cases is obviously expensive for attorneys (as well as for insurers and defendant-physicians). If readily available, scientifically-based assessments of standard of care could assist plaintiff's attorneys in deciding whether to accept and file malpractice cases.

Another potentially important function for empirically-based standard-of-care assessments would be in attempting to reconcile conflicting liability arguments as between plaintiffs and defendants. While proponents of such a new approach usually analyze its possible benefits in the trial context, its true measure of potential worth may well be during the pre-trial settlement process (given the preponderance of cases that are settled or dropped without trial). The question would then be how the new approach could be assimilated into the dynamics of the settlement process. Currently, many court systems have some form of mandated settlement conference applicable to malpractice cases such as the "mediated settlement conference" system in North Carolina.⁷⁰ Currently, these sessions are ill-suited to reconciling a "battle of the experts" over standard of care. Experts are not required to attend, as the expense would be considerable. For the most part, the mediators are not in a position to evaluate which side's medical testimony is stronger, both because such evaluation is prohibited by ethics rules which encourage me-

69. See *infra* Table 6.

70. For a detailed description of the mediated settlement conference process in North Carolina, see Thomas B. Metzloff et al., *Empirical Perspective on Mediation and Malpractice*, 60 LAW & CONTEMP. PROBS. 107 (1997).

diators to facilitate negotiations without evaluating the merits of the claim, and also because mediators do not typically possess the medical knowledge necessary to evaluate competing liability theories.⁷¹ Mediators are usually lawyers with process expertise as opposed to medical acumen.⁷² Indeed, such settlement procedures tend to embrace or at least value uncertainty as a means of fostering compromise. While the current approach may be well-suited to settling cases where the parties agree on liability and primarily disagree on the amount of settlement, it is not constructed to provide meaningful input on the appropriate standard of care.

Other possible settlement approaches would be better-suited to capitalizing on a new regime of empirically-based standard-of-care determinations. For example, in those cases in which the parties (perhaps at the prodding of the court) recognized that differing opinions on the relevant standard of care were a key issue in the case, obtaining an empirically-based assessment of the standard of care could well provide new insights to help speed the voluntary resolution of the case. Courts that were in a position to recognize difficult liability cases could encourage the parties to retain a neutral expert to conduct such an inquiry.

71. *Id.* at 111.

72. *Id.* at 144-47. It is noteworthy that attorneys tend to value mediators with particular expertise in malpractice cases, including medical knowledge.

TABLE 1. EVALUATION OF REVIEWERS BY INITIAL INSURERS' ASSESSMENT OF LIABILITY

Reviewers' Assessment of Liability	Insurers' Initial Assessment of Liability					
	Probable		Uncertain		Unlikely	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Probable	12	80.0	2	13.3	1	6.7
Uncertain	2	10.5	10	52.6	7	36.8
Unlikely	2	7.7	7	26.9	17	65.4

TABLE 2. INSURERS' LAST ASSESSMENT OF LIABILITY BY EVALUATION OF REVIEWERS'

Insurers' Last Assessment of Liability	Reviewers' Assessment of Liability					
	Probable		Uncertain		Unlikely	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Probable	16	100.0	8	38.1	2	8.0
Uncertain	—	—	9	42.9	4	16.0
Unlikely	—	—	4	19.0	19	76.0

TABLE 3. WAS STANDARD OF CARE VIOLATED AND DOES CAUSATION EXIST BY REVIEWERS' ASSESSMENT OF LIABILITY

Did Insurer Believe Standard of Care Was Breached?	Reviewers' Assessment of Liability					
	Probable		Uncertain		Unlikely	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Yes	15	100.0	6	28.6	2	8.0
No	—	—	6	28.6	17	68.0
Uncertain	—	—	9	42.9	6	24.0
Did Insurer Believe Causation Existed between the Defendant's Conduct and the Alleged Injuries?						
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Yes	11	73.3	7	33.3	6	30.0
No	—	—	7	33.3	7	35.0
Uncertain	4	26.7	7	33.3	7	35.0

TABLE 4. INSURERS' ASSESSMENTS OF LIABILITY BY EVALUATION OF STANDARD OF CARE

	Did Insurer Believe that Standard of Care had been Breached?					
	Yes		No		Uncertain	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Insurers' First Assessment of Liability						
Probable	14	58.3	—	—	2	11.1
Uncertain	8	33.3	3	12.0	11	61.1
Unlikely	2	8.3	22	88.0	5	27.8
Insurers' Last Assessment of Liability						
Probable	26	96.3	1	3.8	2	11.1
Uncertain	1	3.8	4	15.4	11	61.1
Unlikely	2	11.1	21	80.8	5	27.8

TABLE 5. INSURERS' ASSESSMENTS OF LIABILITY BY EVALUATION OF THE EXISTENCE OF CAUSATION

	Did Insurer Believe Causation Existed Between Defendants' Conduct and Alleged Injuries?					
	Yes		No		Uncertain	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Insurers' First Assessment						
Probable	10	37.0	1	7.1	5	26.3
Uncertain	8	29.6	4	28.6	8	42.1
Unlikely	9	33.3	9	64.3	6	31.6
Insurers' Last Assessment of Liability						
Probable	21	65.6	1	6.7	7	36.6
Uncertain	4	12.5	4	26.7	9	47.4
Unlikely	7	21.9	10	66.7	3	15.8

TABLE 6. CASE OUTCOMES BY EVALUATION OF WHETHER THE STANDARD OF CARE HAD BEEN BREACHED

	Did Insurer Believe that Standard of Care had been Breached?					
	Yes		No		Uncertain	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Did Insurer make any offer at all?						
Yes	26	96.3	1	4.5	6	35.3
No	1	3.7	21	95.5	11	64.7
Did case go to trial?						
Yes	2	6.9	11	40.7	6	31.6
No	27	93.1	16	59.3	13	68.4
If yes, who won?						
Defendant	1	50.0	9	90.0	5	83.3
Plaintiff	1	50.0	1	10.0	1	16.7
Did case settle?						
Yes	25	86.2	3	11.1	7	36.8
No	4	13.8	24	88.9	12	63.2
Was money paid?						
Yes	27	93.1	4	14.8	7	36.8
No	2	6.9	23	85.2	12	63.2

TABLE 7. CASE OUTCOMES BY WHETHER INSURER BELIEVED CAUSATION EXISTED

	Did Insurer Believe Causation Existed between Defendants' Conduct and Alleged Injuries?					
	Yes		No		Uncertain	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Did Insurer make any offer at all?						
Yes	23	71.9	—	—	11	64.7
No	9	28.1	12	100.0	6	35.3
Did case go to trial?						
Yes	2	6.3	8	53.3	5	25.0
No	30	93.8	7	46.7	15	75.0
If yes, who won?						
Defendant	2	100.0	7	87.5	4	80.0
Plaintiff	—	—	1	12.5	1	20.0
Did case settle?						
Yes	22	68.8	2	13.3	11	55.0
No	10	31.3	13	86.7	9	45.0
Was money paid?						
Yes	22	68.8	3	20.0	12	60.0
No	10	31.3	12	80.0	8	40.0

TABLE 8. CASE OUTCOME BY WHETHER INSURER MADE AN OFFER AND WHETHER STANDARD OF CARE BREACHED

	Standard of Care Breached				Standard of Care Not Breached				Uncertain if Standard of Care Breached			
	Did Insurer Make an Offer? (n = 27)				Did Insurer Make an Offer? (n = 22)				Did Insurer Make an Offer? (n = 17)			
	Yes		No		Yes		No		Yes		No	
	f	%	f	%	f	%	f	%	f	%	f	%
Did case Settle?												
Yes	24	92.3	—	—	1	100	—	—	6	100	—	—
No	2	7.7	—	—	—	—	21	100	—	—	11	100
Was money paid?												
Yes	25	96.2	—	—	1	100	1	4.8	6	100	—	—
No	1	3.8	1	100	—	—	20	95.2	—	—	11	100
Was there a trial?												
Yes	1	3.8	—	—	—	—	9	42.9	1	16.7	4	36.4
No	25	96.2	1	100	1	100	12	57.1	5	83.3	7	63.6
If trial, who won?												
Δ*	1	100	—	—	—	—	7	87.5	—	—	4	100
Π**	—	—	—	—	—	—	1	12.5	1	100	—	—

* Δ denotes Defendant

** Π denotes Plaintiff

FIGURE 1. WAS THE STANDARD OF CARE BREACHED?