MOST CLAIMS SETTLE: IMPLICATIONS FOR ALTERNATIVE DISPUTE RESOLUTION FROM A PROFILE OF MEDICAL-MALPRACTICE CLAIMS IN FLORIDA

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I
INTRODUCTION

Past research on the nature and scope of medical-malpractice claims in Florida has found that a very high number of cases are resolved before trial, and, conversely, a very low number of cases are resolved through jury trials. A general survey of the process of medical-malpractice claims resolution in Florida between 1990 and 2003 reveals that 45% of claims resulted in payments, 46% of paid claims were closed in three years, and 96% were closed in six years.[1] Moreover, 20% of paid claims were settled without a lawsuit ever being filed, and only 2.3% of paid claims were resolved following a jury trial. Out of all awards equal to or exceeding one million dollars, approximately 10% were made without a plaintiff ever filing a formal lawsuit, compared to less than 5% of cases resolved through jury trial.[2]

This article is also available at http://www.law.duke.edu/journals/lcp.

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1. *See* Neil Vidmar et al., *Uncovering the "Invisible" Profile of Medical Malpractice Litigation: Insights from Florida*, 54 DEPAUL L. REV. 315, 329–30 (2005) [hereinafter Vidmar et al., *Uncovering*].

2. Neil Vidmar et al., *Million Dollar Medical Malpractice Cases in Florida: Post-verdict and Pre-suit Settlements*, 59 VAND. L. REV. 1343, 1345 (2006) [hereinafter Vidmar et al., *Million Dollar*].

Numerous researchers have studied when parties in a legal dispute go to trial and when they settle out of court.[3] These investigations—which often use the Pareto notion of equality[4] tested with game-theoretic models—have focused on the strategic decision-making elements of pretrial settlements. These studies have found that each party's level of information, as well as the rules of the game, affect the likelihood of settlement.[5] The few studies that have used real data to examine settlement rates have found very high pretrial-settlement rates.[6]

The dynamics behind these resolution rates—whether they are million-dollar cases, lesser awards, or claims without awards—should be considered in the context of the discovery and procedural rules guiding the claiming process. A study of closed-claim files of major medical-liability insurers clearly demonstrates the importance of the discovery process in resolving claims.[7] Before claims can be settled, both parties need to uncover the facts bearing on the dispute, including both the determination of causality and the presence of legal negligence. Today, a patient in a hospital is often treated by multiple specialists, resident physicians, nurses, and technicians. At the beginning of a claim, no one may know if, which, and how many of these persons might have been negligent.[8] The formal process of discovery can be difficult and time-consuming, and undoubtedly is a primary cause of delay in the settlement of most disputes.

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3. *See, e.g.*, Richard Howard, Richard Chard, Joel Kaji & Jeffrey Davis, *Pre-trial Bargaining and Litigation: The Search for Fairness and Efficiency*, 34 LAW & SOC'Y REV. 431, 434 (2000) (discussing literature and models about settlement).

4. A social condition is pareto-optimal or pareto-efficient when it is not possible to shift to another condition judged better by at least one person and worse by none. AMARTYA SEN, COLLECTIVE CHOICE AND SOCIAL WELFARE 21 (1970).

5. *See* Alison Watts, *Bargaining Through an Expert Attorney*, 10 J.L. ECON. & ORG. 168, 169 (1994); Janusz Ordover & Ariel Rubinstein, *A Sequential Concession Game with Asymmetric Information*, 101 Q.J. ECON. 879, 880 (1986); Stephen Salant, *Litigation of Settlement Demands Questioned by Bayesian Defendants* 1 (Cal. Inst. of Tech., Working Paper, 1984); *see also* Ben DePoorter, *Law in the Shadow of Bargaining: The Precedent Effect of Settlement*, 95 CORNELL L. REV. 957, 987 (2010) (discussing informal networking among lawyers regarding the "going rates" of private settlements and their use in private negotiations); Howard et al., *supra* note 3, at 433 (discussing the role of fairness in settlements).

6. Vidmar et al., *Uncovering*, *supra* note 1, at 355; Vidmar et al., *Million Dollar*, *supra* note 2, at 1345. This finding is also consistent with the disappearing-trial phenomenon, which has found that the rate of trials for civil cases is approaching zero. *See* Gillian K. Hadfield, *Where Have All the Trials Gone? Settlements, Nontrial Adjudications, and Statistical Artifacts in the Changing Disposition of Federal Civil Cases*, 1 J. EMPIRICAL LEGAL STUD. 705, 705 (2004) (finding that the rate of settlement has declined, but that the rate of nontrial adjudication has increased, which is consistent with some of the pretrial mechanisms presented in this research); *see also* Herbert M. Kritzer, *Disappearing Trials? A Comparative Perspective*, 1 J. EMPIRICAL LEGAL STUD. 735, 736, (2004); Allan Kanner & M. Ryan Casey, *Daubert and the Disappearing Jury Trial*, 69 U. PITT. L. REV. 281, 299 (2006); Marc Galanter, *A World Without Trials*, 2006 J. DISP. RESOL. 7, 21 (2007); Shari Seidman Diamond & Jessica Bina, *Puzzles About Supply-Side Explanations for Vanishing Trials: A New Look at Fundamentals*, 1 J. EMPIRICAL LEGAL STUD. 637, 645–46 (2004).

7. NEIL VIDMAR, MEDICAL MALPRACTICE AND THE AMERICAN JURY 28–29 (1995).

8. *Id.*

A study of North Carolina closed-claim files found that the information-gathering process often resulted in changes in the insurers' evaluations of the cases.[9] For instance, an initial defense expert might say there was no negligence; but after consulting with other experts, the defense lawyer and liability insurer might decide negligence had occurred. Indeed, the variation among experts about the presence of negligence is one of the causes of litigation itself.[10] Deposing the plaintiff's experts might change the insurer's evaluation of the claim's merit still again. Despite claims about "nuisance settlements," insurers are reluctant to settle cases unless there is substantial evidence of legal negligence on the part of the insured.[11] Similarly, the results of the discovery process often cause plaintiffs to abandon claims when they conclude that negligence cannot be proven or, in any event, that the costs of litigation would offset any potential recovery.

In short, this article contributes to the topic of alternative dispute resolution (ADR) by drawing attention to the frequent and complicated evidentiary problems in medical malpractice claims and the procedural mechanisms provided by statutes, court rules, and case law that are already in place to facilitate claim resolution. Other states have procedural mechanisms similar to those in Florida. As such, while proposed ADR procedures might well provide better resolutions to medical malpractice claims, they must take into consideration both the unique characteristics of medical malpractice disputes and existing mechanisms for resolving these disputes.

II
REGULATION OF ADR IN FLORIDA

In at least one sense, the nature of medical-malpractice claims makes them particularly suitable for ADR. The patient–provider relationship is not based on a traditional economic exchange.[12] The deliberative nature of many ADR practices can benefit both the provider—who is able to avoid the pitfalls of engagement in a court battle—and the patient, who is seeking a resolution to a breach of confidence.[13] Previous research on the general pretrial process in

9. *Id.*

10. *Id.* at 23–35, 59–82; *see also* Neil Vidmar, *Medical Malpractice Lawsuits: An Essay on Patient Interests, the Contingency Fee System, Juries, and Social Policy*, 38 LOY. L.A. L. REV. 1217, 1219 (2005).

11. *See* Lance McMillian, *The Nuisance Settlement "Problem": The Elusive Truth and a Clarifying Proposal*, 31 AM. J. TRIAL ADVOC. 221, 228 (2007).

12. *See* Mark A. Hall & Carl E. Schneider, *The Professional Ethics of Billing and Collections*, 300 J. AM. MED. ASS'N 1806, 1806 (2008) ("In a relational model, medical service is embedded in a therapeutic relationship in which physicians have personal and moral ties to patients that make maximizing profits inappropriate."); Allen K. Hutkin, *Resolving the Medical Malpractice Crisis: Alternatives to Litigation*, 4 J.L. & HEALTH 21, 26–29 (1989–1990) (discussing the unique aspects of the physician–patient relationship).

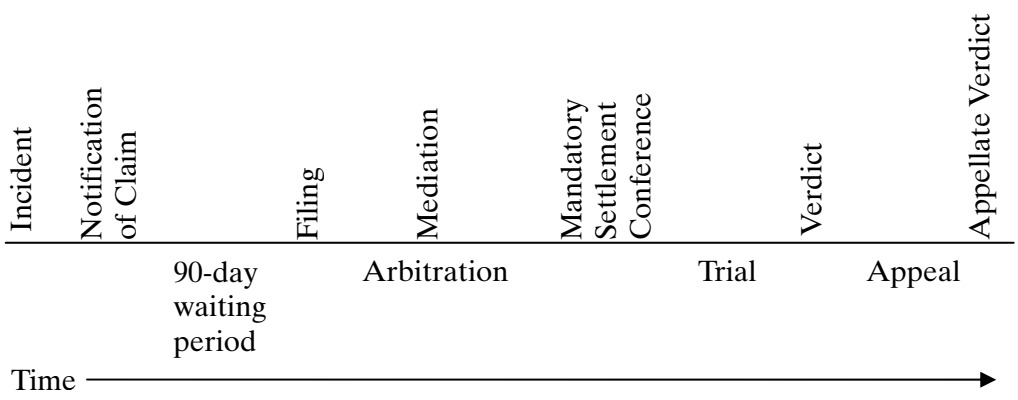
13. *See* John Cooley, *A Dose of ADR for the Health Care Industry*, DISP. RESOL. J., Feb.–Apr. 2002, at 16, 20 (stating "[c]o-mediation has repeatedly produced win–win solutions"); Roderick B. Mathews, *The Role of ADR in Managed Health Care Disputes*, DISP. RESOL. J., Aug. 1999, at 8, 11

medical-malpractice cases, and Florida cases in particular, however, suggests a need for further investigation into the types of claims that are resolved, both outside the formal litigation system and during pretrial processes following a lawsuit.

The research presented in this article leaves the discussions of efficiency, fairness, and legality to others. Instead, it focuses on building a profile of the types of cases that are resolved at each pretrial stage of the claiming process. Creating a quantitative profile of each step between incident and court demonstrates the effectiveness of a regulatory framework governing the course of claims before trial and the consequent opportunities for settlement. The profile also reveals the timeline for claim resolution, the payments involved at each stage, and the extent to which medical-malpractice claims and resolution change over time. Particular attention is paid to the resolution of large-payment cases.

To start this discussion, it is important to understand that the course of a medical-malpractice claim is guided by statutory regulations. Figure 1 displays a timeline for a claim resulting in adjudication, from incident to appeal.[14]

Figure 1: Timeline for a Medical-Malpractice Claim in Florida



(1999) (describing the advantages of ADR including privacy, confidentiality, and avoiding the win-or-lose confrontation of the courtroom).

14. The timeline presented here is specific to the process in Florida. For a simplified timeline, see Thomas Metzloff, *Alternative Dispute Resolution Strategies in Medical Malpractice*, 9 ALASKA L. REV. 429, 430 (1992).

Florida, like many other states,[15] constrains the claiming process through a number of statutory guidelines. By statute, a plaintiff may not file a lawsuit for a period of ninety days after notifying the defendant of the medical malpractice claim.[16] During this ninety-day period, the defendant must conduct a review of the incident in question.[17] After this internal review, the defendant can reject the claim, make a settlement offer, or move that the claim be handled through arbitration.[18] During the pre-suit period, both the plaintiff and defendant may engage in informal discovery; but any information obtained in this informal stage is inadmissible if a lawsuit is filed.[19] All medical-malpractice claims must be bound to a mediation process within 120 days after a lawsuit is filed.[20] In addition, claims can be submitted for arbitration for the sole determination of damages if the defendant concedes fault.[21] These procedural rules, of course, are intended to promote discussion and foster a resolution of the claim. There are additional rules and practices that apply if the claim is not resolved through mediation, including settlement conferences with the judge who is assigned to

15. Many states have statutory requirements for the pretrial process for general grievances and medical-malpractice claims. *See, e.g.*, Richard H. Steen, *NEW JERSEY: Med-Mal Reform Addresses ADR*, DISP. RESOL. J., Aug.–Oct. 2004, at 6, 6–7; Kelly Meadows, Note, *Resolving Medical Malpractice Disputes in Massachusetts: Statutory and Judicial Initiatives in Alternative Dispute Resolution*, 4 SUFFOLK J. TRIAL & APP. ADVOC. 165, 172–75 (1999); Michael E. Weinzierl, *Wisconsin's New Court-Ordered ADR Law: Why It Is Needed and Its Potential for Success*, 78 MARQ. L. REV. 583, 591 (1995). Michigan requires mediation. MICH. COMP. LAWS § 600.4903 (2000). Minnesota has general requirements for ADR, not just aimed at medical malpractice. MINN. STAT. § 145.682 (2010). Montana medical-malpractice claims are subject to mandatory settlement conference conducted by a panel of senior judges. MONT. CODE ANN. §§ 27-6-105, 27-6-701 (2009). New Jersey requires the use of an arbitrator if the amount of the claim is $20,000 or less. N.J. STAT. ANN. § 2A:23A-20 (West 2010). Other states, such as New York, New Mexico, Ohio, and Pennsylvania allow parties to engage in arbitration, but do not require it.

16. FLA. STAT. § 766.106(3)(a) (2010).

17. Florida requires that the review be conducted by either (1) a duly qualified claims adjuster; (2) a panel comprised of a malpractice attorney, a healthcare provider trained in the same or similar medical specialty as the prospective defendant, and a duly-qualified claims adjuster; (3) a medical-review committee of a society of healthcare providers; or (4) any similar procedure that fairly and promptly evaluates the pending claim. *Id.* § 766.106(3)(a). In addition, Section 766.106(4) requires that insurers must investigate all claims with the cooperation of both parties. The investigation may include a screening panel. No civil liability will arise from participation in the pretrial screening "if done without intentional fraud."

18. *Id.* § 766.106(4)(b). The Florida law adds to the growing practice in healthcare of requiring patients to sign binding arbitration agreements when they receive care. *See, e.g.*, Ann Krasuski, *Mandatory Arbitration Agreements Do Not Belong in Nursing Home Contracts with Residents*, 8 DEPAUL J. HEALTH CARE L. 263, 264 (2004); Kenneth A. DeVille, *The Jury Is Out: Pre-dispute Binding Arbitration Agreements for Medical Malpractice Claims*, 28 J. LEGAL MED. 333, 333 (2007); Sandra Benson, *Pre-injury Agreements To Arbitrate Health Care Disputes: Legally "Shocking" or Legally Sensible*, 11 J. LEGAL ETHICAL & REG. ISSUES 59, 59 (2008). Courts frequently address the legality of these agreements. *See, e.g.*, Owens v. Nat'l Health Corp., 263 S.W.3d 867, 879 (Tenn. 2007); Briarcliff Nursing Home, Inc. v. Turcotte, 894 So.2d 661, 663 (Ala. 2004); Hogan v. Country Villa Health Servs., 55 Cal. Rptr. 3d 450, 453–55 (Cal. Ct. App. 2007) (citing Garrison v. Super. Ct. of L.A. Cnty., 33 Cal. Rptr. 3d 350 (Cal. Ct. App. 2005)).

19. FLA. STAT. § 766.106(5) (2010).

20. *Id.* § 766.108(1).

21. *Id.* § 766.106(3)(b)(3).

the case. All of these rules are intended to promote discussion and settlement without trial. Moreover, as described below, by statute, Florida physicians can opt to practice without liability insurance coverage; and a substantial number of physicians have chosen to do so. This factor too can affect the settlement process. With this preliminary overview of the legal guidelines and processes, research on the Florida closed-claim database is presented.

III

METHOD AND DATA

The principal source of these data is the Florida Medical Malpractice Closed Claim Report obtained from the Florida Department of Financial Services.[22] Florida law requires professional-liability insurers and self-insurers to report detailed information relating to every medical-malpractice claim, regardless of whether it results in payment to the claimant.[23] Each claim is coded for up to seventy-six variables,[24] including when and where the incident occurred, the date the claim was filed, the seriousness of the most severe alleged injury, whether a lawsuit resulted, the date of the lawsuit, how and when the lawsuit was resolved, the amount of indemnity paid (if any), and the defense-litigation costs. The database also includes brief, prose summaries of the nature of the injury, which provide a basis for qualitative analyses to supplement the quantitative analyses.

There are several important and unique characteristics of medical practice in Florida that bear upon interpretations of the database. As discussed, Florida is the only state that allows healthcare providers to practice without liability-insurance coverage as long as they sign a nonrevocable letter of credit to cover medical-negligence injuries up to $250,000.[25] In 2003, approximately 600 doctors chose this option.[26] By 2008, reports indicate that as many as 5,200 doctors had

22. *Doctor/Lawyer Malpractice Tracking System*, FLA. OFFICE OF INS. REGULATION, http://www.floir.com/Liability/ (last visited Jan. 11, 2011) [hereinafter *Tracking System*]. The Florida Closed Claims database contains brief summary accounts of the injuries sustained by the plaintiff, the actions of the defendant(s), the nature of the misdiagnosis (if one allegedly occurred), and the remedial actions undertaken by the defendant(s). After cleaning and organizing the data, the descriptions of injuries were run through a qualitative analysis program (Atlas.ti) to determine common patterns of injuries and actions. After groupings of the data were determined, the descriptions were read through by the authors and common problems, occurrences, and issues were identified. Although the full descriptions are available online from the state of Florida, human subjects protocol dictates that the authors provide the information from these claims in a manner that assures the confidentiality of both the plaintiff and the defendant. As the names of the parties could be extrapolated from the Florida database using newspaper reports or court documents, the full details of each claim are not provided.

23. FLA. STAT. § 627.912(1)(a), (5) (2010).

24. *See id.* § 627.912(1)(c) (detailing reporting requirements).

25. *Id.* § 627.912(1)(a), (5).

26. Vidmar et al., *Uncovering*, *supra* note 1, at 325.

chosen the no-liability-insurance option.[27] Claims against these doctors must still be reported to the Florida Department of Insurance, but there is no systematic policing of compliance.[28]

This has two implications. The obvious methodological implication is that some claims may not be reported in the files. The substantive implication is that the failure to carry liability insurance may discourage claims because plaintiffs' lawyers may be discouraged from filing lawsuits on the grounds that a $250,000 limit on their litigation costs will offset any recovery.[29]

Although the dataset extends back to 1975, the analyses are limited to claims closed from the year 1990 forward through 2008.[30] Caution must be used in interpreting the final three years of the dataset, because previous research has shown that, after a lawsuit is filed, the average time to closing the file is 3.39 years, with an average standard deviation of 1.96 years.[31] Consequently, although the 2006 through 2009 data capture information on claims closed during this period, many claims first filed between 2005 and 2008 would not yet have been resolved. The result is an incomplete profile of claims during the last years covered in this study. The later years are included in the analyses but should be treated with caution.

IV

A GENERAL PROFILE OF MEDICAL-MALPRACTICE CLOSED-CLAIMS IN FLORIDA

A. The Total Number of Medical-Malpractice Claims

The number of medical malpractice claims (as measured in incidents, claims, or dispositions) reveals important trends in filing and resolution. Table 1 demonstrates that between 1990 and 1998, the population-adjusted number of incidents averaged 1,765 paid claims per year. Beginning in 1999, the numbers jumped substantially to an average of 2,635 paid claims per year. There was, on

27. Bob LaMendola, *Uninsured Doctors on the Rise in South Florida*, S. FLA. SUN-SENTINEL, July 27, 2008, *available at* http://articles.sun-sentinel.com/2008-07-27/news/0807260139_1_malpractice-insurance-medical-malpractice-doctors.

28. *See* William Monroe, Auditor General, Office of Ins. Regulation Closed Claim Database, Report No. 2005–31 Operational Audit 1 (2004) (noting inaccuracies in the database). The reported pain-and-suffering components of jury verdicts and settlements are especially prone to error.

29. The Florida statute requires all health professionals to report claims and thus the database includes claims against dentists, podiatrists, chiropractors, and independent nurses. FLA. STAT. § 627.912(5) (2010). Because the concern about a medical-malpractice crisis was centered on physicians, those claims involving nonphysician professionals are eliminated from the analyses.

30. The analyses are limited to recent years to focus on the modern approach to the resolution of medical-malpractice claims. In addition, many of the regulatory requirements for pretrial actions in medical-malpractice claims were initiated in the 1980s. Analyses after this period allow for a clear understanding of the effects of pretrial-resolution methods.

31. The mean closing times and standard deviations are approximately the same from 1990 through 2004. The mean disposition time between 2005 and 2008 increased to an average of 3.78 years. The authors offer no explanation at this time for this change.

average, a lag of 1.25 years between the occurrence of a negative outcome and the reporting of a claim, a lag of 2.05 years until the filing of a lawsuit, and a lag of 3.26 years until the disposition of the claim. Thus, beginning in about 2001, the number of lawsuits increased between 1990 and 2009. Finally, beginning in about 2004, the number of paid claims began to rise.

Table 1: Paid Claims by Incident, Suit, and Disposition Date

Year	Florida Population	Incidents	Suits	Dispositions	Incidents (per 100,000)	Suits (per 100,000)	Dispositions (per 100,000)
1990	13,033,307	1,349	855	1,342	10.35	6.56	10.30
1991	13,369,798	1,549	892	1,319	11.59	6.67	9.87
1992	13,650,553	1,568	1,108	1,172	11.49	8.12	8.59
1993	13,927,185	1,623	1,106	1,231	11.65	7.94	8.84
1994	14,239,444	1,681	1,243	1,390	11.81	8.73	9.76
1995	14,537,875	1,771	1,278	1,725	12.18	8.79	11.87
1996	14,853,360	1,721	1,333	1,988	11.59	8.97	13.38
1997	15,186,304	1,716	1,195	1,787	11.30	7.87	11.77
1998	15,486,559	1,786	1,244	1,676	11.53	8.03	10.82
1999	15,759,421	2,194	1,177	1,378	13.92	7.47	8.74
2000	16,049,316	2,641	1,320	1,481	16.46	8.22	9.23
2001	16,348,628	2,706	1,817	1,520	16.55	11.11	9.30
2002	16,667,906	2,428	2,194	1,627	14.57	13.16	9.76
2003	16,959,251	1,949	2,171	2,087	11.49	12.80	12.31
2004	17,342,623	1,524	1,838	2,954	8.79	10.60	17.03
2005	17,736,027	1,125	1,182	2,646	6.34	6.66	14.92
2006	18,057,508	836	1,108	2,346	4.63	6.14	12.99
2007	18,251,243	473	802	2,068	2.59	4.39	11.33
2008	18,328,340	215	453	1,990	1.17	2.47	10.86
2009	18,537,969	25	146	1,659	0.13	0.79	8.95

The shaded cells in Table 1 indicate data on the number of occurrences and suits that must be treated cautiously because some claims from those years might still be working their way through the system.

Although columns three through five of Table 1 report raw numbers, they do not reflect changes in Florida's population. In 1990, the population was 13,033,307; it grew steadily to 18,328,340 in 2008, an increase of 28.9%, or an average population increase of 1.5% each year.[32] The growth in population, especially with a trend toward an older population,[33] increases the chances of

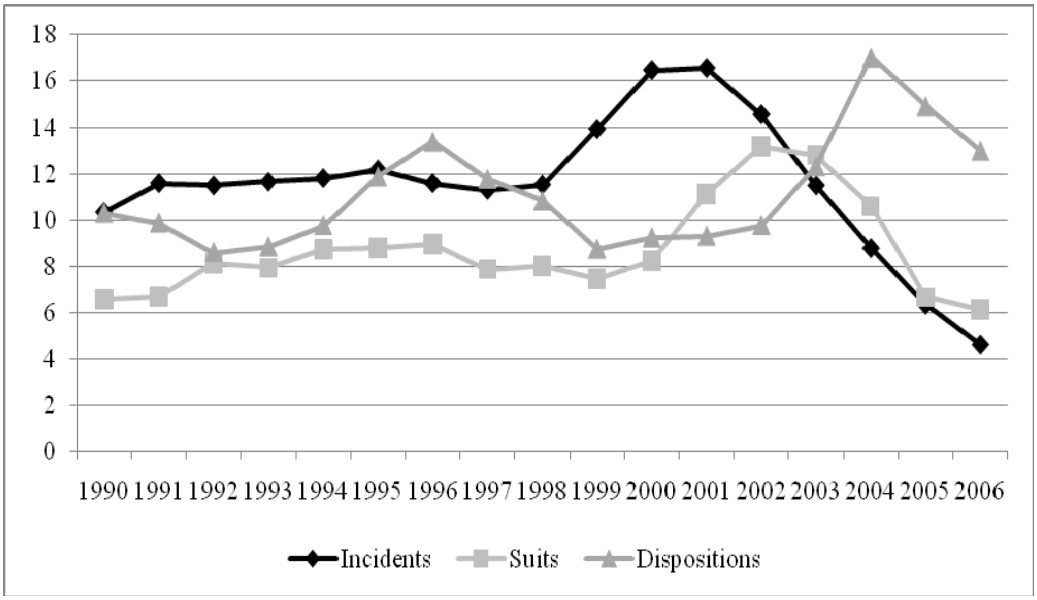
32. Population data from *American Community Survey*, U.S. CENSUS BUREAU, http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&_submenuId=datasets_1&_lang=en&_ts= (last visited Jan. 11, 2011).

33. The median age in Florida is 40.2 years, which is almost four years older than the median population in the United States (36.8 years). Population data from *ACS Demographic and Housing*

serious illnesses and negative outcomes during medical treatment. To account for the possible increase in patients and medical care, Table 1 also reports the dates of the alleged malpractice occurrence, the year a lawsuit was filed, and the paid claims for each year adjusted for population.[34]

Figure 2 presents the above data in graphic form, although it stops at 2006 because claims made after 2004 or 2005 are not expected to be resolved yet due to the lag time between occurrence and resolution. The lag in time between occurrence and suit and between occurrence and disposition can be seen in the peak years of each of these elements in the graph.

Figure 2: Paid Claims Adjusted for Population Growth



B. The Amount of Indemnity Paid

An item of consistent interest in medical-malpractice claims is the amount paid to the plaintiff for medical, wage, legal, and other expenses. Table 2 gives the breakdown of average and standard deviation amounts paid in each of these categories.[35]

Estimates: 2008, U.S. CENSUS BUREAU, http://factfinder.census.gov/servlet/MYPTable?_bm=y&-geo_id=04000US12&-qr_name=ACS_2008_1YR_G00_CP5_1&-ds_name=ACS_2008_1YR_G00_&-_lang=en&-redoLog=false (last visited Mar. 12, 2011).

34. Controlling for the population increase reveals patterns remarkably similar to the raw data. Because the patterns are similar and the raw data are much easier to interpret, the remainder of this paper will use the raw data.

35. All dollar amounts are adjusted to 2008 dollars to account for inflation.

Table 2: Amounts Paid to Plaintiffs in Medical-Malpractice Claims

	Number of Claims	**Average (USD)**	**Standard Deviation (USD)**
Amount Paid to Plaintiff by Primary Insurer	66,246	129,620	559,007
Medical Costs (Past and Future)	66,334	58,061	1,022,354
Wage Costs (Past and Future)	66,334	19,864	263,084
Other Costs (Past and Future)	66,334	22,161	2,103,564
Noneconomic Losses*	66,334	72,619	1,174,270
Loss-Adjustment Expense Paid to Defense Counsel	32,056	42,245	1,043,080
All Other Loss-Adjustment Expenses Paid	32,056	12,170	95,018
Amount Paid to Plaintiff by Primary Insurer **(ONLY PAID CLAIMS)**	20,685	302,476	907,041

As Table 2 shows, the average indemnity paid to the plaintiff is not an extremely large amount, but is not dismissible either. The figure for "noneconomic" losses has an asterisk because previous investigation of the Florida closed-claim files has shown these figures to be unreliable and often inflated by the liability insurer to downplay the plaintiff's actual economic losses.[36] Examining only the paid claims, the average payment increased dramatically to just over $300,000. Another element of interest is that 68.8% of all claims were resolved without any payment.[37]

V

THE SEVERITY OF THE ALLEGED INJURY

The Florida law requires the insurer to rate the severity of the alleged injury on the widely used nine-point scale originally developed by the National Association of Insurance Commissioners (NAIC).[38] Table 3 reports, for each year, the mean percentage of paid claims according to each severity level.[39]

36. *See* Vidmar et al., *Uncovering*, *supra* note 1, at 325–28 (discussing the limitations of the closed-claim files).

37. The number of claims paid is 20,685, which is 31.2% of 66,334. Therefore, 31.2% of claims were paid. The group of claims resolved without payment should be distinguished from those claims that are abandoned. Claims in the first group are resolved, but there is no payment.

38. NAT'L ASS'N OF INS. COMM'RS, INTRODUCTION: CLAIM REPORT FORM, 2 MALPRACTICE CLAIMS: FINAL COMPILATION 2, 8 (M. Sowka ed., 1980). The scale is as follows:

Level	Type of Injury	Examples of Injury
1	Emotional Only	Fright, no physical damage
2	Temporary: Slight	Lacerations; contusions, minor scars, rash. No delay
3	Temporary: Minor	Infections, mis-set fracture, fall in hospital. Recovery delayed
4	Temporary: Major	Burns, surgical material left, drug side-effect, brain damage. Recovery delayed
5	Permanent: Minor	Loss of fingers, loss or damage to organs. Includes non-disabling injuries
6	Permanent: Significant	Deafness, loss of limb, loss of eye, loss of one kidney or lung

Table 3: Severity Level of Medical-Malpractice Claims

Severity Level	Claims	Percent of Total Claims	Paid Claims	Percent of Claims that Are Paid
1	3,178	5%	1,446	46%
2	3,614	6%	1,895	52%
3	10,654	17%	6,630	62%
4	6,192	10%	4,094	66%
5	8,353	14%	6,198	74%
6	6,571	11%	4,820	73%
7	3,443	6%	2,729	79%
8	2,558	4%	2,039	80%
9	16,932	28%	12,419	73%

As Table 3 shows, the number of claims in each severity level varied significantly, with the most common severity level being 9—which indicates the patient died. In addition, those claims that ultimately ended in a payment to the plaintiff also varied by severity level, ranging from 46% for level 1 claims to 80% for level 8 claims, with the more-severe injuries having higher payment rates. As there are large variations between severity levels displayed in Table 3, the examination of severity is continued in subsequent sections.

VI

STAGES OF RESOLUTION

Table 4 displays the stage of resolution for resolved claims. The majority of claims are either dropped or abandoned (19%), resolved before a suit is filed (16%), or resolved after the suit is filed but before trial (50%).

7	Permanent: Major	Paraplegia, blindness, loss of two limbs, brain damage
8	Permanent: Grave	Quadriplegia, severe brain damage, lifelong care or fatal prognosis
9	Permanent	Death

The closed-claims database also includes a prose description of the injury.

39. A similar analysis was presented in Vidmar et al., *Uncovering*, *supra* note 1, at 349, but the data presented in Table 3 are not precisely comparable because this article focuses only on physicians and hospitals, eliminating all other healthcare providers.

Table 4: Stages of Resolution

Stage	Number	Percentage
Claim or Suit Abandoned	6,170	19%
During Arbitration	1,363	4%
Before Pre-suit Period	644	2%
Within 90 Days of Suit Being Filed	947	3%
Pre-suit Period	5,057	16%
Before or During Mandatory Settlement Conference	16,305	50%
During Trial but Before Verdict	379	1%
After Verdict but Before Filing of Appeal	664	2%
After Notice of Appeal is Filed or Posted	664	2%
During Appeal	80	0%
After Appeal	194	1%

In other words, the vast majority of paid claims (94%) were resolved before or during trial—that is, before a formal judgment by the court. Thus, much of the remainder of this discussion will focus on how specific details of claims affect the stage of resolution, broken down by claims resolved (1) through arbitration, (2) before a suit, (3) during the pre-suit period, (4) after the suit is filed but before trial, and (5) after a trial begins but before a verdict is rendered. These claims are also compared to those resolved after a verdict.

VII

SUBPROFILES OF THE STAGES OF RESOLUTION

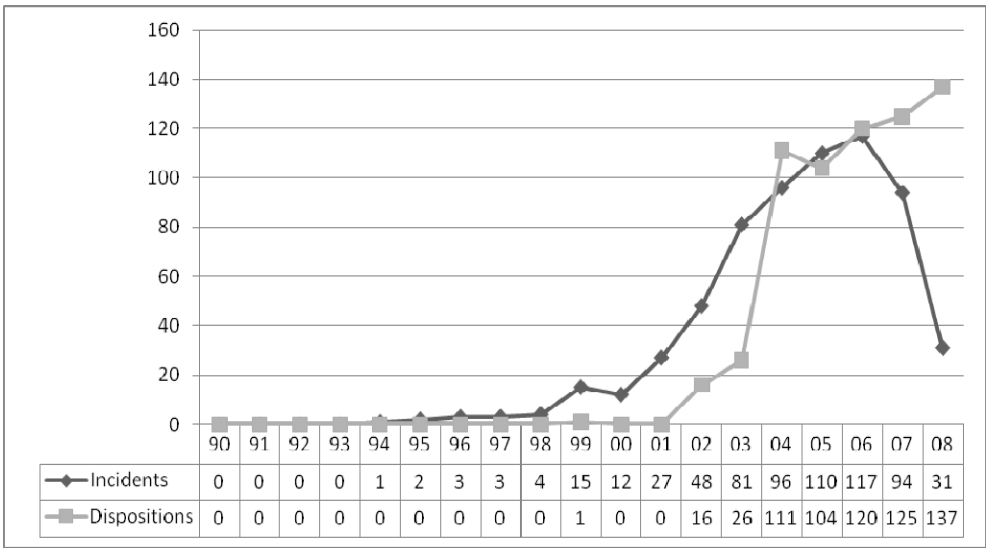
A. Claims Resolved Before the Pre-suit Period

As described earlier, a plaintiff may not file a suit for a period of ninety days after notifying the defendant of the claim of medical malpractice.[40] The data show, however, that some claims are settled before the plaintiff officially notifies the defendant of the claim. The claims resolved prior to the official notification are resolved before the plaintiff officially contacts the defendant for information regarding the claim. Although the number of these claims was not substantial in terms of the overall percentage, as evidenced in Table 4, the number has grown in recent years.[41]

40. FLA. STAT. § 766.106(3)(a) (2010).

41. Please note, again, that the most recent years' data is unpredictable at best and should be treated with caution.

Figure 3: Claims Resolved Before the Pre-suit Period



	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08
Incidents	0	0	0	0	1	2	3	3	4	15	12	27	48	81	96	110	117	94	31
Dispositions	0	0	0	0	0	0	0	0	0	1	0	0	16	26	111	104	120	125	137

Figure 3 shows that a small portion of claims (644 overall) were resolved before the notification of a claim. Recall that the overall time from incident to disposition for all claims averaged 3.25 years. In contrast, claims resolved before the pre-suit period required an average of 1.5 years for disposition. In addition, these claims were reported much more quickly. Although it took most claims 470 days (or 1.28 years) from incident to reporting, claims resolved before the pre-suit period were reported in 208 days (or just over half a year). Claims resolved before the pre-suit period had a lower average payment ($90,867) than the overall average of $129,620. Resolving a claim at this stage, however, resulted in a much-higher likelihood of payment to the plaintiff; ninety-four percent of these claims resulted in a payment. As such, the average payout for paid claims settled before the pre-suit period was also lower ($96,894) than the overall average for paid claims ($302,476). The data presented in Figure 3 combined with the data on average payments suggest, but do not prove, that those claims resolved before the official notification appear to have involved clear-cut issues of negligence, but did not involve gross negligence. Descriptions of incidents[42] included general-liability issues, such as patients falling in the hospital or equipment failures; issues with hospital management, such as long wait times; and billing issues, such as a hospital charging for resuscitation when patient had a current DNR order.[43]

One of the principle areas of concern with medical care is rates of misdiagnoses. Approximately twenty percent of claims involved some allegation

42. Descriptions of claims and allegations have been redacted to remove identifying information and to protect the identities of the patients and providers.

43. *Tracking System*, *supra* note 22.

of an issue with a diagnosis.[44] Claims involving a misdiagnosis were less likely to result in payment,[45] but the average size of the payment for claims with an allegation of misdiagnosis was higher than the average payment for claims without an allegation of misdiagnosis.[46]

Table 5 shows that claims resolved before the official notification of a claim were clustered, in terms of severity, with the largest number (by far) grouped in severity levels 2 through 4, and with an additional group of resolutions involving severity level 9—that is, medical incidents that led to death of the patient.

Table 5: Severity Level of Claims Resolved Before the Pre-suit Period

Severity Level	Resolved Claims Before Pre-Suit Period	Total Resolved Claims	Percent of Total Resolved Claims
1	39	3,178	1%
2	75	3,614	2%
3	267	10,654	3%
4	94	6,192	2%
5	48	8,353	1%
6	18	6,571	0%
7	18	3,443	1%
8	7	2,558	0%
9	78	16,932	0%

The significant increase in the number of cases resolved before the official notification of a malpractice claim is interesting; but at present, there is no clear explanation for the finding. Insurers and medical providers may simply be settling smaller claims as soon as the incident occurs. Perhaps the internal reporting mechanisms in hospitals and other medical providers have triggers allowing for the quick payment of malpractice claims when fault is clear but the severity and consequent settlement amount is small. Early settlement avoids legal transaction costs for the liability insurer, possibly requiring minimal involvement of lawyers. Alternatively, it may be that the movement towards apologies for healthcare errors is finding root in Florida, allowing for earlier settlements. Finally, in 2004, Florida enacted legislation summarized as a "three strikes" law—healthcare providers who are found negligent or admit negligence three times lose their professional licenses. Perhaps this is motivating healthcare

44. The Florida closed-claims database includes a "misdiagnosis" category, which provides a verbatim account of the alleged misdiagnosis. *Id.* These data were transformed into binary variables, where "1" represented any allegation of misdiagnosis and "0" was an absence of misdiagnosis. All data were hand-coded by the authors.

45. The rate of payment for claims without an allegation of misdiagnosis was 95.5%, compared to 87.2% for claims alleging misdiagnosis, a difference that is statistically significant to the 0.001 level.

46. The average payment for claims without an allegation of misdiagnosis was $90,114, compared to $93,752 for claims alleging misdiagnosis, a difference that is not statistically significant.

providers to settle smaller claims before the initiation of a lawsuit, to avoid getting a "strike."[47]

B. Resolutions Occurring During the Official Pre-suit Period

The next profile is of claims resolved during the official ninety-day pre-suit period. Recall that in Florida, after filing a claim, plaintiffs must wait ninety days before filing a lawsuit.[48] During this time, the defendant must conduct a review of the incident in question.[49] After this internal review, the defendant can reject the claim, make a settlement offer, or move that the claim be handled through arbitration.[50] In addition, during this period, both the plaintiff and defendant may engage in informal discovery, with the important qualification that any information gained is not admissible in a formal lawsuit if the claim does go forward.[51] In recent years, the number of claims resolved during the pre-suit period increased, peaking in 2002 for resolutions and 2004 for dispositions (see Figure 4 below).

47. The proposed constitutional amendment was passed by voters in 2004, and is now in the Florida Constitution. FLA. CONST. art. X, § 26. The measure, however, was understandably controversial and resulted in some legislative retooling that rendered it less effective in practice. *See* Laura J. Spencer, *The Florida "Three Strikes Rule" for Medical Malpractice Claims: Using a Clear and Convincing Evidence Standard To Tighten the Strike Zone for Physician Licensure Revocation*, 28 ST. LOUIS U. PUB. L. REV. 317, 320 (2008) (describing the scheme established by the amendment as "controversial"); Mary Coombs, *How Not To Do Medical Malpractice Reform: A Florida Case Study*, 18 HEALTH MATRIX 373, 393–94 nn.88–90 (2008) (discussing the "three strikes" law amendment); Carol Gentry, *Court Asked to Revive "3 Strikes,"* HEALTH NEWS FLA., Sept. 10, 2010, *available at* http://www.healthnewsflorida.org/index.cfm/go/public.articleView/article/13838 (discussing criticisms of the enacted amendment); Melissa Morgan Hawkins, *Amendments 7 and 8 Update: Legislation Enabling the Patients' Right to Know Act and Three Strikes Rule*, 24 TRIAL ADVOC. Q. 7, 9 (2006) (discussing the effect of the subsequent legislative enactments enabling the amendment).

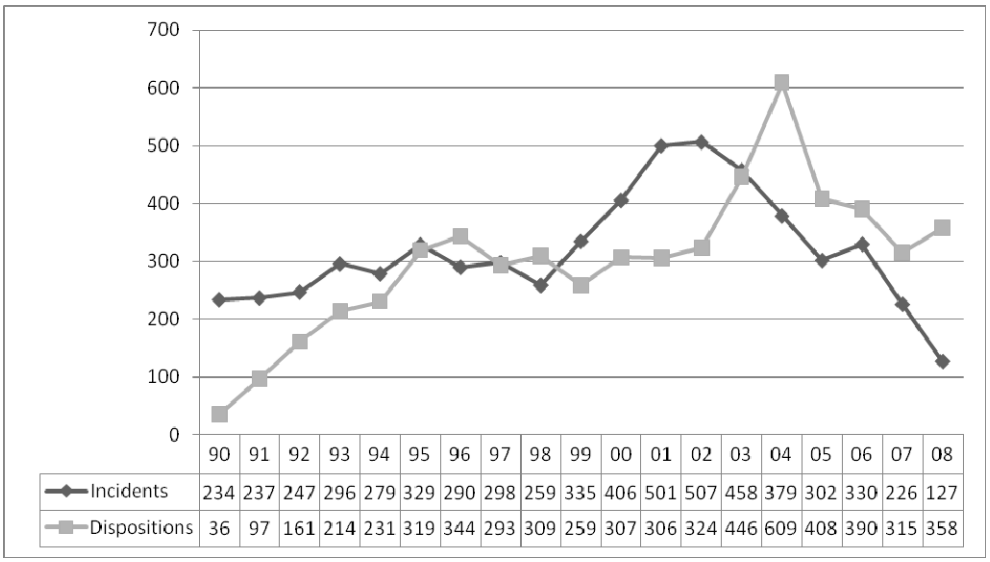
48. FLA. STAT. § 766.106(3)(a) (2010).

49. *Id.*

50. *Id.* § 766.106(3)(b).

51. *Id.* § 766.106(5).

Figure 4: Claims Resolved in the Official Pre-suit Period



	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08
Incidents	234	237	247	296	279	329	290	298	259	335	406	501	507	458	379	302	330	226	127
Dispositions	36	97	161	214	231	319	344	293	309	259	307	306	324	446	609	408	390	315	358

Overall, claims resolved in the pre-suit period were reported in just under a year (342 days) and disposed of in 1.87 years (684 days), which is shorter than the overall average, but obviously longer than those cases settled before the pre-suit period. The average indemnity paid during the official pre-suit period was $194,227, which is higher than the payments in claims settled before formal notification ($90,867) and the overall average indemnity paid ($129,620). Just over eighty percent of claims resolved in the pre-suit period resulted in a payment to the plaintiff. If only the paid claims are considered, the average indemnity payment rose to $252,085, a figure that is under the overall average of $302,495 for all paid claims.

There are quite a few similarities to the overall patterns of severity levels for claims resolved before the pre-suit period. In particular, the majority of pre-suit settlements were in the lower ranges of severity (levels 1 through 4), suggesting the defendant or the defendant's insurer may have recognized that resolving the claim would result in smaller payments and litigation expenses than defending the claim.

Table 6: Severity Level of Claims Resolved in the Official Pre-suit Period

Severity Level	Resolved Claims During Pre-Suit Period	Total Resolved Claims	Percent of Total Resolved Claims
1	306	3,178	10%
2	565	3,614	16%
3	1,368	10,654	13%
4	780	6,192	13%
5	760	8,353	9%
6	465	6,571	7%
7	268	3,443	8%
8	214	2,558	8%
9	1,329	16,932	8%

Claims resolved during this period often involved allegations of failures to maintain the standard of care during the provision of medical treatment, including misdiagnoses; issues during surgery; the improper administration of drugs or anesthesia; and issues involving infants, birthing, and delivery.[52] The overall rate of allegations of misdiagnoses remained in the low twenties (at 22.4%), as with those claims resolved before the pre-suit period. The rate of payment was lower for claims involving an allegation of a misdiagnosis,[53] but had no effect on the payment amounts.[54] The data presented on claims resolved during the official pre-suit period suggest that, for many claims, the regulatory requirement of an investigation by the defendant's insurer produced the desired effect: the resolution of claims outside the formal litigation system. Compared to those claims resolved before this period, these claims had a higher severity level overall and resulted in higher payments. These claims also appear to have been more complex, particularly in the determination of a failure to maintain the standard of care or to assess blame, than claims resolved before this period.

C. Claims Resolved Through Arbitration

An examination of the claims resolved through arbitration revealed several interesting patterns. As discussed, all Florida medical-malpractice claims are bound to a mediation process unless they are resolved before a lawsuit.[55] In addition, before, during, or after mediation the claim can be submitted for arbitration solely for the determination of damages, with the defendant

52. *Tracking System*, *supra* note 22.

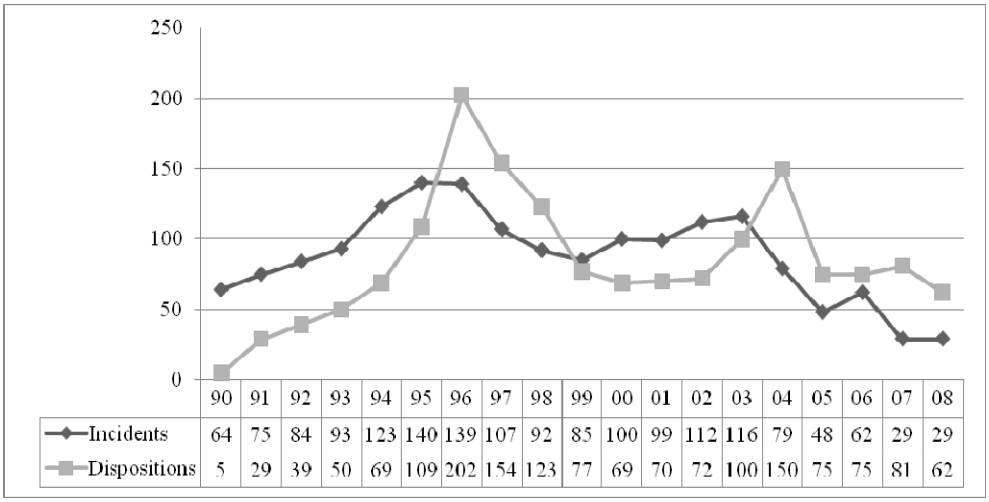
53. The rate of payment for claims without an allegation of misdiagnosis was 84.2%, compared to 68.9% for claims alleging misdiagnosis, a difference that is statistically significant to the 0.0001 level using a standard difference-of-means test.

54. The average payment for claims without an allegation of misdiagnosis was $193,890, compared to $238,117 for claims alleging misdiagnosis, a difference that is not statistically significant using a standard difference-of-means test.

55. FLA. STAT. § 766.108(1) (2010).

admitting fault.[56] Figure 5 graphically displays the number of claims resolved through arbitration by occurrence and disposition year, as well as the total number of claims. As the figure shows, claims resolved through arbitration peaked in 1996 and again in 2004. The earlier peak does not mirror a general increase in the overall number of claims (see Figure 1).[57]

Figure 5: Claims Resolved Through Arbitration



	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08
Incidents	64	75	84	93	123	140	139	107	92	85	100	99	112	116	79	48	62	29	29
Dispositions	5	29	39	50	69	109	202	154	123	77	69	70	72	100	150	75	75	81	62

Examining the time to reporting and disposition for arbitration claims, however, reveals that claims resolved through arbitration were resolved in a much shorter time than would be expected.[58] Recall that for claims overall, it took 3.25 years from occurrence to disposition. In contrast, claims resolved through arbitration only required 717 days, or 1.96 years, for final disposition.[59]

The next set of data involves the average payments for claims resolved through arbitration. Recall that the average indemnity paid for all medical-malpractice claims from 1990 to 2008 (in 2008 dollars) was $129,620. In contrast, claims resolved through arbitration had an average payment of $219,673, or approximately $80,000 more than the average payment overall. In addition, although 64% of all the claims resulted in payment, over 86% of claims resolved through arbitration resulted in payment, which produced higher

56. *Id.* § 766.106(3)(b)(3).

57. *See supra* Part IV.A (discussing an increase in claims corresponding with an increase in the Florida population).

58. Keep in mind that the later years of data (from approximately 2006 onward) should be treated with caution due to the likelihood that many claims had not yet been reported or closed at the time of data collection.

59. The time from occurrence to disposition took an average 717 days, with a minimum of sixteen days and a maximum of 4,102 days. From occurrence to reporting, the average claim resolved through arbitration takes just under one year (333 days), with a minimum of zero days and a maximum of 3,591 days.

overall indemnity payments. In comparison to the average of $302,476 for all claims, the average payment for resolution through arbitration was $249,901. This finding is not very surprising given the higher number of low-severity claims resolved through arbitration and the process by which claims were submitted for arbitration, as claims may be submitted to arbitration for the determination of damages if the defendant has admitted fault.

As Table 7 reports, there was a great deal of variation in the severity of claims resolved through arbitration. The most frequent severity levels were level 3[60] and level 9.[61]

Table 7: Severity Levels of Claims Resolved Through Arbitration

Severity Level	Resolved Claims Through Arbitration	Total Resolved Claims[62]	Percent of Total Resolved Claims
1	92	3,178	3%
2	66	3,614	2%
3	422	10,654	4%
4	291	6,192	5%
5	179	8,353	2%
6	88	6,571	1%
7	71	3,443	2%
8	65	2,558	3%
9	400	16,932	2%

Examining the distribution of the severity levels of claims resolved through arbitration in the context of the overall number of claims reveals a slightly different picture. Column four of Table 7 presents the percentage of each severity level resolved through arbitration. Arbitration resolved more cases on the lower end of the severity scale, representing four percent of level 3 resolved cases and five percent of level 4 resolved cases.

Claims resolved through arbitration often involved issues of monitoring and diagnosis in the alleged suffering of the patient and in the seriousness of allegations against the medical providers.[63] The 20% of claims resolved through arbitration involving an allegation of misdiagnosis had a lower rate of payment (88.4% for claims without misdiagnosis, compared to 77.3% for claims with an allegation of misdiagnosis), but a higher average payment.[64] As indicated in

60. Temporary: Minor—Infections, mis-set fracture, fall in hospital. Recovery delayed. *See supra* note 38 (providing the NAIC scale).

61. Permanent—Death. *See id.*

62. Here, both paid and unpaid claims are used, concentrating on those cases that have been resolved.

63. *Tracking System*, *supra* note 22.

64. The average payment for claims without an allegation of misdiagnosis was $191,802, compared to $315,208 for claims alleging misdiagnosis, a difference that is statistically significant to the 0.01 level using a standard difference-of-means test.

Table 7, there was also an increase in the seriousness of the injuries to the patients. In addition, the reports by the insurers and doctors revealed conflicts over liability, damages, and the appropriate course of action. For example, one claim involved an infant who went into septic shock after birth requiring below-the-knee and partial upper-extremity amputations. This claim also involved a conflict between the doctors and defense counsel, who both believed the case defensible, and the liability insurer, who paid a pre-suit settlement to "protect the insured from any potential excess verdict."[65]

Claims resolved through arbitration were often incredibly complex and frequently involved the patient losing trust in the medical provider. It may be that arbitration can resolve these claims because the parties have to engage in a structured discussion and negotiation.

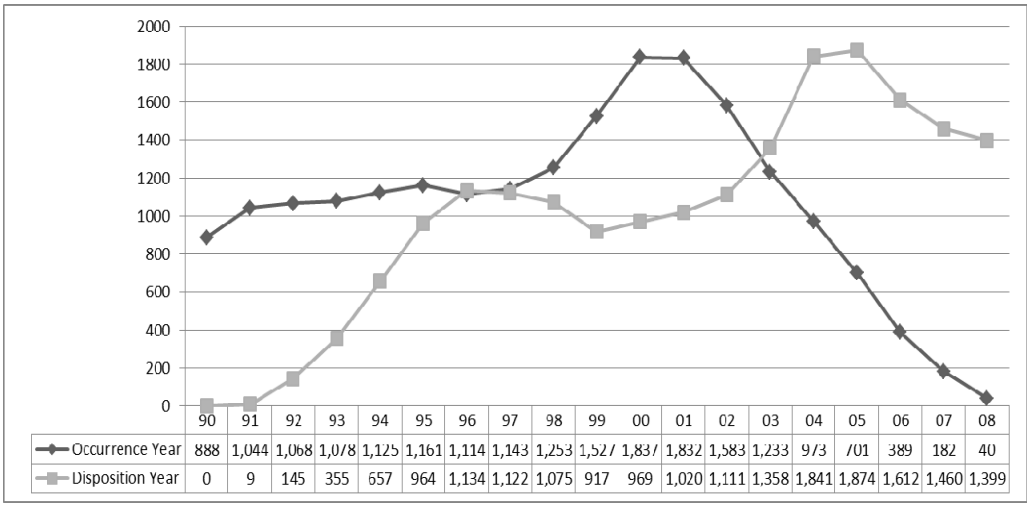
D. Settlements Made Before or During the Mandatory Settlement Conference

Next, consider claims settled before or during the mandatory settlement conference.[66] By this point in the claiming process, the plaintiff and defendant have gone through a mandatory waiting period and the plaintiff has formally filed a suit for medical malpractice. The defendant has gone through an internal review, had an opportunity (during the pre-suit period) to make an offer of settlement or arbitration to the plaintiff, both sides have engaged in formal discovery, and the opportunity for the defendant to offer arbitration has remained available. Claims that reach this point were harder to resolve; thus, the payment rate declined but the size of payments increased compared to earlier stages in the resolution process. As displayed in Figure 6, the number of settled claims peaked in 2000 and 2001 for incidents, and 2004 and 2005 for dispositions, and then declined.

65. As with all claims described in the paper, this claim is redacted to protect the identities of both the patient and providers.

66. *See* FLA. STAT. § 766.108(2)(a)–(b) (2010) (requiring all parties in medical malpractice claims to attend "a settlement conference at least 3 weeks before the date set for trial"). Generally, "[a]ttorneys who will conduct the trial, parties, and persons with authority to settle shall attend the settlement conference held before the court unless excused by the court for good cause." *Id.*

Figure 6: Claims Resolved Before or During the Mandatory Settlement Conference



	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08
Occurrence Year	888	1,044	1,068	1,078	1,125	1,161	1,114	1,143	1,253	1,527	1,837	1,832	1,583	1,233	973	701	389	182	40
Disposition Year	0	9	145	355	657	964	1,134	1,122	1,075	917	969	1,020	1,111	1,358	1,841	1,874	1,612	1,460	1,399

The downward slope in incidents of settled claims could be explained by the dramatically longer time from incident to disposition for claims in this stage as compared to claims resolved before the pre-suit period, during the pre-suit period, or during arbitration. The time from incident to disposition for claims settled during the mandatory settlement conference averaged 1,473 days (over 4 years).[67] As such, the incident data in the later years presented above may represent a dramatic underestimation of the number of settled cases. The average payment pattern for settled cases ($251,094) was higher than the overall average, as well as in comparison to claims resolved before or in the pre-suit period or through arbitration. The 81.5% of settled claims that were paid had an average indemnity of $309,762, which was again higher than the overall average ($302,495), and the average payment for paid cases resolved at earlier stages.

An additional difference—beyond the time between the incident and the disposition—between cases settled at this stage and those resolved earlier was the severity of the cases. As Table 8 below shows, there were much-larger numbers of higher-severity cases settled and a much-lower distribution of cases in severity levels 1 through 4.

67. This metric was not introduced in profiling other stages of resolution as there were no suits filed in many of the cases resolved prior to the mandatory settlement conference. Thus, such a figure would be meaningless. At this stage of resolution, however, there is a requirement of a suit for a mandatory settlement conference, so the amount of time from occurrence to suit is meaningful.

Table 8: Severity Level of Claims Resolved Before or During the Mandatory Settlement Conference

Severity Level	Resolved Claims Before or During the Mandatory Settlement Conference	Total Resolved Claims	Percent of Total Resolved Claims
1	505	3,178	16%
2	478	3,614	13%
3	2,558	10,654	24%
4	1,652	6,192	27%
5	3,247	8,353	39%
6	2,418	6,571	37%
7	1,447	3,443	42%
8	1,011	2,558	40%
9	6,850	16,932	40%

The prose summaries of claims reveal a high number of level 9 claims involving death. Examining claims resolved before or during the mandatory settlement conference, there was an increase in claims involving allegations of misdiagnoses, with a third of claims (thirty-three percent) involving issues of misdiagnoses. The claims involving misdiagnoses continued to result in lower payment rates,[68] but misdiagnoses had no effect on the size of the average payment.[69]

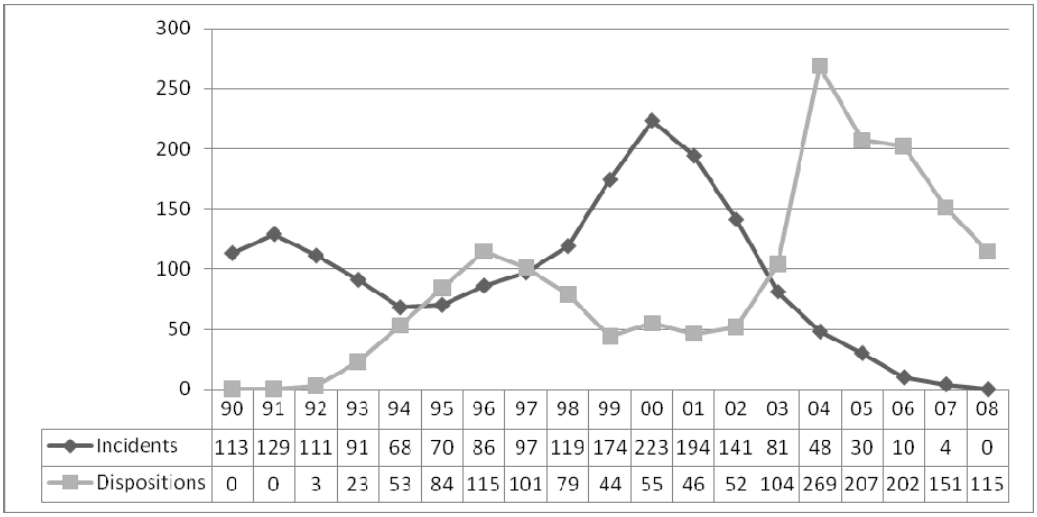
E. Resolutions During the Trial, After the Verdict, or After Appeal

The final set of analyses involves those cases that settled after the trial begins, during the trial, after the verdict, during the appeal, or after the appeal. Parties settle claims at this stage to avoid a trial judgment, avoid an appeal, or avoid the ramifications of a verdict at either the trial or appellate level. A very low number of claims were settled at this stage. As Figure 7 shows, the number of claims settled after the trial began peaked in 2000 and 2001.

68. The rate of payment for claims without an allegation of misdiagnosis was 82.3%, compared to 79.3% for claims alleging misdiagnosis, a difference that is statistically significant to the 0.001 level using a standard difference-of-means test.

69. The average payment for claims without an allegation of misdiagnosis was $250,591, compared to $257,366 for claims alleging misdiagnosis, a difference that is not statistically significant.

Figure 7. Claims Resolved During the Trial, After the Verdict, or During Appeal



	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08
Incidents	113	129	111	91	68	70	86	97	119	174	223	194	141	81	48	30	10	4	0
Dispositions	0	0	3	23	53	84	115	101	79	44	55	46	52	104	269	207	202	151	115

As with claims settled during the mandatory settlement conference, these claims had a much-longer lifespan from incident to disposition, namely an average of five years (1,866 days). Generally, the long time-lag between disposition and resolution is a result of delays between reporting and disposition. Overall, these claims had a much-higher indemnity payment, paying $361,364 on average, or a full $230,000 above the average overall payment. These claims, however, were also much less likely to result in payment; only forty-four percent resulted in payment. As a result, the average indemnity paid for these claims was quite high at $883,420—a full $500,000 above the average overall payment for all paid claims.

Similar to the claims settled before or during the mandatory settlement conference (see Table 8 above), the claims settled after the beginning of the trial were more likely to occupy the higher ranges of severity. Taking this pattern into account, the distribution of these claims was fairly even among severity levels, as demonstrated by Table 9 below.

Table 9: Severity Level of Claims Resolved During the Trial, After the Verdict, or During Appeal

Severity Level	Resolved Claims During the Trial, After the Verdict, or During Appeal	Total Resolved Claims	Percent of Total Resolved Claims
1	31	3,178	1%
2	48	3,614	1%
3	190	10,654	2%
4	146	6,192	2%
5	298	8,353	4%
6	250	6,571	4%
7	147	3,443	4%
8	79	2,558	3%
9	600	16,932	4%

The small number of claims resolved during the trial process were more likely to involve an allegation of misdiagnosis—thirty-eight percent of these claims involved some type of misdiagnosis allegation. The misdiagnosis allegation, however, had no effect on the rate of payment[70] and it did not change the average payment.[71] Claims resolved during the trial involved a high number of issues surrounding births and infant health, as well as an increase in the severity of injuries resulting from strict-liability conduct or misdiagnoses.[72]

VIII

PREDICTING THE PRESENCE AND AMOUNT OF PAYMENT

The data suggest that the stage of resolution increased the probability of a payment from the defendant to the plaintiff. Applying a logistical-regression model to these data can demonstrate the effect of each stage on the probability of payment, using claims resolved during the settlement period as the baseline.[73] The logistic model in Table 10 reveals several interesting results. First, resolving a claim before the pre-suit period showed the largest positively substantive effect on the probability that a claim would result in payment, whereas resolution during or after a trial had a negative effect. Arbitration and resolution during the pre-suit period had near equal effects on the probability of payment.

70. The rate of payment for claims without an allegation of misdiagnosis was 44.6%, compared to 42.1% for claims alleging misdiagnosis, a difference that is statistically significant to the 0.001 level.

71. The average payment for claims without an allegation of misdiagnosis was $356,790, compared to $435,479 for claims alleging misdiagnosis, a difference that is not statistically significant.

72. *Tracking System*, *supra* note 22.

73. The settlement period is used as the baseline because it is the period when the most claims are resolved. Using it as the baseline allows for a comparison to the most likely scenario.

Table 10: Effect of Stage of Resolution on Probability of Payment

Variable	**Odds Ratio**[74] **(Standard Error)**[75]
Before Pre-suit Period	2.696** (0.165)
Pre-suit Period	1.268** (0.0405)
Arbitration	1.661** (0.0810)
During or After Trial	-0.867** (0.0575)
Misdiagnosis	0.0334 (0.0279)
Severity	0.104** (0.00479)
Number of Days Between Incident and Disposition	0.000227** (0.0000186)
Constant	-0.504** (0.0372)
N	32,056
Pseudo R^2 [76]	0.584

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

Looking at a variety of control variables, Table 10 supports a finding that the presence of a misdiagnosis allegation slightly increased the probability of payment. The higher the claim's severity, the higher the likelihood of payment; whereas the longer the claim took to be resolved, the lower the likelihood of payment. None of these control variables, however, came close to having a similarly substantive effect on the likelihood of payment as resolution before

74. The odds ratio column gives the amount of change expected in the odds ratio when there is a one unit change in the predictor variable, with all of the other variables in the model held constant. An odds ratio close to 1.0 suggests that there is no change due to the predictor variable.

75. The standard error for the odds ratio is obtained from the logistic regression coefficient and its standard error using the formula: se(odds ratio) = exp(coef.)*se(coef.).

76. Using dichotomous data (such as data presented here, in terms of the probability of payment) necessitates the use of logistic regression, where an equivalent statistic to R-squared does not exist. As such, an equivalent figure is calculated using McFadden's R-squared. *See* JEREMY FREESE & J. SCOTT LONG, REGRESSION MODELS FOR CATEGORICAL DEPENDENT VARIABLES USING STATA 109 (2d ed. 2006) (discussing McFadden's R-squared).

the pre-suit period, during the pre-suit period, or through arbitration. The stage-of-resolution, presence-of-misdiagnosis, severity-of-injury, and time-to-resolution variables explained more than half of the variance in whether a claim resulted in a payment.[77]

Examining the same set of variables on the amount of payment revealed equally interesting patterns.

Table 11: Effect of Stage of Resolution on Payment Amount for Paid Claims

Variable	**Coefficient**[78] **(Standard Error)**[79]
Before Pre-suit Period	-14,780.5 (29,910.2)
Pre-suit Period	55,144.9** (12,140.0)
Arbitration	66,618.8** (20,981.5)
During or After Trial	177,032.8** (20,650.9)
Misdiagnosis	14,965.1 (9,450.8)
Severity	37,725.5** (1,617.0)
Number of Days Between Incident and Disposition	7.541 (6.264)
Constant	-53,700.8** (12,810.0)
N	31,968
R^2	0.021

$+ p < 0.10$, $* p < 0.05$, $** p < 0.01$

The results presented in Table 11 demonstrate that there was no difference in the amount of payment for resolved claims before the pre-suit stage compared to resolution through a settlement conference (which is the most

77. The *pseudo* R^2, which measures the goodness of the model's fit, was just over 0.58 for these variables.

78. The coefficient is the value for the regression equation for predicting the effect of the dependent variable from the independent variable.

79. The standard error is used for testing whether the parameter is significantly different from 0 by dividing the parameter estimate by the standard error to obtain a statistically significant value.

common resolution stage). Resolution during the pre-suit period, through arbitration, or during or after the trial led to increased payments. The length of time to disposition and the presence of an allegation of a misdiagnosis did not affect the size of payments, whereas severity had a positive effect (both statistically and substantially) on the size of the payment.

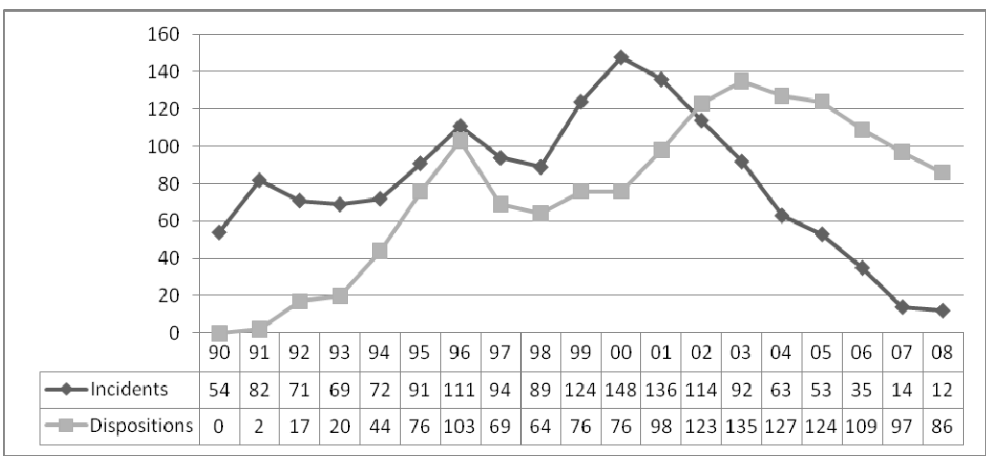
Taken together, the results presented in Tables 10 and 11 suggest that the resolution stages were not merely markers of the inevitable progression of a claim from incident to disposition. Instead, each resolution stage presented a different opportunity to resolve the claim. The specific mechanisms set forth in these stages, such as the discovery component in the pre-suit stage, or the defendant's ability to admit fault and submit to arbitration on damages in the arbitration stage, allowed for new opportunities for resolution. It should be noted that the variance explained by the stage of resolution, misdiagnosis, severity, and time to disposition explains a great more of the variance in the probability of resolution than the payment amount. This simply suggests that the stage of resolution has a larger causal effect on the probability of payment than the size of payment.

IX

MEGA AWARDS AND STAGES OF RESOLUTION

It is important to investigate the nature of medical-malpractice claims that lead to very large payments because these are often the claims identified as evidence of the medical-malpractice "crisis." Figure 8 reports the number of million-dollar cases by incident and disposition year. The number of million-dollar claims peaked in 1996 and in 2003 and 2004. Keep in mind, however, even in the peak years, the sheer number of claims with payments exceeding a million dollars was low as compared to the total number of claims resulting in some payment.

Figure 8: Million-Dollar Claims



	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08
Incidents	54	82	71	69	72	91	111	94	89	124	148	136	114	92	63	53	35	14	12
Dispositions	0	2	17	20	44	76	103	69	64	76	76	98	123	135	127	124	109	97	86

On average, the settlements took just over a year (395 days) to be reported and 3.6 years to be disposed (1,325 days).

Not surprisingly, the majority of claims with million-dollar payments involved higher-severity injuries; in fact, million-dollar claims made up more than ten percent of level 7 claims and thirteen percent of level 8 claims. The correlation between higher severity levels and higher payments is expected; logically, injuries that are more serious generated greater costs.

Table 12: Severity Level of Claims Resulting in Payments of One Million Dollars or More

Severity Level	Resolved Claims Resulting in Payments of One Million Dollars or More	Total Resolved Claims	Percent of Total Resolved Claims
1	19	3,178	1%
2	9	3,614	0%
3	37	10,654	0%
4	39	6,192	1%
5	74	8,353	1%
6	176	6,571	3%
7	329	3,443	10%
8	332	2,558	13%
9	509	16,932	3%

There are interesting patterns in the resolution stages of million-dollar plus awards. Although million-dollar payments can occur at any stage of the resolution process, the vast majority (sixty-eight percent) of these "mega awards" were agreed to before or during the mandatory settlement conference.

Table 13 demonstrates that the million-dollar payments resolved before the official pre-suit period or through arbitration had a significantly lower maximum payment, suggesting that using arbitration to settle disputes—even large disputes—or engaging in pre-claim offers coincided with the less severe of the large claims. The high number of claims resolved through the mandatory settlement conference suggests that high-value claims benefit from institutionalized ADR requirements.

Table 13: Million-Dollar Claims, Stage of Resolution, and Summary Statistics

	Claims	Modal Severity	Time to Reporting (days)	Time to Disposition (days)	Average Indemnity Paid	Maximum Indemnity Paid
Pre-claim	12	9	150	586	$1,631,036	$3,055,250
Official Pre-suit Period	199	9	308	732	$2,553,098	$42,400,000
Arbitration	82	9	342	844	$2,303,231	$16,300,000
Mandatory Settlement Period	998	9	407	1401	$2,063,796	$50,100,000
After Trial	165	9	450	1981	$2,754,318	$34,200,000

Claims that resulted in a payout of a million dollars or more had rates of misdiagnoses (thirty-four percent) that were similar to claims resolved during the mandatory settlement period. The average payment did not differ greatly between those claims involving misdiagnoses and those without an allegation of misdiagnosis.[80] Million-dollar claims involved a wide variety of issues, including severe medical issues that were inappropriately allowed to escalate to untreatable levels; issues with wrongful births, pregnancies, and labor; and accusations of unnecessary surgeries or treatments.[81] The vast majority of million-dollar payouts occurred following deaths or very severe, life-altering injuries.

X

CONCLUSIONS

The profile of the settlements of Florida medical-malpractice claims included in this article provides a structure with which any proposals for ADR must contend. The findings do not provide an argument against ADR. Medical-malpractice disputes are painful for patients and medical providers. Any new way of resolving claims in a more expeditious and less adversarial way should be strongly encouraged.

At the same time, proponents of alternative resolution mechanisms must take into account two important lessons: First, causality and negligence are frequently unclear at the beginning of the claims process. Investigation, and often formal discovery, is required to identify the issues around which the claim is made. Frequently, the facts are ambiguous and contestable, especially at the beginning of the dispute. Second, statutes, court rules, and case law provide a structure intended to facilitate resolution as efficiently as possible, without resorting to a trial. The data presented in this article suggest that a variety of resolution mechanisms—pre-suit discovery, optional arbitration, and pre-suit

80. The average payment for claims without an allegation of misdiagnosis was $2,327,079, compared to $2,286,743 for claims alleging misdiagnosis, a difference that is not statistically significant.

81. *Tracking System*, *supra* note 22.

settlement conferences—provide new opportunities for the parties in a medical-malpractice case to resolve their claims.

The data show that many claims are closed without payment to the claimant. Informal investigation or formal discovery may reveal that medical negligence did not occur—at least in a legal sense—or that the costs of pursuing the claim were likely to be high in comparison to the probable amount of recovered damages. Nevertheless, in these instances, mediation or some other form of ADR might provide a sense of "healing" or "closure" for the plaintiff–patient and perhaps for the defendant–medical provider. Those claims that do result in payment are often closed relatively early. Indeed, the majority of settlements, regardless of the payment size, never reach the stage of a formal trial.

The analyses in this article have underplayed the potential role of mediation in the settlement process simply because the closed-claim files do not report mediation outcomes. Yet mediation must play some role in the settlement process because of the Florida statute requiring mediation within 120 days for all claims resulting in the formal filing of a lawsuit.[82] Further research to uncover the influence of mediation on the eventual settlements would benefit our understanding of the resolution process. Often, mediation does not result in an immediate settlement; but the exchange of information during the session allows parties to examine the other side's viewpoint. There are generally no clear rules to the content of mediation: It may focus merely on an exchange of information, or it may serve as a forum for venting feelings as well as exchanging information. Most ADR discussion emphasizes the palliative effect of emotional expression. In fact, mediation sessions of medical-malpractice cases in North Carolina fit more closely with the information-exchange model than the emotional-venting model. The lawyers are in control and make formal presentations through PowerPoint and "day in the life" films. Even when the plaintiff and defendant are present, they may not participate directly in the session. This is in direct contrast to the assumed emotional-venting and healing goals of many ADR proposals.[83] More research is needed on the subject of mandatory mediation, including the effects of different mediation models on the perceived legitimacy of the outcome and the palliative effects on the participants. In any event, mediation should be viewed as a possible silent factor in the stages and outcomes described in this article: the extent of its role in settlements is unclear, including its role in the many instances in which plaintiffs abandon claims, or its effect on the satisfaction or dissatisfaction of plaintiffs and defendants.

By providing clear profiles for the types of claims resolved through a variety of mechanisms and stages, this research contributes several important lessons to the study of ADR and medical malpractice. First, providing a variety of pretrial

82. *See supra* note 20 and accompanying text.

83. This is based on the personal observations of Professor Vidmar, who has observed medical-malpractice mediations in North Carolina.

mechanisms for resolution allows a diversity of parties to resolve their claims. Second, regulatory mechanisms that provide an incentive for discussion (like mediation and arbitration) or discovery (like Florida's pre-suit period) produce a variety of results, in terms of the type of claims that are resolved, the likelihood of payment, and the size of payment. Third, not all ADR mechanisms are equal, in terms of the number of claims that will be resolved through the method or in terms of the results produced through those resolutions. Advocates of ADR should carefully consider the usefulness of a resolution mechanism to both the plaintiff and the defendant before arguing for its implementation.