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Indiana's Medical Malpractice Act: Results of a Three-Year Study©

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I. Introduction

In 1987, The Center for Law and Health at Indiana University School of Law—Indianapolis began a three-year study of Indiana's Medical Malpractice Act: Results of a Three-Year Study.
Malpractice Act (the "Act"). This Article discusses the basic findings of the study. Specifically, this Article reports the following: (1) Major provisions of the Act, including the leading court decisions interpreting these provisions; (2) empirical data on malpractice claims, claimants, and defendants obtained from the claim files of the Indiana Department of Insurance from 1975 through 1988; (3) findings regarding the performance of Indiana's reforms; and (4) problems with the Act, along with possible approaches for improvements.

II. THE INDIANA MEDICAL MALPRACTICE ACT

A. Background

In the 1970s, Indiana, like many other states, experienced a perceived crisis in the cost and availability of medical malpractice insurance for health care providers. Specifically, the size and frequency of medical malpractice claims increased sharply. Frequency of claims filed against physicians between 1970 and 1975 increased 42%, and the average damage award increased from $12,993 in 1970 to $34,297 in 1975. Accordingly, malpractice insurance premiums rose 410% for physicians between 1970 and 1975.

The availability of malpractice insurance for providers decreased sharply in the mid-1970s. In the summer of 1974, St. Paul Fire and Marine Insurance Company advised nearly 1,000 Indiana physicians that it would not renew their malpractice insurance. Seven major malpractice insurers discontinued or limited the writing of liability insurance for hospitals. Some Indiana hospitals reported curtailing emergency and surgery services because of the high cost of liability insurance or lack of insured physicians to staff these services.

2. This Article is an expanded version of the article by Kinney & Gronfein, Indiana's Malpractice System: No-Fault by Accident?, Law & Contemp. Probs. (forthcoming 1991). This Article is directed to constituencies who are particularly concerned with medical malpractice in Indiana. Therefore, this Article contains additional data and analysis that the authors deemed of particular interest to Indiana health care providers, consumers, and policy-makers.
In January 1975, Governor Otis R. Bowen called for malpractice reform in his State of the State message. On February 4, 1975, House Bill 1460, drafted by attorneys for the Indiana State Medical Association, was introduced into the Indiana House of Representatives. The bill called for an independent administrative tribunal comprised of physicians, lawyers, and consumers to adjudicate malpractice claims and to award damages and attorney's fees according to set formulas. Most Indiana senators opposed the bill as too great a departure from the common law jury system, and the Indiana Senate substantially amended the Act substituting the elements of the current Act. On April 17, 1975, the Indiana General Assembly finally enacted the Act.

The Act's purpose was to provide health care providers with affordable medical malpractice insurance and thus assure the continued availability of health care services in the state. Shortly after enactment, medical malpractice premiums in Indiana dropped and insurance became readily obtainable again. Since the mid-1970s, malpractice insurance premiums have been relatively low compared to other states. More importantly, the affordability and availability of malpractice insurance remained stable in Indiana during the mid-1980s when other states experienced serious problems in this area. Not surprisingly, health care providers and insurers are highly satisfied with the system. However, a series of articles in the Indianapolis Star in June 1990 raised questions about whether the Act promotes the interests of providers and insurers over those of claimants.

6. Message of Governor Otis R. Bowen to the General Assembly, State of Indiana, JOURNAL OF THE HOUSE 31-36 (Jan. 9, 1975); see also Benjamin, supra note 3, at 38; Bowen, supra note 3, at 15.
7. See Benjamin, supra note 3, at 39.
14. See GEN. ACCOUNTING OFF., MEDICAL MALPRACTICE: CASE STUDY ON INDIANA (1986) [hereinafter GEN. ACCOUNTING OFF., CASE STUDY ON INDIANA].
15. See Hallinan & Headden, A Case of Neglect: Medical Malpractice in Indiana,

The Act contains three major reforms: (1) a comprehensive cap on damages; (2) mandated medical review before trial; and (3) a state-run insurance fund, the Patient Compensation Fund ("PCF"), to pay large claims. Eligible health care providers, defined extensively in the statute, participate voluntarily by proving financial responsibility, that is, a specified level of primary malpractice insurance coverage, and by paying a surcharge on that primary coverage to finance the PCF. The level of primary insurance coverage for physicians and other health care providers is $100,000 per occurrence and $300,000 total. Nearly all Indiana physicians and about 90% of Indiana hospitals participate. Nonparticipants are not protected by the damage cap or the PCF.

1. The Cap.—Through 1989, the cap was $500,000. The legislature raised the cap to $750,000 for claims arising after January 1, 1990, out of concern that claimants with large claims be adequately compensated.

2. Medical Review Panel.—Malpractice claimants must file their claims with the Indiana Department of Insurance and go through a medical review panel before proceeding to trial. Any party may request a medical review panel by filing a request with the Indiana Commissioner of Insurance. As of 1985, claimants can opt out and proceed to court


17. Id. § 16-9.5-2-1.
18. Id. § 16-9.5-2-6. As of 1985, the statute set levels of annual aggregate insurance for hospitals and other health care institutions: $2 million for small hospitals (<100 beds); $3 million for larger hospitals; and $700,000 for prepaid health care delivery plans. Act of Apr. 14, 1985, Pub. L. No. 177-1985, § 3, 1985 Ind. Acts 1391 (codified at IND. CODE § 16-9.5-2-6 (1988)).
20. Id. § 16-9.5-2-2.
23. Id. § 16-9.5-9-1.
if all parties agree to forgo panel review.\textsuperscript{24} Also as of 1985, claimants with claims under $15,000 can file claims directly in court.\textsuperscript{25} At any point, the parties may settle the claim. The PCF may consider and pay a claim without a medical review panel opinion.\textsuperscript{26}

The medical review panel is designed to provide an informal, early decision on liability, and thereby facilitate quick resolution of claims.\textsuperscript{27} The panel consists of one attorney, as nonvoting chair, and three health care providers.\textsuperscript{28} The parties select the chair.\textsuperscript{29} Each party selects one provider panelist and the two providers select the third.\textsuperscript{30} Each party may challenge the third member without cause.\textsuperscript{31} When requested, providers must serve on medical review panels except in cases of serious hardship.\textsuperscript{32}

The panel’s sole authority is to give expert opinion on the defendant’s liability, the causation of the injury, or the existence of a material issue of fact bearing on liability.\textsuperscript{33} The panel has no role in determining damages. The panel receives evidence and reviews the discovery made by the parties and can also consult independent medical authorities.\textsuperscript{34} The panel’s opinion is admissible at trial, but is not conclusive evidence of liability or causation.\textsuperscript{35} Either party can compel any panel member to testify at trial.\textsuperscript{36} Convening the panel should take less than two months because of statutory deadlines. Once selected, the panel must meet and make its decision within 180 days.\textsuperscript{37} The panel review process is designed to be completed within nine months.\textsuperscript{38}

3. \textit{The Patient Compensation Fund}.—The PCF pays claims over $100,000.\textsuperscript{39} As of 1985, the PCF, like primary insurers, can make periodic

\begin{footnotes}
\item 24. \textit{Id.} § 16-9.5-9-2.
\item 26. \textit{Ind. Code} § 16-9.5-4-3 (1988).
\item 29. \textit{Id.} § 16-9.5-9-3(a).
\item 30. \textit{Id.} § 16-9.5-9-3(b).
\item 31. \textit{Id.} § 16-9.5-9-3(b)(3).
\item 32. \textit{Id.} § 16-9.5-9-3.
\item 33. \textit{Id.} § 16-9.5-9-7.
\item 34. \textit{Id.} §§ 16-9.5-9-4, -6.
\item 35. \textit{Id.} § 16-9.5-9-9.
\item 36. \textit{Id.}
\item 37. \textit{Id.} § 16-9.5-9-3.5.
\item 38. \textit{Id.} §§ 16-9.5-9-3, -3.5. \textit{See also Kemper, Selby & Simmons, supra} note 27, at 1133-35.
\end{footnotes}
payments to claimants\textsuperscript{40} with no limit on the actual value of future payment the claimant ultimately receives.\textsuperscript{41} The PCF is administered by the Indiana Department of Insurance and financed by a surcharge on providers' primary malpractice insurance.\textsuperscript{42} There is a 15% limit on attorney's fees from PCF recoveries.\textsuperscript{43}

The primary insurer (or the uninsured health care provider) generally pays claims up to $100,000.\textsuperscript{44} These claims are resolved privately in the way claims customarily have been resolved under the common law tort system since the widespread advent of liability insurance.

To be eligible for PCF payment, the primary insurer of one or more defendants must settle a claim for $100,000 or a court must enter a judgment for more than $100,000.\textsuperscript{45} Until 1985, one defendant had to agree to settle a case for $100,000 before a case was eligible for the PCF, although insurers could make periodic payments.\textsuperscript{46} However, since the 1985 legislative amendments, $75,000 must be paid at settlement, with a future payment of $25,000, to qualify for PCF payment.\textsuperscript{47} Most importantly, as of 1985, more than one insurer can contribute to the requisite amount of primary insurance, although one insurer must pay at least $50,000 at the time of settlement.\textsuperscript{48} The cost of an annuity or similar product for a structured settlement is counted in the requisite amount of primary insurance needed to be paid before a claim is eligible for PCF consideration.\textsuperscript{49}

To obtain funds from the PCF, a claimant must file a petition in court for approval of a settlement or payment of a court judgment.\textsuperscript{50} The other parties, the Commissioner of Insurance, or both, may contest the petition, and the court may even convene an evidentiary hearing on

\textsuperscript{41} IND. CODE § 16-9.5-2-2.1(a) (1988).
\textsuperscript{42} Id. § 16-9.5-4-1.
\textsuperscript{43} Id. § 16-9.5-5-1.
\textsuperscript{44} Id. § 16-9.5-2-2(d).
\textsuperscript{45} Id. If a provider's aggregate insurance (e.g., $300,000) has been exhausted, the entire claim can be paid from the PCF according to a procedure that is substantially similar to that for claims above $100,000. Id. § 16-9.5-2-7.
\textsuperscript{46} Id. § 16-9.5-4-3. See Eakin v. Mitchell-Leech, 557 N.E.2d 1057, 1060 (Ind. Ct. App. 1990), in which the court of appeals held that the Department of Insurance's longstanding practice, in cases arising before June 1, 1985, of permitting claimants to access the PCF when an insurer agreed to make future periodic payments with a total face value of $100,000, but making a present payment of as little as $10,000, satisfied the requirements of the Act.
\textsuperscript{47} IND. CODE § 16-9.5-2-2.2(b) (1988).
\textsuperscript{48} Id. § 16-9.5-2-2.2(c).
\textsuperscript{49} Id. § 16-9.5-2-2.1(b).
\textsuperscript{50} Id. § 16-9.5-4-3(1).
damages.\textsuperscript{51} No judicial review of a court approved settlement is available.\textsuperscript{52} In PCF and associated court proceedings, the liability of the health care provider is admitted.\textsuperscript{53}

4. \textbf{Links to the Medical Discipline System}.—The Act requires that the insurance commissioner report the settlements and judgments against health professionals to the appropriate licensure or registration boards for review of continued fitness to practice.\textsuperscript{54} The board may then proceed with various disciplinary action, including censure, or the probation, suspension, or revocation of the professional’s license.\textsuperscript{55} In practice, the Indiana Medical Licensing Board has initiated very few disciplinary actions against physicians reported to it by the Department of Insurance because most cases are settled without a panel ever having been convened.\textsuperscript{56} The Medical Licensing Board will only initiate such actions against those physicians found by a medical review panel to have been negligent.\textsuperscript{57} Moreover, medical review panelists may be reluctant to conclude that one incident of malpractice out of a thousand procedures is cause for a medical disciplinary action.\textsuperscript{58}

5. \textbf{Reporting Requirements and Other Key Provisions}.—The Act also requires reporting the disposition of any malpractice claims by counsel and insurers to the Indiana Department of Insurance.\textsuperscript{59} Specifically, key data to be reported include attorney’s fees and expenses incurred in pressing or defending the claim, settlement, or judgment amounts.\textsuperscript{60} The Act contains several other important provisions, including a shortened statute of limitations\textsuperscript{61} and the Residual Malpractice Insurance Authority for physicians unable to obtain private insurance.\textsuperscript{62}

\textbf{C. Judicial Interpretation of the Act}

Since 1975, over fifty judicial decisions have interpreted provisions of the Act.\textsuperscript{63} Several of these decisions have addressed the Act’s con-

\begin{itemize}
\item \textsuperscript{51} Id. §§ 16-9.5-4-3(3), -3(5).
\item \textsuperscript{52} Id.
\item \textsuperscript{53} Id. § 16-9.5-4-3(5).
\item \textsuperscript{54} Id. § 16-9.5-6-2(a).
\item \textsuperscript{55} Id. § 16-9.5-6-2.
\item \textsuperscript{56} Telephone interview with Louis Belch, Director of Medical Licensing Board (Dec. 14, 1990).
\item \textsuperscript{57} Id.
\item \textsuperscript{58} Id.
\item \textsuperscript{59} IND. CODE § 16-9.5-6-2 (1988).
\item \textsuperscript{60} Id.
\item \textsuperscript{61} Id. § 16-9.5-3-1.
\end{itemize}

The statute of limitations has been amended to require a claimant to file a malpractice claim within two years of the alleged malpractice, although minors under age six have until age eight to file a claim. \textit{Id.}

\begin{itemize}
\item \textsuperscript{62} Id. §§ 16-9.5-8-2, -6.
\item \textsuperscript{63} See Brennan, \textit{Torts, Survey of Recent Developments in Indiana Law}, 10 IND.
stitutionality. In 1980, in *Johnson v. St. Vincent Hospital, Inc.*, consolidating four lawsuits, the Indiana Supreme Court definitively upheld the constitutionality of the Act. Two later cases specifically addressed the constitutionality of the medical review panel process. In *Cha v. Warnick*, the court of appeals reversed a trial court decision that the Act was unconstitutional because of undue delays in the medical review panel process. The court of appeals emphasized that the panel process was not significantly longer than the common law tort system in adjudicating claims. In *Kranda v. Houser-Norborg Medical Corp.*, the court of appeals declined to rule that the Act violated the separation of powers doctrine because admission of the panel opinion at trial usurped courts' authority to rule on admissibility of evidence.

Perhaps the most important issue after the Act's constitutionality is its scope in terms of what types of conduct by a health care provider fall within the scope of the Act. A crucial issue in this regard is whether the negligent conduct of hospital personnel that is nonmedical in nature is within the scope of the Act.

In an early decision, *Methodist Hospital of Indiana, Inc. v. Rioux*, the Indiana court of appeals ruled that an action for damages against

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69. See Harbottle, The Proper Scope of Claimant Coverage under the Indiana Medical Malpractice Act, 23 Ind. L. Rev. 899 (1990); Kemper, Selby & Simmons, supra note 27, at 1138-1139.

a hospital for ordinary negligence arising from an incident where a patient fell from a bed and broke her hip fell within the scope of the Act. However, beginning with Winona Memorial Foundation v. Lomax,\(^{71}\) Indiana courts generally have taken the position that hospital premises liability is outside the Act’s scope.\(^{72}\) The rationale for this position, as stated by the Lomax court, is that the availability of malpractice insurance and liability insurance for nonmedical accidents is unrelated; thus, liability for ordinary negligence does not interfere with the Act’s purpose to assure the continued delivery of health care services.\(^{73}\) Further, premises liability is ordinary negligence within the common knowledge and experience of jurors for which proof of medical expertise is unnecessary. In Methodist Hospital of Indiana, Inc. v. Ray,\(^{74}\) the court of appeals reaffirmed this position, concluding that the Act does not cover every patient-provider relationship. In this case, the plaintiff contracted Legionnaire’s Disease while in the defendant’s hospital.

In other situations, Indiana courts have interpreted the scope of the Act more broadly. For example, in Ogle v. St. John’s Hickey Memorial Hospital,\(^{75}\) the court of appeals ruled that a patient’s negligence action against a psychiatric hospital for failing to supervise another patient who raped the plaintiff fell within the Act because the plaintiff’s confinement was an integral part of the diagnosis and treatment of her condition. Further, in two cases in which the plaintiff challenged a civil commitment arranged by a spouse and a physician who never examined the patient, Indiana courts ruled that the actions had to be brought under the Act.\(^{76}\)

More recently, third party claims for negligence have come under scrutiny with respect to the scope of the Act. In Midtown Community Mental Health Center v. Estate of Gahl,\(^{77}\) the court of appeals held that a third party’s wrongful death claim alleging negligent treatment of a patient and failure to warn the deceased of the patient’s dangerous propensity does not come within the purview of the Act because the estate is neither the patient nor a party whose claim was derived from


\(^{73}\) Lomax, 465 N.E.2d at 738, 739 n.6.

\(^{74}\) 511 N.E.2d 463 (Ind. Ct. App. 1990), aff’d, 558 N.E.2d 829 (Ind. 1990).


the patient. This decision distinguished an earlier case, Sue Yee Lee v. Lafayette Home Hospital, Inc., 78 in which the court of appeals ruled that a third party derivative claim by a parent for loss of services of a child and medical expenses of a minor child against a medical provider must comply with the Act.

Similarly, in Webb v. Jarvis, 79 a shooting victim brought a negligence action against the physician of the assailant, alleging that the physician had breached his duty by negligently overmedicating the assailant to a level of toxic psychosis. In essence, Midtown and Webb stand for the proposition that the Act does not apply to the risk of liability a health care provider faces when a patient commits some tortious act against a third party.

Another key issue regarding the Act’s applicability arises when some ancillary tortious conduct unrelated to the promotion of the patient’s health occurs within the physician-patient relationship. In Collins v. Thakkar, the court concluded that a plaintiff’s complaint alleging wrongful abortion, assault and battery, and intentional infliction of emotional distress did not come within the scope of activity intended to be included under the Act. 80 The court, carefully limiting its holding to the alleged facts, cautioned that its decision did not apply generally to a class of intentional torts occurring within the physician-patient relationship, and emphasized that the complaint contained factual issues that could be decided by a jury without medical expert testimony. 81

In sum, Indiana courts have played, and continue to play, a dynamic role in defining the function and extent of the Act’s provisions. While the constitutionality of the Act seems well settled, at least with the current Indiana Supreme Court, other problematic issues remain — most notably the scope of the Act with respect to what type of conduct the courts believe the legislature intended to encompass.

In such cases, as one court observed, conclusions about the Act’s scope depend on assumptions about the breadth of the legislature’s intent. 82 Nevertheless, while the specific rationale in individual cases about excluding certain conduct from the Act may make sense for those cases, they pose problems for future litigants in selecting a forum in which to bring their actions in questionable instances, and they also provide opportunities for the imposition of procedural hurdles in malpractice and related litigation. Consequently, Indiana courts would be well advised to

81. Id. at 511.
82. Methodist Hosp. of Ind., Inc. v. Ray, 551 N.E.2d 463, 465 (Ind. Ct. App. 1990); see also Harbottle, supra note 69, at 904-07.
look carefully at situations that might be excluded from the Act, particularly for those torts arising directly in the physician-patient relationship such as in Collins v. Thakkar. Even in Methodist Hospital of Indiana, Inc. v. Ray, the line between premises liability and liability for medical malpractice is not necessarily clear because the risk of viral infection may be intrinsically related to the delivery of health care in a hospital setting.

III. INDIANA’S EXPERIENCE UNDER REFORMS

This section reviews data on the operation of Indiana’s malpractice reforms as well as data on Indiana claimants, defendants, and claims from 1975 through 1988. The Indiana University study collected data on all malpractice claims filed with the Indiana Department of Insurance from 1975 through 1988.84

A. General Trends

From 1975 through 1988, 6,225 malpractice claims were filed with the Indiana Department of Insurance. Of these claims, only 2,074 were closed. It is remarkable that, under Indiana’s reforms, less than one-third of claims filed were closed over a twelve-year period. The implications of this backlog will be discussed below.87

1. Frequency and Severity.—The key characteristics of claims affecting the availability and affordability of medical malpractice insurance are frequency and severity (that is, size) of claims. Increases in these characteristics triggered the two malpractice crises of the 1970s and 1980s.88 Further, most legislated tort and insurance reforms, including Indiana’s, are aimed at controlling the frequency and severity of claims.89 Indiana’s trends in frequency and severity of claims from 1975 through 1988 were

84. See description of database in Appendix A.
86. Id.
87. See infra § III(D)(2).
similar to those of the nation. Like other states, Indiana has experienced increases in claim frequency during the 1980s despite reforms. Table I presents data on new claims opened per physician from 1977 through 1988. Claim frequency in Indiana rose from 2.2 claims per 100 physicians in 1977, to 9.7 in 1986, to 8 per 100 physicians in 1987. These trends are similar to national trends, although annual frequency is actually lower in Indiana compared to the nation.

### TABLE I

**SEVERITY AND FREQUENCY OF INDIANA MALPRACTICE CLAIMS, 1977-1988**

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean Paid Claim</th>
<th>Mean Paid Claim</th>
<th>Claims Per 100 Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current $</td>
<td>Constant 1977 $</td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>$4,166</td>
<td>$4,166</td>
<td>2.2</td>
</tr>
<tr>
<td>1978</td>
<td>53,760</td>
<td>49,935</td>
<td>4.1</td>
</tr>
<tr>
<td>1979</td>
<td>79,531</td>
<td>66,398</td>
<td>4.7</td>
</tr>
<tr>
<td>1980</td>
<td>74,264</td>
<td>54,615</td>
<td>5.7</td>
</tr>
<tr>
<td>1981</td>
<td>26,625</td>
<td>17,740</td>
<td>6.1</td>
</tr>
<tr>
<td>1982</td>
<td>85,674</td>
<td>53,731</td>
<td>7.6</td>
</tr>
<tr>
<td>1983</td>
<td>111,719</td>
<td>67,952</td>
<td>8.3</td>
</tr>
<tr>
<td>1984</td>
<td>128,511</td>
<td>74,975</td>
<td>9.0&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>1985</td>
<td>135,925</td>
<td>76,569</td>
<td>9.7</td>
</tr>
<tr>
<td>1986</td>
<td>186,387</td>
<td>103,012</td>
<td>8.5</td>
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<tr>
<td>1987</td>
<td>220,697</td>
<td>117,674</td>
<td>8.0</td>
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<tr>
<td>1988</td>
<td>37,988</td>
<td>19,460</td>
<td>——&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
</tbody>
</table>


1. Indiana Department of Insurance, American Medical Association, 1988.

90. *Id.* at 6-8.
91. *Id.* at 7 (Figure 2). See also Gen. Accounting Off., Six State Case Studies Show Claims and Insurance Costs Still Rise Despite Reforms (1986) [hereinafter Gen. Accounting Off., Six Case Studies]; Gen. Accounting Off., Case Study on Indiana, supra note 14.
Between 1975 and 1988, the mean claim severity in current dollars for paid Indiana claims was $130,855 ($89,350 for all claims). The median was $14,000. The mean paid claim in 1977 constant dollars was $73,566 and the median was $7,684. A study combining data collected by the National Association of Insurance Commissioners and the United States General Accounting Office ("GAO") reported mean severity for paid claims at $102,313, using 1984 constant dollars.

Claim severity in Indiana has also increased substantially over time. Table I presents data on mean paid claim severity from 1977 through 1988. Claim severity in Indiana rose 88.6% in real dollars between 1980 and 1986. As with claim frequency, Indiana's experience with claim severity has been similar to national trends, despite reforms.

2. Unique Patterns in Indiana Claim Severity.—About 32% of the closed claims were settled without payment, a figure considerably smaller than the 57% found by the GAO in its study of claims closed in 1984. This difference is interesting, and suggests that the operation of Indiana's malpractice reforms may negatively influence the initial decisions of plaintiffs' attorneys to bring a claim or, on the other hand, may promote a more expansive view toward settlement by malpractice insurers.

The distribution of Indiana's mean paid claim severity is especially interesting. Specifically, very few paid Indiana claims were settled between $25,000 and $100,000, 12% compared with the national data in the GAO's 1984 study of closed claims (28.5%). In fact, only 3.0% of all closed claims (54 claims) were between $50,000 and $100,000, and only 0.5% of all closed claims (14 claims) were between $75,000 and $100,000. It seems remarkable that only 54 claims out of 2,074 claims would fall between $50,000 and $100,000. This suggests that an interesting phenomenon may be influencing the resolution of Indiana's claims.

95. Although data on closed claims included claims filed as early as 1975, none of these earlier claims were settled before 1977. Also, the table "endpoints" (1977 and 1988) are excluded from consideration because the number of claims settled in those years was much lower than the number of claims settled from 1978 through 1987.
98. Id. at 20.
Large Indiana claims (> $100,000) constituted 30.2% compared with 18.3% in the GAO study. 99 Yet, the proportion of small claims (< $25,000) in Indiana (57.9%) and the GAO study (53.2%) was similar. 100 This different pattern of Indiana's mean paid claim severity is very important and, as will be discussed below, suggests that Indiana's system may be working in an unusual manner. 101

3. Claim Disposition Time.—From 1975 through 1988, an average of 23.7 months elapsed between the time a claim was filed and its closure, with virtually no difference between paid and nonpaid claims. Interestingly, Indiana's average was almost two months shorter than the time stated in the GAO study of 1984. 102 Like other national studies discovered, 103 larger claims in Indiana took longer than smaller claims.

B. Characteristics of Indiana Malpractice Claimants and Claims

The study sought to collect considerable data on malpractice claimants in Indiana. However, the claim files at the Indiana Department of Insurance actually contained very little demographic data on claimants. Only data on age and sex was present on a widespread basis.

1. Demographic Characteristics of Claimants.—

a. Claimant sex

Of Indiana malpractice claimants, 59.5% were female and 40.5% male. While this represents a statistically significant difference from Indiana's population generally, it is quite similar to the percentages of 56.9% and 43.1% found in the 1984 GAO study of closed claims. 104 It is well documented that women use more health care services on average than do men, due in part to childbearing needs. 105 This fact may explain the disproportionately large representation of women among malpractice claimants.

Men, however, tended to have larger awards than women, receiving nearly $105,909 on average for all closed claims compared to $78,887 for

99. Id.
100. Id.
101. See infra §§ III(D)(1) and IV(A).
102. GEN. ACCOUNTING OFF., CHARACTERISTICS OF CLAIMS CLOSED IN 1984, supra note 93, at 35 (25.1 months). See also Sloan, Mergenhagen & Bovbjerg, supra note 94, at 688 (1.97 years).
103. GEN. ACCOUNTING OFF., CHARACTERISTICS OF CLAIMS CLOSED IN 1984, supra note 93, at 35.
104. Id. at 28.
105. L. ADAY, R. ANDERSON & G. FLEMING, HEALTH CARE IN THE UNITED STATES: EQUITABLE FOR WHOM? 104 (Table 3.4) (1980).
women. For paid claims, the mean payment for men was $157,709 and $114,188 for women, a highly significant difference.\textsuperscript{106} This difference suggests that, in practice, male work and lives are valued higher than female work and lives. Independent of malpractice, this is an extremely disturbing finding which strongly suggests that the legal system reinforces underlying social inequities.

\textbf{b. Claimant age}

Data on claimant age showed that the ages of Indiana claimants were relatively similar in distribution to the age data reported by GAO.\textsuperscript{107} Newborns received the highest mean award of any age category, although they were among the smallest age category (6.4\%). This is due, almost certainly, to the fact that injuries suffered at birth are likely to require expensive, often lifelong, care. Other differences between age groups were not significant.

\textbf{c. Claimant race}

Although data on race was missing in 72.9\% of claims closed between 1975 and 1988, the racial composition of Indiana malpractice claimants appears to be similar to Indiana’s population generally. According to 1984 census data, whites and nonwhites constituted 91.41\% and 8.59\% of Indiana’s population respectively.\textsuperscript{108} Of closed claims, 85.7\% of claimants were white, and 14.3\% were Black, Asian, or Hispanic.

\textbf{d. Marital status}

Data on marital status was available in only a little more than one-third of all cases. Nearly 93\% of adult claimants (defined as those claimants 18 years or older) were married or had been married at some time.

\textbf{e. Employment}

Data on the claimant’s employment status at time of injury was recorded in almost 55\% of the closed claims. Most claimants (61.5\%) were employed. Dependent children and students (23.4\%) constituted the next highest category, followed by homemakers (5.8\%). Only 2.7\% of the claimants were unemployed at the time of injury. The remainder of claimants were either self-employed, retired, independent students, or classified as “other.”

\textbf{f. Claimant county of residence.}

Data on claimant residence was often missing from the Department of Insurance claim files. Nevertheless, data was available for nearly half

\textsuperscript{106} The difference is significant at p < .001.
\textsuperscript{107} Gen. Accounting Off., Characteristics of Claims Closed in 1984, supra note 93, at 28.
(46.8%) of the closed claims between 1975 and 1988. Of these claimants, the largest portion, 20.5%, were from Marion County, followed by 12.8% from Lake County, 3.6% from Allen County, and 3.3% from St. Joseph County. Overall, 68.7% of the claimants lived in urban counties, that is, Standard Metropolitan Statistical Areas.\textsuperscript{109} Claimants from rural areas accounted for 25.6% of claims. Of the 5.7% of the claimants residing outside Indiana, Illinois residents outnumbered Ohio, Kentucky, and Michigan residents by nearly half.

2. \textit{Claim Characteristics}.—Most malpractice injuries in Indiana from 1975 through 1988 occurred in hospitals (67.9% versus 22.2% in physicians’ offices or clinics). The GAO found that 80% of malpractice injuries occur in hospitals compared to 13% in physicians’ offices.\textsuperscript{110}

The predominant allegation of negligence for closed claims in Indiana was errors in treatment, followed by errors in surgery and errors in diagnosis. The GAO’s study of claims closed in 1984 found a similar pattern\textsuperscript{111}

Further, the distribution of severity of injury closely parallels the distribution reported by the GAO study and, as in that study, award size varied directly with severity.\textsuperscript{112} Nearly 60% of paid wrongful death claims received payments in excess of $100,000 — a proportion much greater than the claims of living claimants. Table II presents data on the mean claim severity (size) and severity of injury index for all closed claims by allegations of negligence.

\textbf{C. Characteristics of Indiana Malpractice Defendants}

Physicians and hospitals account for about 80% of the 4,230 malpractice defendants in the closed claims under Indiana’s malpractice reforms through 1988. Of all varied defendants, nearly 60% were individual physicians, 7.4% were physician professional corporations, 8% were other health professionals, and 25.1% were hospitals and other health care institutions. More than 75% of the claims involved just one or two defendants. This is logical because one defendant must pay $100,000 to get a claim to the PCF, or at least $50,000 in a structured settlement.\textsuperscript{113}

\textsuperscript{109} Id.
\textsuperscript{110} Gen. Accounting Off., Characteristics of Claims Closed in 1984, supra note 93. See also Sloan, Mergenthaler, & Bovbjerg, supra note 94, at 688 (app. 2).
\textsuperscript{111} Gen. Accounting Off., Characteristics of Claims Closed in 1984, supra note 93, at 23.
\textsuperscript{112} Id. at 41. See also Bovbjerg, Sloan, Dor & Hsieh, Juries and Justice: Are Malpractice and Other Personal Injuries Created Equal?, Law & Contemp. Probs. (forthcoming 1991); Sloan & Hsieh, Variability in Medical Malpractice Payments: Is the Compensation Fair?, 24 L. & Soc’y Rev. 997 (1990).
\textsuperscript{113} See supra notes 45-49 and accompanying text.
## TABLE II

**MEAN PAYMENT AND MEAN SEVERITY OF INJURY (SI) BY ALLEGATIONS OF NEGLIGENCE FOR ALL CLOSED INDIANA CLAIMS, 1977-1988**

<table>
<thead>
<tr>
<th>Allegations of Negligence</th>
<th>Payment (N) SI</th>
<th>Payment (N) SI</th>
<th>Payment (N) SI</th>
<th>Payment (N) SI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TABLE II</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MEAN PAYMENT AND MEAN SEVERITY OF INJURY (SI)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLAIMS OF LIVING CLAIMANTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnosis</td>
<td>413,252 (36)</td>
<td>6.6</td>
<td>37,050 (10)</td>
<td>5.1</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>471,001 (10)</td>
<td>7.5</td>
<td>25,000 (1)</td>
<td>5.0</td>
</tr>
<tr>
<td>Surgery</td>
<td>378,052 (80)</td>
<td>5.6</td>
<td>39,131 (48)</td>
<td>4.8</td>
</tr>
<tr>
<td>Medication</td>
<td>385,000 (7)</td>
<td>5.9</td>
<td>39,500 (5)</td>
<td>5.2</td>
</tr>
<tr>
<td>Medication - Administration</td>
<td>359,615 (8)</td>
<td>5.9</td>
<td>40,017 (5)</td>
<td>4.2</td>
</tr>
<tr>
<td>Intravenous</td>
<td>364,375 (4)</td>
<td>6.3</td>
<td>50,000 (1)</td>
<td>6.0</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>473,583 (47)</td>
<td>7.5</td>
<td>46,479 (11)</td>
<td>4.3</td>
</tr>
<tr>
<td>Treatment</td>
<td>403,560 (59)</td>
<td>6.3</td>
<td>41,167 (37)</td>
<td>5.2</td>
</tr>
<tr>
<td>Monitoring</td>
<td>440,951 (10)</td>
<td>6.5</td>
<td>3,650 (5)</td>
<td>4.0</td>
</tr>
<tr>
<td>Equipment</td>
<td>370,401 (24)</td>
<td>6.4</td>
<td>38,500 (5)</td>
<td>4.6</td>
</tr>
<tr>
<td>Blood Products</td>
<td>359,615 (8)</td>
<td>5.9</td>
<td>26,250 (2)</td>
<td>4.5</td>
</tr>
<tr>
<td>Other</td>
<td>344,675 (9)</td>
<td>6.0</td>
<td>39,070 (11)</td>
<td>4.5</td>
</tr>
</tbody>
</table>

**WRONGFUL DEATH CLAIMS**

<table>
<thead>
<tr>
<th>Allegations of Negligence</th>
<th>Payment (N) SI</th>
<th>Payment (N) SI</th>
<th>Payment (N) SI</th>
<th>Payment (N) SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
<td>420,008 (31)</td>
<td>9.0</td>
<td>40,666 (4)</td>
<td>9.0</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>420,357 (21)</td>
<td>9.0</td>
<td>62,250 (2)</td>
<td>9.0</td>
</tr>
<tr>
<td>Surgery</td>
<td>332,742 (10)</td>
<td>9.0</td>
<td>55,000 (2)</td>
<td>9.0</td>
</tr>
<tr>
<td>Medication</td>
<td>400,000 (2)</td>
<td>9.0</td>
<td>8,250 (2)</td>
<td>9.0</td>
</tr>
<tr>
<td>Medication - Administration</td>
<td>316,666 (3)</td>
<td>9.0</td>
<td>8,250 (2)</td>
<td>9.0</td>
</tr>
<tr>
<td>Intravenous</td>
<td>417,500 (2)</td>
<td>9.0</td>
<td>37,100 (5)</td>
<td>9.0</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>442,942 (6)</td>
<td>9.0</td>
<td>20,250 (2)</td>
<td>9.0</td>
</tr>
<tr>
<td>Treatment</td>
<td>422,006 (28)</td>
<td>9.0</td>
<td>7,488 (27)</td>
<td>9.0</td>
</tr>
<tr>
<td>Monitoring</td>
<td>389,016 (14)</td>
<td>9.0</td>
<td>7,333 (3)</td>
<td>9.0</td>
</tr>
<tr>
<td>Equipment</td>
<td>348,546 (3)</td>
<td>9.0</td>
<td>2,000 (1)</td>
<td>9.0</td>
</tr>
<tr>
<td>Blood Products</td>
<td>315,001 (1)</td>
<td>9.0</td>
<td>8,750 (2)</td>
<td>9.0</td>
</tr>
<tr>
<td>Other</td>
<td>407,500 (5)</td>
<td>9.0</td>
<td>35,076 (1)</td>
<td>9.0</td>
</tr>
</tbody>
</table>

**SOURCE:** Indiana Malpractice Claims Data Base, The Center For Law and Health, Indiana University School of Law - Indianapolis, 1990.

*See Appendix A for description of severity of injury index.*
Of the total number of physician defendants, 12.5% were named in two or more closed claims. Specifically, 230 physician defendants were named in two claims; forty-six were named in three claims; fifteen were named in four claims; seven were named in five claims; and three were named in six claims.

For almost 54% of physician defendants, no settlement or judgment was made. Table III presents data on the mean claim payments by defendant physicians’ specialty. As Table III shows, about one-third of physician defendants in Indiana were OB/GYNs, general surgeons, or orthopedic surgeons, as is true nationally.114

Of all specialties, OB/GYNs were the largest single group of malpractice defendants (14.5), with general surgeons a close second (14.2). These specialty groups, along with anesthesiologists, orthopedic surgeons, and radiologists, were over-represented compared to their proportion in Indiana’s physician population. Physicians in family practice, internal medicine, and psychiatry were under-represented.115

Approximately 55% of the Indiana physician defendants were board certified compared to 50% reported in the GAO study.116 About 20% of the Indiana physician defendants were educated in foreign medical schools compared to 23% foreign-educated defendants nationally.117 There were no statistically significant differences in mean severity of paid claims between board certified physicians and nonboard certified physicians, nor between foreign medical graduates and physicians educated in the United States.118 For claims decided by a medical review panel, there was no statistically significant difference between board and nonboard certified physicians nor between foreign medical graduates and physicians educated in the United States and Canada in terms of whether the panel found physicians negligent.

117. Id. at 59.
118. Board certified physicians and foreign medical graduates were associated with slightly higher average claim payments, though no information on how much each defendant paid was available.
### TABLE III

CLAIM AND DEFENDANT CHARACTERISTICS BY PHYSICIAN SPECIALTY  
1977-1988

<table>
<thead>
<tr>
<th>Specialty</th>
<th>% Phys. Defend. (N)</th>
<th>% IN(^1) Phys.</th>
<th>% All Paid(^2) Claims (N)</th>
<th>Paid Claims(^3) Mean</th>
<th>Paid Claims(^3) Median (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OB/GYN</td>
<td>14.5 (335)</td>
<td>5.4</td>
<td>72.9 (240)</td>
<td>$ 70,683</td>
<td>$ 10,000 (56)</td>
</tr>
<tr>
<td>General Surgery</td>
<td>14.2 (327)</td>
<td>7.0</td>
<td>65.5 (213)</td>
<td>126,841</td>
<td>25,000 (61)</td>
</tr>
<tr>
<td>Orthopedic Surgery</td>
<td>10.0 (230)</td>
<td>3.6</td>
<td>56.1 (128)</td>
<td>79,232</td>
<td>10,000 (44)</td>
</tr>
<tr>
<td>Radiology</td>
<td>9.6 (107)</td>
<td>2.1</td>
<td>67.3 (72)</td>
<td>170,125</td>
<td>8,750 (6)</td>
</tr>
<tr>
<td>General Practice</td>
<td>8.9 (205)</td>
<td>8.2</td>
<td>62.5 (125)</td>
<td>117,857</td>
<td>8,750 (48)</td>
</tr>
<tr>
<td>Family Practice</td>
<td>8.8 (203)</td>
<td>15.3</td>
<td>62.6 (127)</td>
<td>139,934</td>
<td>21,250 (30)</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>5.4 (124)</td>
<td>12.7</td>
<td>61.3 (76)</td>
<td>155,050</td>
<td>32,000 (6)</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>5.4 (124)</td>
<td>6.0</td>
<td>87.1 (108)</td>
<td>341,127</td>
<td>375,000 (9)</td>
</tr>
<tr>
<td>Urology</td>
<td>2.9 (68)</td>
<td>1.9</td>
<td>64.7 (44)</td>
<td>134,536</td>
<td>5,000 (17)</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>2.5 (58)</td>
<td>5.5</td>
<td>75.4 (43)</td>
<td>15,300</td>
<td>15,300 (2)</td>
</tr>
<tr>
<td>ER Medicine</td>
<td>2.5 (58)</td>
<td>3.0</td>
<td>78.9 (45)</td>
<td>4,812</td>
<td>5,125 (4)</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>2.3 (52)</td>
<td>2.9</td>
<td>50.0 (25)</td>
<td>110,928</td>
<td>45,000 (14)</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>2.3 (53)</td>
<td>0.7</td>
<td>51.9 (27)</td>
<td>120,425</td>
<td>2,750 (4)</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>1.9 (43)</td>
<td>1.7</td>
<td>60.5 (26)</td>
<td>185,699</td>
<td>90,000 (11)</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>1.1 (25)</td>
<td>0.6</td>
<td>60.0 (15)</td>
<td>78,640</td>
<td>9,500 (11)</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>1.4 (33)</td>
<td>4.0</td>
<td>46.9 (15)</td>
<td>113,415</td>
<td>1,455 (4)</td>
</tr>
<tr>
<td>Pathology</td>
<td>0.9 (20)</td>
<td>3.5</td>
<td>75.0 (15)</td>
<td>20,000</td>
<td>20,000 (1)</td>
</tr>
<tr>
<td>Other</td>
<td>10.6 (244)</td>
<td>15.9</td>
<td>63.1 (152)</td>
<td>172,108</td>
<td>20,000 (34)</td>
</tr>
</tbody>
</table>

**SOURCE:** Indiana Malpractice Claims Data Base, The Center for Law and Health, Indiana University School of Law -- Indianapolis, 1990.

\(^1\) Distribution of physician defendants by specialty differs significantly from distribution of Indiana physicians. (chi-squares = 1,293, p < .001).

\(^2\) Figure represents the number of specialist physicians involved in a paid claim whether or not the specialist actually contributed to the payment.

\(^3\) Number of paid claims involving only one physician provider.
Hospitals constituted approximately one-fourth of the defendants in all Indiana closed claims from 1975 to 1988. Private, nonprofit hospitals accounted for 69.9% of institutional defendants, a proportion substantially higher than their representation among Indiana’s acute care hospitals (48.1%). On the other hand, public hospitals made up only 29.4% of institutional defendants and for-profit hospitals comprised 0.2%. Of Indiana acute care hospitals, 45.1% are public and 6.8% are investor-owned.\(^{119}\)

D. Performance of the System

1. Operation of the Cap.—The major issue regarding the Act is the fairness of Indiana’s comprehensive damage cap. Intuitively, comprehensive damage caps seem unfair to plaintiffs with large claims because they impose limits on compensation that bear no relation to the plaintiff’s actual damages. Indeed, several state courts have invalidated damage caps on grounds that they deny plaintiffs their property rights.\(^{120}\) Nevertheless, empirical research repeatedly has demonstrated that damage caps are one of the few tort reforms that are effective in reducing the severity of malpractice claims.\(^{121}\)

In assessing the operation of Indiana’s cap, comparisons with two neighboring states regarding large (>\$100,000) malpractice claims are


\(^{121}\) P. Danzon, Medical Malpractice: Theory, Evidence, and Public Policy (1985) [hereinafter P. Danzon, Medical Malpractice]; Danzon, New Evidence, supra note 88; Zuckerman, Bovbjerg & Sloan, Effects of Tort Reforms and Other Factors on Medical Malpractice Insurance Premiums, 27 Inquiry 167 (1990); cf. Sloan, Mergenhagen, & Bovbjerg, supra note 94.

Danzon found that caps on damages reduce the average severity of the claim by 23%. Danzon, New Evidence, supra note 88, at 78. More recently, Sloan, Mergenhagen and Bovbjerg found that damage caps on total payments achieved savings in claim payment of up to 39%. Sloan, Mergenhagen & Bovbjerg, supra note 94, at 678.
instructive.\textsuperscript{122} Unlike Indiana, Michigan and Ohio have adopted malpractice reforms only sporadically and never have implemented a damage cap.\textsuperscript{123} Yet, with respect to other, more general, tort reforms, all three states are similar.\textsuperscript{124} In terms of aggregate variables identified as having an important influence on claim severity, Indiana, Michigan, and Ohio are reasonably similar. These variables include: Level of urbanization;\textsuperscript{125} number of physicians per 100,000;\textsuperscript{126} per capita income;\textsuperscript{127} and, the ratio of surgeons to all physicians.\textsuperscript{128} With respect to these variables, Indiana is lower than either Michigan or Ohio.\textsuperscript{129} Thus, one would expect that claim payments in Indiana would be lower than in either Michigan or Ohio.

In fact, the amount of compensation to claimants with large malpractice payments in Indiana is, on average, substantially higher than in Michigan and Ohio.\textsuperscript{130} Indiana’s mean large claim payment ($>\$100,000) between 1975 and 1988, in current dollars, was $404,832;

\begin{itemize}
  \item \textsuperscript{123} In 1975, Michigan authorized voluntary, binding arbitration in lieu of a court trial, but this arbitration alternative has not been used to any extent. Mich. Comm’r of Ins., Claims Experience and Market Conditions for Medical Malpractice Insurance 26 (1989). In 1975, Ohio enacted a $200,000 limit on noneconomic damages except for wrongful death, and mandated compulsory arbitration of malpractice claims. The Ohio Supreme Court immediately ruled that these reforms were unconstitutional, and thus they were never implemented. Simon v. St. Elizabeth Medical Center, 3 Ohio Op. 3d 164, 355 N.E.2d 903, 911 (1976).
  \item \textsuperscript{124} Michigan, Ohio, and Indiana have adopted the two tort reforms, i.e., shortened statutes of limitations and modification of the common law collateral source rule, which Danzon found effective in reducing claim frequency and severity. P. Danzon, Medical Malpractice, \textit{supra} note 121, at 166, 174; Danzon, \textit{New Evidence}, \textit{supra} note 88, at 71-72. All three states tightened their statutes of limitations for malpractice in the mid-1970s. Ind. Code § 16-9.5-3-1 (1988); Mich. Comp. Laws § 600.5805 (1989); Ohio Rev. Code Ann. § 2305.10 (Anderson 1988). Also, all of these laws modified the common-law collateral source rule to require some offset of collateral payments from damage awards in the late 1980s, although Ohio’s rule does not apply to medical malpractice. Ind. Code § 34-4-36-1 to -3 (1988); Mich. Comp. Laws Ann. § 600.6301 (West 1987); Ohio Rev. Code Ann. § 2317.45 (Anderson Supp. 1988).
  \item \textsuperscript{125} Danzon, \textit{New Evidence}, \textit{supra} note 88, at 69.
  \item \textsuperscript{126} P. Danzon, Medical Malpractice, \textit{supra} note 121, at 70-72.
  \item \textsuperscript{128} Danzon, \textit{New Evidence}, \textit{supra} note 88, at 74, 79.
  \item \textsuperscript{129} Gronfein & Kinney, \textit{supra} note 122.
  \item \textsuperscript{130} Id. Data on Michigan and Ohio claims included large claims ($>\$100,000) filed with the Medical Protective Company in Fort Wayne, Indiana, from 1977 through 1988. For the relevant period, the Medical Protective Company had about one-third of the market in Michigan and Ohio.
Michigan's was $290,022; and Ohio's was $303,220.\textsuperscript{131} The median payment for large claims (> $100,000) was $435,283 in Indiana; $180,000 in Michigan; and $200,000 in Ohio.\textsuperscript{132} Further, 27.9\% of Indiana PCF cases received the maximum allowable payment of $500,000, while only 13\% of Michigan and Ohio claims were paid at this level or above.\textsuperscript{133}

2. Medical Review Panel.—Surprisingly, medical review panels were invoked in only 11.7\% of closed claims.\textsuperscript{134} For more than half of the PCF defendants (52\%) for whom the PCF paid claims, a medical review panel was not convened. Of the defendants in closed claims whose cases were considered by a medical review panel, only 189 (22.4\%) were found to have committed malpractice. However, panels had been convened in 1,452 additional claims that remained open as of December 31, 1988.\textsuperscript{135} A crucial question for Indiana’s system, which will be discussed further below,\textsuperscript{136} is why so many claims remain open after a panel opinion is rendered.

One reason for these findings regarding the limited use of the medical review panel process in closed claims is that it has increasingly proven to be time consuming. From 1975 through 1988, the average time period between the filing of a complaint and a final panel opinion was thirty-two months.\textsuperscript{137} Some anecdotal evidence suggests that delays in forming and convening medical review panels are responsible for delays in the resolution of malpractice claims,\textsuperscript{138} and perhaps may be responsible for the large backlog in open claims described above.\textsuperscript{139}

These findings are quite interesting given the role the medical review panel was to play in affording accessible expert review to determine liability early in a claim. The medical review panel in fact plays a much reduced role in the adjudication of malpractice claims. To the extent that delays in convening medical review panels contribute to the fact that only one-third of filed claims were closed from the start of reforms in 1975 through 1988, such evidence could be quite persuasive in a future constitutional challenge to Indiana’s reforms with respect to the court of appeals decision in Cha v. Warnick discussed above.\textsuperscript{140}

\textsuperscript{131} Id. The difference between these three means was highly significant at < .001.

\textsuperscript{132} Id.

\textsuperscript{133} Id.

\textsuperscript{134} IND. DEP’T OF INS., INDIANA PATIENT’S COMPENSATION FUND, supra note 85, at 3.

\textsuperscript{135} Id.

\textsuperscript{136} See infra § IV(B)(2).

\textsuperscript{137} IND. DEP’T OF INS. INDIANA PATIENT’S COMPENSATION FUND, supra note 85, at 5.

\textsuperscript{138} Kemper, Selby & Simmons, supra note 27, at 1133; Murphy, Pitfalls in Medical Malpractice Panel Practice, 29 Res Gestae 178, 180-81 (1985).

\textsuperscript{139} See supra note 85-87 and accompanying text.

\textsuperscript{140} See supra note 67 and accompanying text. See, e.g., Aldana v. Holub, 381
3. Impact of the By-Pass Amendment.—As noted above, a 1985 legislative amendment authorized the filing of small claims (<$15,000) directly in state court.¹⁴¹ Some commentators anticipated that this authority would generate a flood of claims filed in court and effectively undercut Indiana’s malpractice reforms.¹⁴² As a matter of fact, this by-pass amendment has rarely if ever been used.¹⁴³

The availability of the by-pass amendment did not provide significant incentives for plaintiffs to change their strategy for bringing malpractice claims. No statistically significant difference emerged in the number of paid claims between $15,001 and $50,000 compared to claims between $1 and $15,000 for the pre-amendment time period (Sept. 1, 1982 to Aug. 31, 1985) and the post-amendment time period (Sept. 9, 1985 to Aug. 31, 1988). There was also no statistically significant difference in the amount that claimants in the $1-$15,000 group actually received before and after the passage of the amendment in either current or constant dollars.

4. PCF Performance.—Of the 410 PCF claims from 1975 through 1988 analyzed in this evaluation, the great majority of PCF claims were settled. Only twenty-one claims were paid after court proceedings were initiated, and one claim was settled after trial and appeal. After claims reached the PCF, recoveries were very generous. The mean payment for claims paid at $100,000 or above (including a few claims paid at $100,000 from primary insurance only) was $405,297.¹⁴⁴ The average degree of severity of injury ranged from major permanent disability to total disability. About 14.9% of PCF claims involved injuries to infants at birth, and 29.8% were wrongful death cases.

The PCF’s financial condition has been a persistent concern from the beginning. The PCF really has been financed on a “pay-as-you-go” basis, rather than on a system in which surcharges are calculated according to actuarial projections of the PCF’s future liabilities. Since 1975, the PCF surcharge has generated $150.8 million in revenue, and the PCF

So. 2d 231 (Fla. 1980); Mattos v. Thompson, 491 Pa. 385, 421 A.2d 190 (1980). In these cases, courts found panel review processes unconstitutional because of delays. However, in Cha, 476 N.E.2d 109, the Indiana Supreme Court distinguished these cases on grounds that Indiana’s statutory scheme was different. See also Bovbjerg, Legislation on Medical Malpractice: Further Developments and a Preliminary Report Card, 22 U.C. Davis L. Rev. 499, 524 & n.109 (1989).

¹⁴¹ See supra note 25 and accompanying text.


¹⁴³ The Indiana Department of Insurance has no record of this procedure being used in any claim. (The Act requires health care providers and insurers to report the disposition of all malpractice claims. See supra note 54 and accompanying text.)

¹⁴⁴ See supra note 122 and accompanying text.
has paid $135.3 million in claim payments.\textsuperscript{145} A transfer of $7.2 million from the reserves of the state’s Medical Malpractice Joint Underwriting Commission saved the PCF from insolvency in 1984.\textsuperscript{146} In 1988, the PCF collected $41.3 million from the surcharge and paid $21.5 million for claims, leaving a balance of $29.8 million.\textsuperscript{147} The surcharge to finance the PCF has risen substantially since the Act’s inception. From 1975 through 1982, the surcharge on providers to support the PCF was 10% of malpractice premiums.\textsuperscript{148} By 1988, the surcharge increased to 125%.\textsuperscript{149}

5. **Malpractice Insurance Premiums.**—Given these trends, it is interesting that Indiana’s malpractice insurance premiums have remained low compared to other states. According to a GAO study, Indiana health care providers continue to pay among the lowest malpractice insurance premiums in the nation.\textsuperscript{150} Specifically, Indiana physicians pay lower premiums compared to physicians in neighboring states of Ohio, Michigan, Illinois, and Kentucky.\textsuperscript{151}

For example, the Medical Protective Company, a major malpractice insurer in Indiana, Michigan and Ohio, charged lower premiums in Indiana compared to Michigan and Ohio. Medical Protective reports the following annual premiums for malpractice insurance of $100,000 per occurrence and $300,000 total for nonsurgeons in January 1989: Indianapolis, IN-$988, Cincinnati, OH-$2,291, Cleveland, OH-$2,579, Kalamazoo, MI-$4,881, and Detroit, MI-$7,953.\textsuperscript{152} For Medical Protective’s highest premium category (OB/GYNs and neurosurgeons), annual malpractice premiums in January 1989 were as follows: Indianapolis, IN-$8,398, Cincinnati, OH-$19,474, Cleveland, OH-$21,922, Kalamazoo, MI-$43,929, and Detroit, MI-$71,577.\textsuperscript{153} The cost of malpractice insurance increased dramatically with the PCF surcharge. For example, in Indianapolis in January 1989, malpractice insurance costs (primary insurance premium plus PCF surcharge) were $2,223 for nonsurgeons and $18,896 for OB/GYNs and neurosurgeons.\textsuperscript{154} In comparing the cost of insurance,

\textsuperscript{145} Ind. Dep’t of Ins., Indiana Patient’s Compensation Fund, supra note 85, at 1.

\textsuperscript{146} Gen. Accounting Off., Case Study on Indiana, supra note 14, at 6.

\textsuperscript{147} Ind. Dep’t of Ins., Indiana Patient’s Compensation Fund, supra note 85, at 66.

\textsuperscript{148} Id. at 61.

\textsuperscript{149} Id.


\textsuperscript{151} Mullen, supra note 12, at 5-13 to 5-14.

\textsuperscript{152} Id.

\textsuperscript{153} Id.

\textsuperscript{154} Id.
it is crucial to appreciate that a physician receives total protection against liability in Indiana, while physicians in other states are still liable for claims in excess of policy limits.

6. Litigation Costs.—Under Indiana’s system, attorney’s fees are limited for claims paid from the PCF,\(^{155}\) ostensibly to maximize payments to claimants. Although it appears that Indiana claimants with large claims pay less than under a common law system because of the cap on fees, reason for concern exists because plaintiffs’ attorneys have been able to charge expenses in addition to attorney’s fees which effectively increase the total payment to attorneys under the capped system.

Regarding defense costs, Indiana compares very favorably to other states. The Medical Protective Company reports that its defense costs were markedly lower in Indiana than in either Ohio or Michigan. Specifically, between 1984 and 1988, it cost Medical Protective 46% more in allocated loss adjustment expenses to close claims in Ohio and more than 100% more in such expenses to close claims in Michigan.\(^{156}\)

7. Use of Structured Settlements.—Periodic payments of primary insurers and the PCF have been used extensively in structured settlements of PCF claims. Of the 264 PCF claims settled between 1985 and 1988, 32.6% involved periodic payments. Also, 23.9% of PCF claims during this period involved contributions from multiple health care providers or their insurers to activate the PCF. This data suggests that insurers find the periodic payment option attractive in settling claims.

Periodic payments and associated structured settlements are ostensibly designed to ensure that damage awards will remain available to claimants through the course of their need for compensation.\(^{157}\) Structured settlements are particularly useful given some evidence that a significant number of plaintiffs exhaust large damage awards quickly and continue to have needs not met by the damage award.\(^{158}\) In many Indiana claims, use of periodic payments has resulted in creatively structured settlements that enabled the claimant to receive compensation worth more than the $500,000 cap. However, there is concern that claimants actually receive very little in present compensation after attorney’s fees.\(^{159}\) Also, in a very few cases, serious abuses have occurred.\(^{160}\)

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\(^{155}\) See supra note 43 and accompanying text.

\(^{156}\) Gronfein & Kinney, supra note 122.


\(^{158}\) Marello, supra note 157, at 271.

\(^{159}\) Hallinan & Headden, Malpractice Laws Stacked Against Victims, supra note 15, at 8.

\(^{160}\) Indeed, in one dramatic illustration of such abuses, St. Paul Fire and Marine
8. **Compliance With Reporting Requirements.**—It appears that insurers and counsel for the parties are not complying with reporting requirements regarding malpractice claims. In creating the data base on closed claims, many gaps were found in data required to be reported to the Department of Insurance, such as attorney’s fees and expenses incurred in pressing or defending the claim, settlement, or judgment amounts. With respect to these fees and expenses, itemized and total attorney’s costs were collected under the survey instrument for both plaintiff and defense counsel. Defense fees and expenses were missing in 75.7% and 78% of closed claims, respectively. However, the total unitemized amount of fees and expenses to defend a claim was missing in only 18.4% of closed claims. Plaintiffs’ attorneys were better at reporting their itemized fees and expenses (56.7% and 58.6% missing respectively), but worse than defense counsel at reporting total costs, a figure missing in 41.9% of closed claims.

9. **Subrogation, Statutory Liens, and the Collateral Source Rule.**—In a capped system, the operation of various remedies and rules that accord rights to third parties to share in the claimant’s tort recovery, or require reductions in the claimant’s recovery to adjust for compensation from other sources, raises important concerns. While these rights and rules may be analytically appealing as preventing possible windfalls to claimants in an abstract sense, their fairness must be questioned in a capped system. Specifically, when a damage cap sets a categorical limit on what can be awarded and also permits attorneys to be paid off the top, the possibility exists that claimants may actually get very little after other third parties have received reimbursement of their expenses.

Indiana has adopted several statutory lien authorities to permit hospitals, worker’s compensation insurers, and the state Medicaid

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Insurance Company agreed to settle a case with a claimant by paying $100,000 to get the case to the PCF if the claimant agreed to repay St. Paul $25,000 out of the settlement received. The claimant subsequently reported this arrangement to the Indiana Attorney General, and the Indiana Department of Insurance did persuade St. Paul to repay this $25,000 to the claimant. See Hallinan, Insurer’s Proposal for $25,000 ‘Loan’ Draws State’s Ire, Indianapolis Star, June 26, 1990, at 8.

161. See supra § 11(B)(5) and accompanying text.
162. IND. CODE § 16-9.5-6-2 (1988). See supra note 54 and accompanying text.
program\textsuperscript{165} to obtain reimbursement from plaintiffs' tort recoveries. Indiana common law recognizes the right of health insurers, pursuant to contract, to recover reimbursement for medical expenses from tort recoveries of their insureds.\textsuperscript{166} Also, as noted above,\textsuperscript{167} the Indiana legislature abrogated the common law collateral source rule, which prohibited evidence at trial of other sources of compensation for the plaintiff.\textsuperscript{168}

These various authorities have been invoked in 2.3% of all closed claims between 1975 and 1988, for a total of $2,931,482. PCF claimants, however, have been disproportionately affected by this practice and were three times more likely to have liens imposed against them, an overall rate of 8%. In fact, 68% of all the liens imposed were against PCF claimants. The mean and median current dollar lien amount imposed against all closed claims was $62,372 and $21,113, respectively. On average, these liens represented 20.4% of what the claimant received in compensation of the claim. The Indiana Medicaid program imposed the majority of these liens, while Blue Cross and Blue Shield of Indiana, Inc., the Medicare program, and hospitals imposed a few.

Operation of these rights of third parties to recover against malpractice awards has produced some harsh results. In one case, the lien was $605,075 — $129,873 more than the plaintiff was permitted to receive under the cap! In several instances, claimants have received very little from a large recovery because third parties, as well as the plaintiff's attorney, have been paid first.\textsuperscript{169}

\textsuperscript{165} Ind. Code § 12-1-7-24.6 (1988).
\textsuperscript{167} See supra note 124 and accompanying text.
\textsuperscript{168} Ind. Code § 34-4-36-1 (1988). See generally Wilkins, A Multi-Perspective Critique of Indiana's Legislative Abrogation of the Collateral Source Rule, 20 Ind. L. Rev. 399 (1987). Under Indiana's rule, the trier of fact calculates reductions in awards for collateral benefits received. Life insurance payments and other death benefits, insurance benefits directly paid for by the plaintiff or his family, and governmental benefits received by the plaintiff before trial are excluded, but worker's compensation is not. Ind. Code § 34-4-36-1 (1988).
\textsuperscript{169} The following letter from a 43-year-old PCF claimant dramatically illustrates the injustice that can result from imposing such liens in a capped system:

During April of 1981, I became a victim of medical malpractice. . . . To meet his one hundred thousand dollar ($100,000.00) obligation, Dr. [Defendant] purchased an annuity that will mature in fifteen (15) years. According to my attorney, I will be awarded four hundred thousand dollars ($400,000.00) on the fifteenth of this month (July 15th, 1987). I feel it is necessary to write to you to show you how that amount will be divided up and thus showing the injustice
IV. Conclusions

A. Some Observations

Indiana’s claims are adjudicated and paid under the most comprehensive and severe set of insurance and tort reforms in the nation. Yet, Indiana’s malpractice reforms operate in a unique fashion that softens the expected impact of these reforms and actually results in a compensation scheme that is more generous in several respects than the common law tort system. Under Indiana’s system, a variety of subtle incentives apparently encourage malpractice insurers and health care providers to settle claims, particularly large claims eligible for PCF payment, with less concern for defendant’s fault than expected. Once a claim reaches the PCF, the provider’s primary insurance policy usually has been exhausted, and in any event, the insurer no longer has any real obligation to defend the claim. Because medical review is an optional and costly proceeding, insurers have much to gain and little to lose by expeditiously

day the state’s medical malpractice system.

During the last five and one half (5.5) years, the Indiana State Department of Public Welfare (through Medicaid) has spent two hundred thirty-nine thousand eighty-two dollars and forty-two cents ($239,082.42) for my care as of mid-June 1987. A lien for this amount has been filed and must be honored accordingly. The attorney fees are one hundred thousand dollars ($100,000.00) plus expenses incurred for this case. Those expenses have been set at thirty thousand dollars. The balance is the actual compensation I’ll receive until the annuity matures. The following table illustrates the settlement’s division:

<table>
<thead>
<tr>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$400,000.00</td>
<td>Amount to be received July 15</td>
</tr>
<tr>
<td>239,082.42</td>
<td>To the State Welfare Department</td>
</tr>
<tr>
<td>130,000.00</td>
<td>Attorney fees and expenses</td>
</tr>
<tr>
<td>30,917.58</td>
<td>TO THE VICTIM</td>
</tr>
</tbody>
</table>

By July 15th, Medicaid will probably increase the lien by two thousand dollars ($2,000.00).

The Malpractice incident resulted in the loss of function in my left arm and both legs. I also lost bladder and bowel control making the possibility of employment almost impossible. I’m living in a nursing home and my part of the settlement will not cover one year’s expenses. This means I’ll be back on Medicaid and in fifteen (15) years (when the annuity matures) it will be claimed through a lien by Medicaid.

I’m forty-three (43) years old. If financially able to do so I could live on my own with an attendant, but I’ve lost more than bodily functions. I’ve also lost independence and my liberty. That loss of independence and liberty was through medical malpractice yet as the victim, I’ll not be allowed to regain my liberty and independence through just compensation.

Letter from malpractice claimant to Indiana Commissioner of Insurance (July 4, 1987) (available from The Center for Law and Health, Indiana University School of Law—Indianapolis, Indianapolis, IN 46202).
pushing claims — particularly claims with considerable damage — to the PCF without adjudicating fault in the medical review panel process.

By law, the PCF can only decide damage and must assume that the defendant's liability is admitted. Consequently, the factors that influence the final payment of claims in the common law tort system, such as, what a jury will find on liability or the future expenses involved in pressing a claim through trial, are not considered in the final decision on the claimant's compensation. In these respects, Indiana's system is similar to no-fault compensation systems that pay claims more efficiently with little regard for fault.

Of particular interest, Indiana claimants with large claims get substantially more than their counterparts in Michigan or Ohio. Most importantly, claimants in the aggregate are better off because they get more compensation for their injuries. It is crucial to remember that claimants who receive large malpractice payments have been seriously and tragically damaged and deserve the compensation they receive. Perhaps Indiana's reforms have provided a more efficient way to manage the resolution of such large claims fairly while still according providers and private insurers more predictability regarding claim severity and defense of malpractice claims, thereby permitting these insurers to maintain more stable underwriting and premium practices.

B. Some Concerns

There are, however, some features of Indiana's malpractice system that are troublesome. These features are: (1) Delays in the medical review panel process; (2) the backlog of open claims; (3) the fairness of allowing third parties to obtain reimbursement from malpractice awards in a capped system; (4) increases in the PCF surcharge and the solvency of the fund over time; and (5) poor compliance with reporting requirements.

1. The Medical Review Panel Process.—Delays in the medical review panel process are troubling and are probably due to practical difficulties in scheduling the busy professionals on the panel — three physician panel members, the attorney chairman, counsel for the parties, and the defendants. It may be worthwhile to search for more efficient and streamlined procedures for expert review of claims, including permitting optional "paper" review of submissions before all panel members without convening an oral hearing. In any event, it should be appreciated that even with the delays and expense involved in a medical review panel proceeding, it is still cheaper and probably faster to proceed with the medical review panel system than to revert to the common law tort system.

170. See supra notes 130-33 and accompanying text.
2. *The Backlog of Open Claims.*—A second major concern is the backlog of open claims. As discussed above, as of December 31, 1988, more than two-thirds of claims filed under the Act remained open.

The study did collect data on the open claims, many of which were quite old and on which there had been little action in recent years. Policy-makers in the Department of Insurance, as well as the bar, should give some thought as to why this backlog exists. Some questions to consider: Are many small claims simply languishing with plaintiffs' counsel not actively pursuing the claims? Are counsel and insurers failing to report to the Department of Insurance that claims are closed? Or, is the system simply too inefficient to adjudicate claims expeditiously? Also, what is the potential exposure to the primary coverage and the PCF of these open claims?

The 1990 case, *Eakin v. Mitchell-Leech*, could complicate the problem of the backlog to the extent the backlog includes claims filed before 1985. In this case, the court of appeals with the effective concurrence of the Indiana Supreme Court has condened the practice of primary insurers to include extensive future payments within the required $100,000 primary insurance payment required for PCF eligibility.

3. *Third Party Rights to Malpractice Awards.*—The rights of third parties to obtain reimbursement from claimants' recoveries in a capped system raise troubling issues of fairness. In brief, in a system in which the legislature has imposed a cap on recoverable damages to achieve other policy goals such as the availability and affordability of malpractice insurance for health care providers, it may be unfair to place the rights of third parties ahead of the claimant who has already been called upon to expect limited compensation to meet other societal goals. Medicaid liens also raise more complicated issues because Medicaid eligibility rules require applicants to deplete resources to become eligible for benefits. Nevertheless, future medical expenses represent only part of special and general damages that also include losses due to inability to work and pain and suffering, or, in the case of wrongful death, losses to the survivors resulting from the tortious death. Allowing third parties to receive full payment from claimants' damage awards under a capped system erroneously assumes that claimants' damages are basically medical expenses.

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171. See supra §§ III(A)(1) and III(D)(2).
173. See supra note 46 and accompanying text.
175. *Id.* § 8.3, at 556-557.
4. The PCF Surcharge.—This study did not address the financial condition of the PCF. Nevertheless, the facts that the surcharge has increased over 100% and that the PCF needed an infusion of substantial sums in 1985 to remain solvent are of concern. One possible reason for the increase is that it was not fixed at actuarially sound levels at the PCF’s inception in 1975. A second possibility is that the state has not aggressively defended claims that reach the fund. The fact that PCF claims have been paid at generous levels lends credibility to this second possible explanation of why the PCF surcharge has increased so markedly since 1975. In a recent article in the Indianapolis Star, the Commissioner of Insurance was quoted, stating: “We feel like the fund [PCF] has not been adequately defended. . . . We have been paying out 50% more than we should have been.”

5. Compliance with Reporting Requirements.—Finally, insurers and counsel for the parties are not complying with statutory reporting requirements regarding malpractice claims. Consequently, there is inadequate data at the state level to determine if affected parties are complying with the requirements of the Act, particularly with respect to setting attorney’s fees and structuring settlements.

C. Conclusion

Nevertheless, Indiana’s experience, particularly for large claims, suggests that relatively subtle administrative arrangements for the management of claims at the state level influence whether claimants can be treated fairly in a system that is tightly structured to control claim severity, and thus control the price and availability of malpractice insurance for providers. Clearly, pragmatic approaches that seek to control frequency and severity of claims can be designed in a way that also facilitate more efficient and fair compensation of medical injuries. Indiana’s experience should caution reformers, critics, and other observers to look more closely at the detailed aspects of how a system operates in practice before coming to intuitively appealing conclusions about the fairness of apparently strict changes in the common law tort system, such as damage caps, or the appropriateness of modifying the current medical malpractice system.

176. See supra notes 145-47.
177. See supra § III(D)(1) and accompanying text.
179. See supra §§ II(B)(5) and III(D)(8).
APPENDIX A

Data from this study is from the Indiana Malpractice Claims Data Base (IMDB) obtained from all Indiana malpractice claims filed with the Indiana Department of Insurance from 1975 through 1988. Collected data falls in three categories: Claims, claimants, and defendants. Data on claims includes: (1) Filing date; (2) date of final disposition; (3) allegations of negligence; (4) medical review panel decision, if any; (5) results of court proceedings, if any; (6) amount of award, if any; and (7) nature of final disposition. On claimants, data includes: (1) Demographic characteristics of claimants, for example, age, sex, marital status, and residential county and zip code; (2) claimant’s medical condition giving rise to the malpractice, including initial diagnosis and any misdiagnosis, if any; (3) any operations or procedures performed on the claimant; (4) injuries sustained during the incident of alleged malpractice, including initial injury and ultimate injury; and (5) severity of injury. On physician defendants, data elements include: (1) Date of licensure; (2) medical education; (3) location of practice; (4) self-reported specialty; (5) nature of medical practice; and (5) board certification. For hospital defendants, data includes: (1) Bed size; (2) type of corporate control; (3) teaching status; (4) geographic location; and (5) case mix.

For claimant characteristics and damage awards, this study used the data collection instrument developed by the General Accounting Office for its study of claims closed in 1984.\(^\text{180}\) Whenever possible, information on diagnosis, procedures performed, and injuries came directly from the patient’s hospital chart for the treatment episode within which the alleged malpractice occurred. A registered medical records administrator has coded data on diagnoses, injuries, procedures, and operations using the ICD-9-CM disease classification system.\(^\text{181}\)

For allegations of negligence, this study used the classification categories developed by the Risk Management Foundation (RMF) of the Harvard Medical Institutions.\(^\text{182}\) The RMF protocols provide for seventy-seven individual allegations of negligence, which may be grouped into twelve larger categories: (1) Diagnosis, (2) anesthesia, (3) surgery, (4) medication, (5) medication administration, (6) intravenous procedures, (7) obstetrics, (8) treatment, (9) patient monitoring, (10) biomedical

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equipment, (11) blood products, and (12) other allegations not elsewhere classified.

Severity of injury was classified according to the nine-level system developed by the National Association of Insurance Commissioners.\textsuperscript{183} Categories included: (1) Emotional only (for example, fright); (2) insignificant (for example, lacerations, contusions, rash); (3) minor temporary disability (for example, infections, improperly set fracture leading to delayed recovery); (4) major temporary disability (for example, burns, surgical material left in patient, recovery delayed); (5) minor permanent partial disability (for example, loss of fingers); (6) major permanent partial disability (for example, deafness, loss of limb, loss of one kidney); (7) major permanent total disability (for example, paraplegia, brain damage); (8) grave permanent total disability (for example, quadriplegia, severe brain damage); and (9) death.

\textsuperscript{183} Nat’l Ass’n of Ins. Comm’r, Medical Malpractice Closed Claims, 1975-1978, at 8 (1980).