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Issues surrounding medical malpractice liability are being vigorously debated at federal and state levels, and MICRA—the Medical Injury Compensation Reform Act passed by California in 1975—has been held out as a possible model for changes in medical liability rules and procedures. MICRA instituted a cap of $250,000 on any award for non-economic damages, such as pain or suffering, and it also imposed limits on plaintiffs’ attorney fees.

This monograph presents the results of an empirical study of the effects of MICRA on plaintiffs’ recoveries and on the liabilities of defendants in medical malpractice cases. It addresses a number of questions: How have MICRA’s caps on non-economic damages affected the final judgments in California jury trials? What types of cases and claims are most likely to have an award cap imposed following trial? What have been the effects of MICRA on plaintiffs’ attorney fees? What have been the effects of MICRA on plaintiffs’ net recoveries (the final judgments minus estimated fees)? If the MICRA cap had been adjusted for inflation, what would have been the effect on the final awards in the trials we examined? This monograph should be of particular interest to policymakers considering changes to the existing rules controlling medical malpractice litigation and compensation and to a wider audience outside the policymaking community.
Peer review is an integral part of all RAND research projects. Prior to publication, this document, as with all documents in the RAND monograph series, was subject to a quality assurance process to ensure that the research meets several standards, including the following: The problem is well formulated; the research approach is well designed and well executed; the data and assumptions are sound; the findings are useful and advance knowledge; the implications and recommendations follow logically from the findings and are explained thoroughly; the documentation is accurate, understandable, cogent, and temperate in tone; the research demonstrates understanding of related previous studies; and the research is relevant, objective, independent, and balanced. Peer review is conducted by research professionals who were not members of the project team.

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Concerns over the price and availability of medical malpractice insurance have sparked a vigorous national debate over proposed medical malpractice liability legislation. Proponents of changes in the existing rules and procedures governing medical malpractice liability argue that skyrocketing medical liability insurance premiums and withdrawals of insurers from the market are forcing some health care providers out of practice and deterring others from performing risky procedures or taking up certain medical specialties. Many such proponents claim that the root cause of these problems is the growing cost of resolving malpractice claims. This assumption forms the basis of proposals to change the laws that govern the medical malpractice dispute process, including proposals that call for placing limits on trial awards and attorney fees in malpractice cases.

A model for such limits has been the Medical Injury Compensation Reform Act (MICRA), a law enacted in California in 1975 to control soaring medical malpractice insurance premiums in the state and to ensure the continuing availability of malpractice insurance coverage. This complex legislation has two main provisions. First, it limits (or caps) to $250,000 the amount of non-economic damages a plaintiff can recover at a medical malpractice trial. Trial awards granted to compensate plaintiffs for their physical and financial injuries consist of economic damage awards for specific expenses that are incurred or likely to be incurred, such as medical treatment expenses and wage loss, and non-economic damage awards that address losses that are more difficult to quantify, such as pain or suffering, loss of consortium and companionship, emotional distress, and mental anguish. MICRA’s caps apply only to non-economic damages. Typically unaware of the MICRA limit, a jury can award whatever amount it believes is appropriate for non-economic losses, but following the verdict, the judge will reduce the award to $250,000 if necessary prior to entering the final judgment in the case. Second, MICRA limits the contingency fees of the

1 Loss of consortium claims allege that the injuries incurred by one member of a marital relationship have adversely affected the other spouse’s expectations of care, comfort, companionship, emotional support, or sexual intimacy.
2 The terms “damages” and “losses” are for the most part interchangeable. In this report, the word “damages” refers specifically to claimed losses.
plaintiffs’ attorneys according a sliding scale that allows attorneys to charge no more than 40 percent of the first $50,000 of any recovery, one-third of the next $50,000, 25 percent of the next $500,000, and 15 percent of the amount over $600,000. Together, the limits on trial awards and on contingency fees were intended to reduce the costs of resolving individual claims and to reduce the overall number of claims brought against health care providers in the first place. In turn, it was hoped that any savings resulting from these rule changes would be reflected in lower premium levels and a healthier insurance industry.

Critics of proposals that contain limits on awards and fees similar to those contained in MICRA claim that they result in inadequate compensation for the most severely injured individuals; that they shift the costs of liability from malpractice insurance companies to other types of insurers, benefit providers, or government agencies; that they are increasingly unfair over time as the cap’s size remains fixed at $250,000 in nominal terms despite inflation; and that they prevent many victims with legitimate claims from obtaining skilled legal representation. These critics of the proposals have suggested that the current problems in the malpractice insurance industry are due more to the cyclical nature of the insurance market and poor underwriting conditions and also question claims that the insurance industry is so weak that it needs this kind of specialized relief and that MICRA-like rule changes would translate into reduced premiums and greater availability of coverage.

As this debate heats up in Congress and in some state legislatures, it underscores that there is a clear need for empirical analysis of the issues that are involved. The most contentious issues revolve around MICRA’s imposition of a ceiling of $250,000 on non-economic damages in malpractice awards and its maximum limits on attorney fees, two features of the legislation that are the subjects of this research.

**Study Objectives**

This report presents the results of an empirical study of the effects of MICRA on plaintiffs’ recoveries, the fees plaintiffs’ attorneys receive, and the liabilities of defendants following trial. After examining data from 257 plaintiff verdicts in malpractice trials from 1995 to 1999, we sought to answer the following questions:

- How have MICRA’s caps on non-economic damages affected the final judgments in California jury trials?
- What types of cases and claims are most likely to have an award cap imposed following trial?
- What have been the effects of MICRA on plaintiffs’ attorney fees?
- What have been the effects of MICRA on plaintiffs’ net recoveries (the final judgments minus estimated fees)?
If the MICRA cap had been adjusted for inflation, what would have been the effect on the final awards in the trials we examined?

Research Approach

Our analysis is based on the outcomes of 257 medical malpractice trials (195 with non-fatal injury claims and 62 death claims) with jury verdicts granted in favor of the plaintiffs over a five-year period (1995 to 1999) in California state courts. The source for these data was the *California Jury Verdicts Weekly* (CJVW), a private publication used primarily by lawyers, insurance adjusters, and others who follow what juries are awarding for specific types of claims in the state. We abstracted extensive information from the case reports in the publication, including information on type of claim, litigant characteristics, and award amounts for economic damages, non-economic damages, and punitive damages.

Because the MICRA award cap is applied by the trial judge only after the jury’s decision has been delivered, we were able to use the jury verdict data to calculate the difference between what the jurors believed to be the proper amount of damages (as evidenced by their original awards) and what the plaintiffs were likely to have received as a result of MICRA.

Limitations and Caveats

The answers to our study questions should help to provide a clearer picture of MICRA’s effects on litigants in actual trials. But this study addresses only the impact of MICRA on jury awards, attorney fees, and plaintiffs’ recoveries arising from such trials. We are aware that MICRA influences the entire claiming and litigation process and that focusing on jury verdicts ignores MICRA’s effects on the much larger number of cases that were resolved before trial and on disputes and losses arising from health-care-related injuries that may never have been filed as formal actions. MICRA’s most important ramifications for both patients and health care professionals (and their insurers) may not be on trial awards but instead on the far greater number of matters that never went before a jury. But such cases and claims are outside the scope of this analysis. MICRA is likely to have changed the number and character of cases that reached the trial stage; however, our analysis focused solely on actual trials concluded during our study period.

We did not attempt to calculate the effects of MICRA on malpractice insurance premiums or on coverage availability. As a result, no conclusion can be drawn from the study as to whether MICRA achieved the California Legislature’s ultimate goal of maximizing the availability of health care services by holding down insurance pre-
mum levels. Nor does this study address other important issues such as MICRA’s effects on (1) the costs and quality of health care services; (2) specific medical practices, such as the extent of “defensive” medicine; (3) transaction costs of the malpractice liability system; (4) the frequency of what some observers have characterized as “frivolous” lawsuits; (5) shifts in costs to other types of insurance and benefit providers; (6) the size of pre-trial settlements; and (7) the ability of injured individuals to receive fair compensation through settlement or trial.

As described more fully in Appendix C, privately published jury verdict reporters such as CJVW do not capture all trials. We have no way of determining the extent of the gap in our data, but limited evidence suggests that it could be substantial. As a result, our results should be viewed as reflecting the experience of just a sample of all trials during the five-year period of the study (which would in turn impact our findings for aggregate verdict awards and for aggregate attorney fees calculated on the basis of those awards). Additionally, there is evidence that smaller-value awards are more likely to be underreported in these publications, which would also impact our findings on average award size.

**How Has MICRA Affected Jury Awards?**

About 22 percent of California medical malpractice trials during our study period resulted in a verdict in favor of one or more plaintiffs in each case (compared with 53 percent for all other types of trials). In those plaintiff verdicts, MICRA-triggered changes by judges to jury awards are a common occurrence. The cap on non-economic awards was imposed in 45 percent of the cases won by plaintiffs in our sample. Verdicts in death cases were capped more often (58 percent) than those in non-fatal injury trials (41 percent).

Awards in the original verdicts in our sample totaled $421 million, but with MICRA, the final judgments in those cases dropped to $295 million. In other words, MICRA reduced the overall liabilities of the defendants by 30 percent. In death cases, defendants’ liabilities were reduced by 51 percent, compared with a 25 percent reduction in non-fatal injury claims. When their awards are capped, plaintiffs typically lose many hundreds of thousands of dollars. The median reduction in non-economic awards was $366,000. Although some awards were reduced by only a few thousand dollars, the largest cut found in our sample during the five-year period (1995 to 1999) was nearly $9 million, a reduction representing 97 percent of the jury’s original non-economic damage award. Similar cases with multi-million-dollar

---

3 The “median” award is that value for which half of all values are above it (and half are below it). The “mean” award is the arithmetic average.
reductions are often cited as evidence that some plaintiffs are shouldering a dispro-
portionate share of MICRA’s impact.

What Types of Cases Are Most Affected by MICRA?

To identify the types of cases that realized the greatest changes in award size, we
looked at the data in a number of different ways. First, although we give aggregate
results for all cases, we also examined the difference in results for non-fatal injury
cases (which we refer to from here on as “injury cases”) and cases that resulted in
death, and we found some stark differences. Second, we estimated the effect of
MICRA on awards in terms of absolute size of reduction (in dollars) and also in
terms of the percentage reduction in the total award, by which we mean the eco-
nomic and non-economic damages combined. Injury cases with absolute reductions
of $2.5 million or more usually involved newborns and young children with very
critical injuries (such as permanent coma, quadriplegia, or severe retardation). But
such large dollar losses did not always translate into large percentage reductions in
total awards because these very young plaintiffs needed extensive medical care over
the rest of their lives and were often awarded economic damages of equal or greater
value than their non-economic awards. Even after MICRA reductions, the total
awards in most of these cases were still more than a million dollars. Arguably, the
injury cases most affected by MICRA were the ones in which the plaintiffs lost the
greatest percentage of the total award as a result of the cap on non-economic
damages.

Cases with the greatest percentage losses in total awards are those with small
economic losses but great damage to the plaintiff’s quality of life. These cases, with
economic awards of $100,000 or less (and sometimes as little as $1,200), had non-
economic awards of about a million dollars or more (suggesting that the jury believed
the plaintiff’s injuries resulted in extreme levels of pain, suffering, anguish, distress,
and the like), resulting in a drop of 67 percent or more in total award size. In one
instance, the final total award was reduced by 94 percent.

Cases involving claims of death have larger reductions than non-fatal injury
cases—in both absolute and relative terms. The median reduction in capped-death
cases was $459,000, compared with $286,000 for injury cases, and the median per-
centage reduction in total awards when the cap was imposed was 49 percent, com-
pared with 28 percent in injury cases. The reason for these deep percentage cuts in
total award size for death cases is that, on average, death cases receive relatively low
awards for economic damages compared with the awards originally granted by juries
for non-economic damages.
What Types of Injuries Experienced the Greatest Reductions in Awards?

Table S.1 describes the effects of MICRA by injury type along several dimensions: the percentage of capped cases, the median award reduction when the case is capped, and the percentage reduction in aggregate total awards (including cases above and below the cap). The table shows that plaintiffs with the most serious injuries, such as brain damage, a variety of catastrophic injuries, and paralysis, have their awards capped most frequently, and when they do, they incur median reductions of more than a million dollars. Dental cases, however, experience the highest percentage reduction in aggregate awards in all plaintiffs’ verdicts, even though they resembled many other injury cases in their frequency of being capped and median dollar reduction. Jury awards for these injuries are reduced by nearly half because of the cap. A few other types of non-catastrophic injuries, such as injury to a foot or ankle or claims of a loss of consortium, also experienced deep cuts in total awards aggregated across all cases.

Table S.1
Effects of MICRA by Various Injury Categories

<table>
<thead>
<tr>
<th>Injury Categorya</th>
<th>Percentage of Cases Capped (Among Plaintiff Wins)</th>
<th>Median Dollar Reduction in Capped Cases (1999$)</th>
<th>Percentage Change in Aggregate Total Awardsb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain damage (any degree) (n = 31)</td>
<td>65</td>
<td>$1,239,000</td>
<td>–23</td>
</tr>
<tr>
<td>“Catastrophic” loss (n = 30)c</td>
<td>63</td>
<td>$1,150,000</td>
<td>–23</td>
</tr>
<tr>
<td>Paralysis (any body part) (n = 16)</td>
<td>56</td>
<td>$1,699,000</td>
<td>–16</td>
</tr>
<tr>
<td>Loss of consortium (n = 39)</td>
<td>49</td>
<td>$212,000</td>
<td>–35</td>
</tr>
<tr>
<td>Any injury to an arm (n = 13)</td>
<td>46</td>
<td>$127,000</td>
<td>–30</td>
</tr>
<tr>
<td>Any injury to an eye or reduced vision (n = 11)</td>
<td>45</td>
<td>$498,000</td>
<td>–30</td>
</tr>
<tr>
<td>Dental injuries (n = 17)</td>
<td>41</td>
<td>$260,000</td>
<td>–47</td>
</tr>
<tr>
<td>Any injury to a leg or hip (n = 17)</td>
<td>41</td>
<td>$410,000</td>
<td>–21</td>
</tr>
<tr>
<td>Any injury to a foot or ankle (n = 11)</td>
<td>27</td>
<td>$328,000</td>
<td>–38</td>
</tr>
<tr>
<td>Emotional or psychological injury (n = 31)</td>
<td>26</td>
<td>$156,000</td>
<td>–13</td>
</tr>
<tr>
<td>Head or face injury (n = 12)</td>
<td>17</td>
<td>$183,000</td>
<td>–21</td>
</tr>
</tbody>
</table>

NOTE: Dollar amounts are rounded to the nearest thousand.
* These categories overlap (a plaintiff may be counted in more than one category) and reflect only those claimed injury types found in 5 percent or more of the injury cases in which plaintiffs won. Counts for each category correspond to the number of cases with plaintiff wins, whether or not they are capped.
** Includes cases both above and below the cap.
† Includes catastrophic losses as we have defined them include claims of burns over more than 50 percent of the body, quadriplegia, paraplegia, becoming infected with HIV or allowing AIDS to develop, severe brain damage, or blindness.
Among the injuries least affected by the cap are those that involve emotional or psychological injuries. Verdicts for the plaintiffs in such cases trigger the MICRA cap 26 percent of the time (compared with 41 percent for all injury cases), have one of the smallest median dollar reductions of any commonly claimed injury when the cap is triggered, and result in one of the smallest reductions in aggregate total awards for all cases with such claims (13 percent).

**Which Age Groups and Gender Are Most Affected by MICRA?**

Injured plaintiffs under one year of age\(^4\) had MICRA reductions imposed in 71 percent of their cases. The median reduction for this age group in capped cases was also very high: 1.5 million dollars, far more than the median for individual plaintiffs with injury claims ($268,000). But because their economic awards are also relatively large, cases involving infants have the smallest median percentage reductions in the total award when the cap is imposed: losses of 22 percent compared with losses of 32 percent for all individual plaintiffs with injury claims.

Plaintiffs 65 years of age and older also have a very high percentage of awards reduced by the cap (67 percent), but they have the smallest median dollar reduction of any age group because their awards for non-economic damages often fall relatively close to the $250,000 limit. Undoubtedly, the fact that different age groups are likely to experience different sorts of injuries may play a role in these distinctions.

Female plaintiffs typically have larger cuts to their total verdicts, with a median change of –34 percent compared with –25 percent for males. As with the differences between age groups, some of the differences between men and women in the frequency and impact of the cap’s imposition may be due to differences in the types of medical conditions for which they originally sought treatment.

**What Are MICRA’s Effects on Attorney Fees?**

In the absence of MICRA, the cases we examined would have generated an estimated $140 million in fees for the plaintiffs’ attorneys, assuming a contingency fee rate of one-third of the recovery and using the jury’s original verdict for calculating that fee. But with the effects of the award caps and sliding scale, attorney fees were reduced by 60 percent overall (59 percent for injury cases and 65 percent for death cases). Figure S.1 shows the impact of various assumptions on estimated fees. From top to bottom, the figure shows estimated total fees ($140 million) with no limits on the fees or awards), the effect of award caps without any limits on fees (a 30 percent decrease),

\(^4\)This group includes newborns and fetal injuries.
effects of fee limits without any caps on awards (a 46 percent decrease), and the effect of MICRA on fees with limits on both awards and fees, which yields aggregate fees of $56 million (a 60 percent decrease). These results suggest that MICRA has had a major impact on plaintiffs’ attorney fees in medical malpractice cases and that the sliding scale has a greater effect on those fees than has the damage cap.

What Are MICRA’s Effects on Plaintiffs’ Net Recoveries?

One justification for imposing limits on attorney fees was to help offset the impact of award reductions on plaintiffs. To gauge the size of this offset, we estimated plaintiffs’ net recoveries—i.e., the final judgments minus estimated fees—for all cases in our data. In the absence of MICRA, the plaintiffs in the cases we examined would have received estimated net recoveries of about $280 million, using the jury’s original verdict and assuming a contingency fee of one-third of the recovery. We found that net recoveries were reduced by 15 percent overall (9 percent in injury cases and 44 percent in death cases) as a result of MICRA’s limits of awards and fees.

Figure S.2 shows the impact of various assumptions on estimated net recoveries. Moving from top to bottom, the figure shows estimated net recovery in the aggregate without MICRA ($280 million), the effect of award caps but no fee limits on that

Figure S.1—Effects of Fee Scales and Award Caps on Aggregate Attorney Fees
amount (a 30 percent decrease), the effect of fee limits without award caps (a 23 percent increase), and the effect of both fee and award limits on the original amount ($240 million, a 15 percent decrease).

Such aggregate numbers, however, hide significant differences in the effects of MICRA on net recoveries in cases that were awarded different amounts for non-economic damages. Figure S.3 illustrates those differences. It shows that when combined with the award cap, the attorney fee limits work to the greatest advantage of those plaintiffs with relatively modest non-economic awards, but does not provide complete offset for those with the largest awards. Net recoveries for all cases with original jury awards for $250,000 or less in non-economic damages were increased by 19 percent, while those with non-economic damage awards over $1 million were reduced by 28 percent. The change in net recovery was greatest in high-value death cases, with a 64 percent drop in aggregate size despite the limits on fees.

### Adjusting the Cap for Inflation

With the cap remaining fixed in nominal terms at its 1975 levels, the real value of the maximum award for non-economic damages has been declining over the years. To explore this issue, we calculated how final judgments in our five-year sample of

![Figure S.2—Effects of Fee Scales and Award Caps on Aggregate Net Recoveries to Plaintiffs](image-url)
trials would have changed if the MICRA caps had been allowed to increase at the rate of inflation (or “indexed”) as part of the original legislative package. Based on the Consumer Price Index for urban consumers as the benchmark for annual increases, the cap would have been $708,000 in 1995, $729,000 in 1996, $746,000 in 1997, $757,000 in 1998, and $774,000 in 1999.

If the MICRA cap had been indexed for inflation since 1975, the savings to defendants in the five years’ worth of cases we examined would have been 21 percent of the amount originally awarded (compared with 30 percent under the fixed cap), assuming that the same number and types of trials would occur under these modified conditions. The tripling of the cap’s size for the study period would have resulted in a 13 percent increase in defendant liabilities for the trials found in our data. The proportion of verdicts over the cap in the five-year period of the study would decrease by more than half, from 45 percent to 19 percent. However, it is possible that additional cases would have been filed and more trials would have taken place with the higher limits, increasing defendant expenditures.
Conclusions and Implications

MICRA does appear to have had the California Legislature’s intended initial result of limiting defendants’ expenditures. Whether such savings have translated into reduced premiums and greater availability of coverage—which were the California Legislature’s ultimate goals—is beyond the scope of this analysis.

Although the study did not assess the adequacy of compensation for plaintiffs, it did identify the types of cases and plaintiffs that lose the most as a result of MICRA:

- Plaintiffs with the severest injuries (brain damage, paralysis, or a variety of catastrophic losses) had their non-economic damage awards capped far more often than all plaintiffs with injury claims and had median reductions of more than one million dollars (compared with a median reduction of $286,000 for all injury cases).
- Plaintiffs who lost the highest percentage of their total awards were often those with injuries that led to relatively modest economic damage awards (about $100,000 or less) but that caused a great loss to their quality of life (as suggested by juries’ million-dollar-plus awards for pain, suffering, anguish, distress, and the like). These plaintiffs sometimes received final judgments that were cut by two-thirds or more from the jury’s original decision.
- Death cases are capped more frequently than injury cases (58 percent versus 41 percent), and when they are capped, death cases have much higher percentage reductions in total awards than injury cases, with a median drop of 49 percent versus a 28 percent drop for injury cases.

The study results also suggest that MICRA has resulted in a sea change in the economics of the malpractice plaintiffs’ bar. Because of the law’s combination of award caps and limits on maximum contingency percentages, attorneys lost 60 percent of the fees they would have made from these plaintiff victories without MICRA. The analysis suggests that the savings to defendants and their insurers are funded by both plaintiffs and their attorneys. Because the fee limits help offset award reductions (aggregate net recoveries for plaintiffs are 15 percent less than they would have been without MICRA even though defendants are realizing a 30 percent drop in aggregate liabilities), the legislation’s provisions regarding awards and fees could be characterized as shifting some of the costs for compensating medical malpractice from defendants to not only plaintiffs but also to plaintiffs’ counsel.5

5 To put it another way, defendants would have paid out $420.6 million without MICRA but with the award cap, aggregate liabilities were $295.5 million, a $125.1 million savings. Without MICRA, we estimate that plaintiffs would have received $280.4 million in net recoveries after fees were deducted but with the award cap and the fee limits, aggregate net recoveries were $239.5 million, a $40.9 million drop. The difference between the defen-
The effect of this financial shift on attorney practices is unclear. Has MICRA discouraged attorneys from practicing in this field? Has MICRA changed the way claims are litigated and settlements are negotiated? Has MICRA made it more difficult for plaintiffs in malpractice cases to find attorneys who will represent them? These are all important questions raised by this analysis. Steeply reduced fees, combined with the relatively low rate of plaintiff victories in California medical malpractice cases and the high costs of expert medical witnesses—which are almost always borne by the attorney if there is no recovery—suggest that attorneys in California are likely to be much more selective in evaluating new malpractice clients than they would be in the absence of MICRA.

The study suggests that the research that is required to fully inform the policy discussion would include an analysis of the following:

- the effects of MICRA on a patient’s access to attorney representation
- the comparative effects of MICRA on different demographic groups and between patients with various types of losses arising from malpractice incidents (e.g., those with low out-of-pocket expenses versus those with more substantial economic losses)
- the effects of MICRA’s trial award limits on the size of settlement offers
- the effects of MICRA’s impact on award and settlement size on other types of benefit providers, such as government programs or disability insurers
- the effects of current and proposed liability rules on medical errors and the quality of care
- the effects of current and proposed liability rules on access to medical care
- the effects of various liability regimes on health care costs
- the impact of any savings to defendants occasioned by MICRA upon medical malpractice insurance premium levels and the availability of coverage.

dants’ savings and the reduction in plaintiffs’ net recoveries, approximately $84 million, would come in the form of reduced attorneys fees.
Acknowledgments

We would like to acknowledge the excellent long-term relationship that ICJ has enjoyed with some of the most respected private jury-verdict reporting services across the country: *California Jury Verdicts Weekly* (San Diego), *Cook County Jury Verdict Reporter* (Chicago), *Jury Verdict Reporting Service* (St. Louis), *Jury Verdicts Northwest* (Seattle), *New York Jury Verdict Reporter* (East Islip), and *Texas Blue Sheet* (Houston). Without their generous permission to use the information that they gather and publish, this work would not have been possible.

For nearly two decades, the Institute for Civil Justice has had the benefit of the enthusiasm and skills of both upper-level law students from Southern California law schools and recent bar admittees to help us develop our jury verdicts database. The most recent effort to read and code 17,000 reports of jury verdicts reached in 1995 through 1999 in California, New York, and a number of other jurisdictions in the country was led by Janine Chu and Sharona Ghodsian. Other coders included Michael Rousseau, Ted Gipstein, Mary Masi, Lisa Anderson, Michael Levine, Erin Haggerty, Susan Jensen, William Colitre, Padraic McCoy, and Yaron Tilles. Donald Solosan of the RAND Survey Research Group coordinated the considerable administrative aspects of the coding effort.

Steven Garber and David Studdert provided helpful criticisms and contributions in their formal review of this report. We value their suggestions and hope that we have responded appropriately.

Joanna Nelsen of ICJ and Christopher Dirks of RAND are to be thanked for their tireless and valuable administrative work on this document. Nancy DelFavero did her usual outstanding job of editing.

We are also grateful for the input of various members of the ICJ Board of Overseers who took the time to review early drafts of this report. Their comments gave the authors an invaluable education and grounded the end result in reality. Any errors in methodology, data collection, or conclusions are, of course, solely the responsibility of the report’s authors.
CHAPTER ONE

Introduction

Over the past few years, growing concerns about the availability and costs of medical malpractice insurance have sparked a vigorous national debate over how personal injury claims arising from health care treatment are litigated and resolved. Proponents of changes to existing rules and procedures have argued that doctors, hospitals, and other health care providers are facing skyrocketing medical liability insurance premiums in many states and in some instances are unable to obtain malpractice coverage at all.¹ They also claim that doctors are retiring from practice out of frustration with the high costs of insurance or moving their practices to states that have revamped their medical liability rules or where insurance is more affordable.²

Asserting that an increase in both the frequency of medical malpractice claims and the size of the average payout has been at the root of the current situation, some observers have called for sweeping changes in the laws controlling how disputes over health-care-related injuries are resolved.³ In response, the U.S. Congress in recent years has deliberated over various proposals that would impose new rules on all states that have not already adopted restrictions on malpractice litigation.³

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³ One example of a reform package that Congress has considered is House Bill 5 (H.R. 5), passed by the U.S. House of Representatives on March 13, 2003, although not under consideration by the U.S. Senate as of this writing. While H.R. 5 is clearly modeled on the Medical Injury Compensation Reform Act of 1975 (MICRA), the subject of this study, there are a number of significant differences between the two. For example, the proposed legislation would limit punitive damages to instances in which the defendant acted with malicious intent to injure or deliberately failed to avoid unnecessary injury and would cap such damages to the greater of $250,000 or twice the economic damage award (MICRA is silent as to punitive damages). Another departure from MICRA is that H.R. 5 clearly applies its restrictions to actions against health care organizations and medical product manufacturers. H.R. 5 also appears to place a single cap for all plaintiffs on non-economic damages arising out of a single event, whereas MICRA (as interpreted by the California courts) places separate caps on the claims of the person directly injured and the claims of his or her spouse. H.R. 5 would eliminate joint liability for both economic and non-economic losses, whereas MICRA is silent on this issue (California Civil Code §1431.2, which does eliminate joint liability for non-economic damages only, became effective on June 4, 1986). Finally, H.R. 5 contains a clear prohibition on informing the jury of the potential imposition of the award cap, whereas no such restriction is found in the MICRA statutes.
A model for these efforts has been a California law known as MICRA, the Medical Injury Compensation Reform Act of 1975. This complex legislation has two key features: It limits to $250,000 the amount a plaintiff can recover for non-economic damages (such as pain or suffering, emotional distress, mental anguish, and loss of consortium) and it limits plaintiffs’ attorney fees in malpractice cases according to a sliding scale based on the size of the recovery, with the contingency fee percentage decreasing as the plaintiff’s recovery increases.

The framers of MICRA hoped that the law’s provisions would result in lower premium levels and a healthier insurance industry. Proponents of similar changes to liability rules today claim that MICRA has done just that: They believe that MICRA is the primary reason that medical malpractice insurance is relatively affordable and available in California.

Critics of proposed changes to liability rules with features similar to those found in MICRA claim that such changes would result in inadequate compensation for the most severely injured; that they would shift the costs of liability from malpractice insurance companies to other types of insurers, benefit providers, or government agencies; that they would become increasingly unfair over time because the size of any award caps would remain fixed in nominal terms despite inflation; and that they would prevent many victims with legitimate claims from obtaining skilled legal representation. Suggesting that the current problems in the malpractice insurance industry are due more to the cyclical nature of the insurance market and poor underwriting conditions, critics of the proposed changes also question claims that the insurance industry is so weak that it needs this kind of specialized relief and asserts that MICRA-like rule changes would translate into reduced premiums and greater availability of coverage.

As this debate heats up in Congress and in some state legislatures, it underscores that there is a clear need for empirical analysis of the issues that are involved. The

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5 The terms “damages” and “losses” are for the most part interchangeable. In this report, the word “damages” refers specifically to claimed losses.
6 Loss of consortium refers to the loss of a spouse’s care, comfort, companionship, emotional support, and sexual intimacy.
7 See, e.g., Office of the Assistant Secretary for Planning and Evaluation, 2002. President George Bush, for example, asserted that MICRA has worked to lower insurance premiums: “Anybody who goes into court and wins their case ought to get full economic damages. At the same time, we must prevent excessive awards that drive up costs, encourage frivolous lawsuits, and promote drawn-out legal proceedings. And that is why we need a reasonable federal limit on non-economic damages awarded in medical liability lawsuits, and the reasonable limit in my judgment ought to be $250,000. . . . In California, when they had a problem with their medical malpractice insurance premiums, they put a law in place, and it worked. . . .” [emphasis added](Bush, 2002).
9 See, e.g., Williams, 2003; Rosenfield, 2003; and Weiss, Gannon, and Eakins, 2003, p. 3.
most contentious issues revolve around MICRA’s imposition of a ceiling of $250,000 on non-economic damages in malpractice awards and its maximum limits on attorney fees, two features of the legislation that are the subjects of this research.

Study Objectives and Approach

This study examined how MICRA’s caps on damage awards and its limits on contingency percentages have affected the plaintiffs’ recoveries, the fees plaintiffs’ attorneys receive, and the liabilities of defendants following a verdict at trial. Specifically, it addresses the following questions:

• How have MICRA’s caps on non-economic damages affected the final judgments in California jury trials?
• What types of cases and claims are most likely to have an award cap imposed following trial?
• What have been the effects of MICRA on plaintiffs’ attorney fees?
• What have been the effects of MICRA on plaintiffs’ net recoveries (the final judgments minus estimated fees)?
• If the MICRA cap had been adjusted for inflation, what would have been the effect on the final awards in the trials we examined?

We analyzed the outcomes of 257 medical malpractice trials (195 plaintiffs with non-fatal injury claims and 62 with death claims) with jury verdicts granted in favor of the plaintiffs over a five-year period (1995 to 1999) in California state courts. The source for these data was the California Jury Verdicts Weekly (CJVW), a private publication that provides extensive information about recent jury decisions across the state.

Because the MICRA award cap is applied by the trial judge only after the jury’s decision has been delivered, we were able to use the jury verdict data to calculate the difference between what the jurors believed was the proper amount of damages (as evidenced by their original awards) and what the plaintiffs were likely to have received as a result of MICRA. A more detailed description of our methodology and data is provided in Chapter Two and Appendix C.

Issues Not Addressed in This Report

While this analysis provides important information about how MICRA operates in actual trials, it is important to clarify what the study does not do. Focusing on jury verdicts ignores MICRA’s effects on the much larger number of cases that were re-
solved prior to trial and on disputes and losses from health-care-related injuries that
never reached the filing stage. MICRA’s most important ramifications for both pa-
tients and health care professionals (and their insurers) may not be on trial awards
but instead on the far greater number of matters that never went before a jury. But
such cases and claims are outside the scope of this analysis. MICRA is likely to have
changed the number and character of cases that reached the trial stage; however, our
analysis focused solely on actual trials concluded during our study period.

There is also a good deal of interest in the relationship between award caps and
malpractice insurance premium levels and the availability of coverage, but we were
not able to include an analysis of that relationship in this study. Such an analysis
would have required analyzing insurance cycles, assessing the impact of other changes
in the liability and insurance system since MICRA was implemented, comparing
California with other states that have not radically changed their medical liability
laws, determining the underlying frequency and severity of medical errors and the
injuries that result from them, investigating the rates of informal claiming and filing
cases, and exploring other issues.\textsuperscript{10} As a result, no conclusion can be drawn from the
study as to whether MICRA achieved the California Legislature’s ultimate goal of
maximizing the availability of health care services by holding down insurance pre-
mium levels.

Nor does this study address other important questions, such as MICRA’s effects
on (1) the costs and quality of health care services; (2) specific medical practices, such
as the extent of “defensive” medicine; (3) transaction costs of the malpractice liability
system; (4) the frequency of what some observers have characterized as “frivolous"
lawsuits; (5) shifts in costs to other types of insurance and benefits providers; (6) the
size of pre-trial settlements; and (7) the ability of injured individuals to receive fair
compensation through settlement or trial.

Nevertheless, we believe an analysis that focuses on jury awards can shed light
on how important—albeit selected—aspects of MICRA’s features operate in practice
and contribute to the ongoing policy debate over medical malpractice litigation.

**Origins and Purpose of MICRA**

What many states are experiencing now mirrors what California faced in the mid-
1970s, when a major medical malpractice insurer announced that it would no longer
write group insurance in the state while other insurers implemented dramatic rate

\footnotesize{\textsuperscript{10} For an example of the type of complex analysis needed for exploring the linkage between liability laws and
medical malpractice insurance premiums, see U.S. General Accounting Office, 2003a.}
increases.\textsuperscript{11} And like physicians in states such as New Jersey,\textsuperscript{12} West Virginia,\textsuperscript{13} and Nevada\textsuperscript{14} in 2002 and 2003, California doctors in 1975 went on strike to protest what they felt was an unfair and unjust situation that was squeezing them out of their practices.\textsuperscript{15}

California legislators at the time voiced their concerns that if the crisis were allowed to continue, a collapse of the medical liability insurance system would limit the availability of health care and also result in a situation in which those who were injured by medical negligence would be unable to recover adequate compensation from uninsured doctors. As the preamble to MICRA states:

\begin{quote}
The Legislature finds and declares that there is a major health care crisis in the State of California attributable to skyrocketing malpractice premium costs and resulting in a potential breakdown of the health delivery system, severe hardships for the medically indigent, a denial of access for the economically marginal, and depletion of physicians such as to substantially worsen the quality of health care available to citizens of this state.\textsuperscript{16}
\end{quote}

The legislature reacted to the situation by passing MICRA. The ultimate legislative goal of MICRA, repeatedly reiterated by the California Supreme Court, was to maximize the availability of health care services by holding down premium levels and thereby reducing the cost of malpractice insurance.\textsuperscript{17} As the Court stated in a 1984 decision:

\begin{quote}
As we have frequently recounted, the Legislature enacted MICRA in response to a medical malpractice insurance “crisis,” which it perceived threatened the quality of the state’s health care. . . . The continuing availability of adequate medical care depends directly on the availability of adequate insurance coverage, which in turn operates as a function of costs associated with medical malpractice litigation. . . .
\end{quote}

\textsuperscript{11} Although per-doctor malpractice insurance premiums in California had already been rising 14 percent per year between 1960 and 1974, they took a sharp upward turn in the mid-1970s. Rate hikes of 300 percent and more were put into effect in 1975 by Argonaut Insurance and Travelers Insurance, two of the state’s largest insurers (Lipson, 1976, p. 1). Argonaut also announced in January 1975 that it would no longer extend group coverage to Northern California doctors, although it would offer more expensive individual policies that were sometimes as much as four times the group rate. Fosburgh, 1975a, p. A1.


\textsuperscript{13} Miller, 2003, p. A1.

\textsuperscript{14} “Shuttered Las Vegas Trauma Center . . . .,” 2002, p. A20.

\textsuperscript{15} Triggered by Argonaut Insurance’s cessation of group coverage to Northern California doctors, nearly half of the doctors in that part of the state failed to show up for work beginning May 1. By the end of the month, the work stoppage had spread to Southern California hospitals as well. Fosburgh, 1975a, p. A1; Fosburgh, 1975b, p. A56.


\textsuperscript{17} See, e.g., \textit{Perry v. Shaw}, 106 Cal. Rptr. 2d 70 at 76 (Cal. App. 2nd Dist., 2001).
Accordingly, MICRA includes a variety of provisions all of which are calculated to reduce the cost of insurance by limiting the amount and timing of recovery in cases of professional negligence. . . . MICRA thus reflects a strong public policy to contain the costs of malpractice insurance by controlling or redistributing liability for damages, thereby maximizing the availability of medical services to meet the state’s health care needs.18

MICRA left unchanged both the core elements for establishing liability and the burden of proof that is placed on a plaintiff. In theory, identical plaintiffs bringing a case to trial before and after MICRA would have the same chance of winning. MICRA also did not attempt to directly influence the size of medical malpractice insurance premiums or mandate the availability of coverage. Instead, its primary strategy was to reduce the exposure of defendants (directly) by limiting trial awards and (indirectly) by influencing the size of settlements and by reducing the number of new cases filed against health care providers.

How MICRA Works

This section provides information on the types of damage awards, as well as recovery caps and limits on attorney fees under MICRA. For a summary of MICRA provisions other than those related to the cap on awards and the limits on fees, see Appendix A. For a description of how malpractice litigation in California compares with other civil litigation in terms of frequency, plaintiff win rates, and award amounts, see Appendix B.

Types of Damage Awards

When juries find for plaintiffs on the question of liability and grant them some amount of money—what we will call a plaintiff “win”—the monetary verdicts take the form of compensatory damage awards and, on occasion, punitive damage awards. Compensatory damage awards are designed to help the plaintiff recover any losses suffered as a consequence of the defendant’s actions. The purpose of compensatory awards is often characterized as an attempt to return plaintiffs to the condition they occupied before they were injured. The awards represent, to the maximum degree possible, the financial equivalent of the losses and the harms incurred in the past or reasonably certain to be incurred in the future by the plaintiff. This compensation is typically divided into separate awards for economic damages and non-economic damages.

Table 1.1 breaks out the types of damage compensation. Economic damages awards (sometimes called special damage awards or pecuniary loss awards) are for spe-
cific costs already incurred or likely to be incurred by the plaintiffs, such as medical care expenses or past wage loss or estimated impairment to one’s future earning capacity. An award for economic damages usually has some quantifiable basis. Non-economic damage awards (sometimes called general damage awards, non-pecuniary loss awards, discretionary damage awards, or indeterminate damage awards) encompass losses that are harder to quantify in dollar terms, such as pain, suffering, humiliation, and the like. Translating these losses into their monetary equivalent is a subjective process that is left up to the jury after considering the evidence and the arguments of counsel for both sides.\footnote{The jury instruction used in California for non-economic damages typically contains language similar to the following: “No definite standard or method of calculation is prescribed by law by which to fix reasonable compensation for pain and suffering. Nor is the opinion of any witness required as to the amount of such reasonable compensation. In making an award for pain and suffering you shall exercise your authority with calm and reasonable judgment, and the damages you fix shall be just and reasonable in light of the evidence.” See, e.g., \textit{California Jury Instructions—Civil} (BAJI [Book of Approved Jury Instructions]), 1994. Nevertheless, so called “per diem” arguments in which an attorney suggests that a certain amount of money per unit of time be awarded for non-economic damages (for example, one dollar per hour for the rest of the plaintiff’s life) are allowed as are total dollar-figure requests. \textit{Beagle v. Vasold}, 53 Cal. Rptr. 129 (Cal. Sup. Ct., 1966).} However, the trial judge—and ultimately the appellate courts—can reduce or void the non-economic damage award if they believe it to be excessive.\footnote{The power to override the jury’s decision also exists in the context of economic damage awards. Also, trial judges, if they believe any award component is inadequate, have the ability to order a new trial unless the defendant agrees to an increase in the size of a judgment.} Non-economic awards are the sole focus of MICRA’s limits on trial awards.

The second broad type of monetary awards, granted under only limited circumstances, are punitive damages. Unlike compensatory damages, punitive damages are not intended to cure the plaintiff’s harm but rather to punish the defendant and send a signal that similar behavior by others is unacceptable.

\begin{table}[h]
\centering
\caption{Types of Damage Awards}
\begin{tabular}{l|l}
\hline
Economic damages & Compensate for past or future economic losses such as wage loss, costs of medical care and vocational rehabilitation, property damage, loss of profits, replacement services, attendant care, and other such losses \\

Compensatory damages & Compensate for past or future non-economic losses such as pain, suffering, emotional distress, mental anguish, disfigurement, physical impairment, loss of consortium, loss of companionship, loss of parental guidance, loss of enjoyment of life, loss of society, humiliation, embarrassment, inconvenience, injury to reputation, and other such losses \\

Non-economic damages & Punish and/or deter similar behavior by the defendant or others \\
\hline
\end{tabular}
\end{table}
MICRA’s Damage Caps
MICRA limits to $250,000 the amount a plaintiff can recover at trial for non-economic losses due to medical negligence. The cap has remained fixed in nominal terms at $250,000 since 1975. Like other aspects of MICRA, the award cap applies to virtually any claim against licensed health care providers for negligent acts or omissions in the rendering of their services. This includes claims against doctors and nurses, of course, but also claims against hospitals, chiropractors, psychotherapists, blood banks, sperm banks, emergency medical technicians, dentists, and just about any other licensed health care professional in a dispute. The limit is applied no matter how serious the injuries claimed by the plaintiff, including those that result in the death of a patient.

Any reduction of the award for non-economic damages that is needed to conform to the MICRA caps comes after the jury has rendered its decision. The jurors can award whatever amount they believe is appropriate for non-economic losses, but upon a post-verdict motion by the defendant, the judge will reduce the award to comply with MICRA’s limits before entering the final judgment in the case.

MICRA’s Sliding Scale for Attorney Fees
Placing limits on attorney fees may not seem to fit into MICRA’s strategy of lowering costs to defendants and their insurers as a means of reducing malpractice insurance premiums and improving availability of health care services. After all, such fees are paid not by the defendant but by the plaintiff in a transaction that conceivably is of no concern to the defense.

In reality, reduced contingency fees decrease the likelihood that a potential plaintiff will be able to obtain legal representation and, as such, decrease the overall exposure of potential defendants. As with any type of civil litigation in which contingency-fee agreements are extensively used, plaintiffs’ attorneys in medical malpractice litigation must perceive that the expected revenues from representing a client exceed the costs the attorney is likely to incur in litigation, given the risk that there may not be any recovery whatsoever. Legislatively imposed restrictions on contingency fees loom large in this calculus. As potential fees decrease, at some point it is no longer economically viable to represent some previously acceptable clients when the expected costs outweigh the expected payoff. Conceivably, those patients who are unable to retain counsel could proceed on their own. But the likelihood of a pro se claimant (one without attorney representation) obtaining full compensation in a serious medical malpractice case with complex issues of liability and damages is quite small. If maximum contingency fees are reduced enough, the number of successful

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21 In contrast, health maintenance organizations do not receive MICRA’s protections. Under California Civil Code §3428, “Health care service plans and managed care entities are not health care providers under any provision of law” and, as such, would not be within MICRA’s scope.
cases—and indeed the number of formally filed cases—will drop off from the numbers that might be seen without such limits.

Reducing the number of claims has been suggested as one of the intents behind MICRA’s limits on medical malpractice contingency fees. In attempting to understand why the California Legislature chose to regulate fees as part of a medical liability reform package that was designed to reduce insurer expenditures, the California Supreme Court suggested that such restrictions might result in plaintiffs agreeing to accept smaller settlement offers, reducing the incentives to pursue “marginal claims” and providing greater net recoveries to plaintiffs to take some of the sting out of award caps.

MICRA’s sliding scale for attorney fees, as amended in 1987, is shown in Table 1.2. This fee scale applies to any medical malpractice recovery, whether it is achieved through a trial, a settlement, or arbitration. Moreover, in the case of trials, it is the final judgment, after any MICRA-triggered reduction to the original jury award, which forms the basis for the fee.

The maximum contingency fee allowable under MICRA depends on the size of the recovery, and different percentages are used for different portions of the recovery. For example, attorney fees for a final judgment of $220,000 would be calculated as 40 percent of the first $50,000, one-third of the next $50,000, and 25 percent of the remaining $120,000, for a total of $66,666.67.

<table>
<thead>
<tr>
<th>Recovery</th>
<th>Maximum Fee Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>First $50,000</td>
<td>40%</td>
</tr>
<tr>
<td>Next $50,000</td>
<td>1/3</td>
</tr>
<tr>
<td>Next $500,000</td>
<td>25%</td>
</tr>
<tr>
<td>Amounts over $600,000</td>
<td>15%</td>
</tr>
</tbody>
</table>

**Table 1.2**

MICRA’s Sliding Scale for Attorney Fees

**Organization of This Report**

Chapter Two describes how we conducted the analysis. Chapter Three provides the results of our analysis of the effects of MICRA on awards. Chapter Four places the award limits within the context of another important feature of MICRA: its restrictions on what an attorney may charge for representing plaintiffs at trial. Chapter Five

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explores the effects of MICRA on defendants and plaintiffs if the award limit had been adjusted for inflation in the original legislation. Chapter Six summarizes our key findings and describes their implications.
CHAPTER TWO
Methodology

In this chapter, we present information on our study methodology, including a discussion of our data sources, our method for calculating the size of post-jury-verdict award reductions to conform with MICRA caps, some limitations in our approach, and information on the cases we used in our analysis.

Data Sources

To answer our research questions (see Chapter One), we used data from the Institute for Civil Justice (ICJ) Jury Verdicts Coding Project. The ICJ’s data collection efforts in this area have tracked verdicts in selected jurisdictions dating back to 1959. The sources for this database are “jury verdict reporters,” which are private publications that record verdicts within a particular jurisdiction and provide detailed information about case and party characteristics and trial outcomes. These reporters are used primarily by lawyers, insurance adjusters, and others who follow what juries are awarding for specific types of claims. We abstracted extensive information from the case reports in these publications, including the type of claim, nature of the injuries, litigant characteristics, and award amounts for economic damages, non-economic damages, and punitive damages.

For this study we selected malpractice cases that were coded using reports found in the California Jury Verdicts Weekly, a publication that has covered jury trials in the state of California for more than four decades. CJVW relies primarily on self-reported descriptions of recent trials submitted voluntarily by participating attorneys. It also employs “stringers” in the more populous counties in the state to review local court dockets and identify new verdicts. A case description questionnaire is then sent to the attorneys on both sides if none had been submitted already. Once responses have been received and edited, a draft write-up is returned to the attorneys for their review before publication.

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1 See, e.g., Seabury, Pace, and Reville, 2004; Moller, Pace, and Carroll, 1997; Moller, 1996; Peterson, 1987; Chin and Peterson, 1985; and Shanley and Peterson, 1983.
Calculating Award Reductions

We focused on verdicts reached from 1995 through 1999; and used only those state court cases in which there was at least the possibility that the jury would have to determine a monetary damage award. The awards reported in CJVW do not reflect any post-verdict adjustments by the trial judge, but we calculated the (almost-certain) reductions according to MICRA’s clear and explicit rules.

We estimated the size of the judge-ordered MICRA reduction by assuming that in every instance in which an award for non-economic damages exceeded $250,000, the defendant would move to have the jury’s verdict amended to reduce that component of the award to the MICRA maximum and the judge would so agree. The example provided in Table 2.1 illustrates an example of what might have happened following an original jury award. Following the post-verdict amendment by the judge, the $600,000 economic damages award would remain unchanged, but the non-economic damages award would have been reduced from $1 million to $250,000. Thus, this $1.6 million verdict would have been cut by almost half to a final judgment of $850,000. (We use the term “verdict” to refer to the jury’s original decision and the term “judgment” to refer to the final results of the trial that are officially entered or ordered by the judge.)

We performed an analogous calculation on every California medical malpractice verdict in our database. By comparing the jury’s original verdict with the likely post-verdict judgment, we were able to gauge the impact that MICRA had on plaintiffs’ recoveries in these cases.

Table 2.1
Example of How MICRA Changes a Jury’s Award

<table>
<thead>
<tr>
<th>Type of Award</th>
<th>Original Jury Award</th>
<th>Final Judgment After Cap Is Imposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic damages</td>
<td>$600,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>Non-economic damages</td>
<td>$1,000,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Total</td>
<td>$1,600,000</td>
<td>$850,000</td>
</tr>
</tbody>
</table>

2 1999 is the latest year of verdicts currently included as part of the RAND-ICJ Jury Verdicts Coding Project. Data prior to 1995 were not used for this analysis because earlier phases of the coding effort did not collect enough information about each case to identify when issues other than medical malpractice were involved.

3 To put it another way, we excluded any trial in which the jury’s only task was to determine the liability of the defendant. Bifurcated trials (in which the jury is solely concerned with questions of liability in an initial phase, and if the jury rules in favor of the plaintiffs, a second phase is conducted in which the issue of damages is decided) were included even though we would have had information on only the liability phase if the jury initially found for the defendants.
Limitations in Our Approach

Although we believe that using jury verdict reporter data for estimating MICRA’s effects on plaintiff recoveries is useful and appropriate, we also recognize some limitations in our source material and in our approach, the most important of which are described in this section. For a fuller discussion of these limitations and other methodological challenges, see Appendix C.

Gaps in Data

The voluntary reporting system used by our sources does not capture all jury trials. We have no way of determining the extent of the gap in our data, but limited evidence suggests that it could be substantial. As a result, our results should be viewed as reflecting the experience of just a sample of all trials during the five-year period under study (which would in turn impact our findings for aggregate verdict awards as well as aggregate attorney fees calculated on the basis of those awards). Additionally, there is evidence that smaller-value awards are more likely to be underreported in these publications, which would impact our findings on mean and median award amounts.4

Possible Juror Knowledge of Caps

It is possible that in some of the trials in our data, jurors were aware of the MICRA limits and took them into account during their determination of award size. Trial judges in California do have the discretion of directly informing the jury of the cap through jury instructions or allowing such information into the trial via the arguments of counsel. It is also possible that some jurors knew about the caps from media reports or other sources and informed the other members of the jury during deliberations. It is not clear whether jurors, when armed with such knowledge, would be more likely to “self-limit” their original awards to just $250,000 for non-economic damages or to inflate their awards beyond what they might have granted to make a public statement about their feelings. In the former case, we would be understating the aggregate size of MICRA-triggered reductions; in the latter case, we would be overstating the effect.5

4 The “mean” award is the arithmetic average. The “median” award is that value for which half of all values lie above it (and half lie below it).

5 MICRA might be influencing jury decisions even when jurors are unaware of the cap. In a case with catastrophic injuries, for example, a plaintiff’s attorney could request that the jury award $250,000 as a “token” amount for non-economic damages while placing far greater emphasis during final argument upon the need for a substantial economic damage award. The intent would be to guard against the possibility that the jury would render a large compensatory damage award in such a way as to expose it to significant judicial modification. The practice may result in increased numbers of original verdicts with $250,000 for non-economic damages when in fact these verdicts would have been larger without the possibility of the cap.
Unallocated Compensatory Damage Verdicts
In 29 percent of the cases we examined, the jury reporter provided only a single amount for total compensatory damages for one or more of the plaintiffs in the case, rather than breaking that amount out into separate awards for economic and non-economic components. Sixty percent of these unallocated verdicts were $250,000 or less and therefore could not have been affected by the MICRA cap. But excluding such cases from our analysis, as well as those whose undifferentiated amounts were greater than $250,000, might have led to a distorted view of the impact of the verdict limits. To fill in the missing information, we imputed the individual components for the cases with missing information using a tree-structured regression model, as described in Appendix C.

Cases and Awards Used in the Analysis
In this section, we review the types of cases that were selected as part of our exploration of MICRA’s effects, the unit of analysis generally used in this report, why we describe death claims and non-fatal injury claims separately, and how instances where the plaintiff’s own negligence contributed to his or her injuries were handled.

Sample Selection
To better isolate what MICRA does to jury awards in California medical malpractice plaintiff verdicts, we selected only those cases in which claims of professional negligence by licensed health care providers were the only significant issues. One reason for this restriction is that MICRA’s caps do not apply when a licensed health professional is sued not only for medical negligence but also for intentional torts, such as battery, if such actions are found to have fallen outside the scope of the license.6 Similarly, we excluded trials in which auxiliary claims were also being asserted for “financial injuries” such as those for a breach of contract related to health care provider billing problems.

Another reason for our selection criteria was related to the complexities of MICRA’s application to non-health-care-provider co-defendants. For example, we would have excluded a case in which claims were made both against a surgeon for errors during the insertion of a silicone breast implant and against the manufacturer for defects in the implant’s design or materials. In such a case, any verdict for non-economic damages against the doctor would be capped if it exceeded $250,000, whereas a similar award for damages against the manufacturer would remain unchanged regardless of the size of the award. Our data collection strategy did not cap-

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ture enough information about such mixed verdicts to identify the individual legal theories used against particular defendants. Therefore, we felt that our results would be more reliable if we confined the analysis to “pure” medical malpractice trials.

Of the 1,255 California verdicts in our database (272 verdicts for the plaintiffs and 983 for the defense) in which allegations of medical malpractice were the primary issue, 35 included additional legal claims that would have gone beyond MICRA’s scope, and 19 included financial injury claims in addition to claims related to non-fatal personal injuries, death, or loss of consortium. After these cases were excluded, a total of 1,2027 verdicts were available for the analysis (of these, 257 resulted in a monetary award for at least one plaintiff, and 945 resulted in defense verdicts). In the analysis that follows, we use the 257 verdicts in cases in which medical malpractice was the exclusive issue. The claims involve only personal injuries, loss of consortium, or wrongful death, and some amount of money was awarded by a jury to at least one plaintiff in the case.

**Unit of Analysis**

Case law interpreting the MICRA statutes requires that separate limits be applied to each plaintiff directly injured by the negligent acts and to those plaintiffs who are suing for a related, although distinct, loss of consortium claim. Accordingly, we calculated reductions to non-economic damage awards on the basis of the jury’s separate awards to each individual plaintiff. However, we report MICRA’s effects on a “case-level” basis in order to better reflect the magnitude of the reductions on the combined claims arising out of the same event. In other words, original verdicts and modified final judgments are combined for all plaintiffs in a single case for the purposes of any per-case averages or percentages presented in the tables or figures in this report.

**Wrongful Death Cases**

Twenty-four percent of the California medical malpractice verdicts in our primary analysis dataset in favor of plaintiffs involved one or more claims that the alleged malpractice caused the death of the patient (the remainder involved injuries). Our analysis often makes a distinction between those cases in which the alleged victim

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7 We dropped one case that included both non-MICRA legal claims and financial injury claims.

8 MICRA’s cap generally applies to the entire action by implementing a single $250,000 limit for all claims against the same health care provider related to allegations of professional negligence. Spousal claims for loss of consortium are a notable exception to this rule. *Atkins v. Strayhorn*, 273 Cal. Rptr. 231 (Cal. App. 4th Dist., 1990). The 18 percent of cases in our analysis dataset that involved a second plaintiff (other than death cases) were ones in which a husband or wife was making such a claim.

9 Non-fatal injury cases often also include a related claim by the patient’s husband or wife for loss of consortium. References to “non-fatal injuries” in this report generally include these spousal claims.
died and those in which the victim survived because the types of damages being claimed are very different for death claims.

Claims for most non-economic losses “die” with the decedent no matter how much discomfort the person may have endured before dying. The decedent’s estate can seek to recover only the actual economic losses of the decedent (such as medical care costs and wage loss incurred up to the moment of death) in a “survival action.” But in a separate “wrongful death action,” the decedent’s survivors, dependents, and beneficiaries can seek compensation not only for their own economic losses but also for loss of affection, society, moral support, comfort, and consortium that would have been provided had the decedent survived. Awards for these latter types of essentially non-economic losses are capped by MICRA in the same way any non-economic damage award to the decedent would have been capped had he or she survived.

In practice, survival actions and wrongful death actions related to the same decedent are often consolidated or joined into the same case for purposes of trial. While technically the plaintiffs in cases with death claims are the survivors, beneficiaries, or dependents of the decedent (in a wrongful death action) or the decedent’s estate (in a survival action), for the sake of convenience, we have collapsed all such claimants into a single hypothetical entity seeking to recover any and all malpractice-related losses in a single consolidated wrongful death action and survival action. As such, references to “plaintiffs” in this report include not only those individuals claiming injuries and loss of consortium but also each decedent whose death was later claimed by others to be the result of medical malpractice.

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10 See California Code of Civil Procedure §377.34. A notable exception for this rule sometimes seen in medical malpractice cases involves the death of elderly patients under California’s Elder Abuse and Dependent Adults Civil Protection Act. See California Welfare & Institutions Code §15657.

11 Estates are also able to make a claim for punitive damages if the decedent would have been able to make such a claim had he or she survived. See California Code of Civil Procedure §377.34.

12 In actuality, claimants in a wrongful death action are not technically allowed to seek non-economic damages for mental or emotional distress, including grief and sorrow for the loss of a loved one. Rather, they are allowed to recover the loss of support, society, comfort, care, or protection, because under California case law, these are considered to be almost a form of “pecuniary” (i.e., economic) damages. See, e.g., Krouse v. Graham, 19 Cal.3d 59 at 67–70 (Cal. Sup. Ct., 1977). Despite the characterization of such losses as being marginally economic in nature to meet the common law requirement that only pecuniary damages are available in a wrongful death action, they are treated as non-economic damages for the purpose of MICRA. Yates v. Pollock, 239 Cal. Rptr. 383 at 385 (Cal. App. 2nd Dist., 1987).


14 Indeed, case law requires that the MICRA cap in matters involving fatal injuries be applied to the entire case as a single limit regardless of the number of individual claimants. Yates v. Pollock, 239 Cal. Rptr. 383 (Cal. App. 2nd Dist., 1987).
Comparative Negligence Reductions
Case law under MICRA requires that any limitations on non-economic damage awards be imposed only \textit{after} any percentage reduction for comparative negligence\textsuperscript{15} has been applied to all of the individual components of the award and not just to the total.\textsuperscript{16} In the tables and figures in the following chapters that report the non-economic and economic damage components of entire compensatory awards, the numbers for those components in about 14 percent of plaintiff wins have already been adjusted downward in accordance with the jury’s decision on the plaintiff’s relative degree of fault.

\textsuperscript{15} Under the rule of “comparative negligence,” juries can reduce their overall award if they believe the plaintiff was partially at fault for his or her injuries (for example, for failing to take medicines as prescribed, which may have exacerbated the effects of medical negligence). If the jury finds, for example, that the plaintiff is 20 percent responsible for the cause of the harm or the extent of the losses, then the final award total would be reduced by 20 percent as well.

As background on the discussion of the effects of MICRA on final judgments, we offer a brief overview of the size of plaintiffs’ verdicts as originally rendered by the juries in the trials and the size of non-economic damage awards as a percentage of total awards. We then present the results of our analysis of the effects of MICRA’s award caps on plaintiff awards from a number of different perspectives: savings to defendants; a comparison of various kinds of cases, types of verdicts, and types of injuries; and a comparison by age and gender of plaintiff.

About 22 percent of California medical malpractice trials during our study period resulted in a verdict in favor of one or more plaintiffs in the case (compared with 53 percent for all other types of trials in California during this same period). Table 3.1 shows the average size of these plaintiff verdicts, taken together and separated into non-fatal injury cases (which we refer to as “injury cases”) and death cases. The table shows that the median award for non-economic damages for all plaintiff verdicts was more than four times the median economic damage award. Figure 3.1 presents the average non-economic damage awards in our database as a percentage of total awards\(^1\) for various award amounts: smaller awards (under $250,000), mid-sized awards ($250,000 to $1 million), and higher awards (over $1 million). While the overall percentage of non-economic awards is 42 percent of the aggregate awards originally granted by juries in all cases, as total award size increases, the proportion of non-economic damages decreases, except in death cases. As the figure shows, death cases generally have a much higher proportion of non-economic damages making up their total awards than do injury cases (especially in high-value verdicts), suggesting that they may incur the greatest losses from any MICRA reductions. We will discuss this trend later in this chapter.

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\(^1\) Unless otherwise noted, the term “total awards” in this document refers to the sum of economic and non-economic compensatory damage awards. As discussed in Appendix B, punitive damage awards are very rare events in California medical malpractice trials.
Table 3.1
Average Size of Original Verdicts by Type of Claim, All Cases with Plaintiff Wins

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>Measure</th>
<th>Median</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases (n=257)</td>
<td>Economic damage awards</td>
<td>$61,000</td>
<td>$950,000</td>
</tr>
<tr>
<td></td>
<td>Non-economic damage awards</td>
<td>$260,000</td>
<td>$687,000</td>
</tr>
<tr>
<td></td>
<td>Total damage awards</td>
<td>$382,000</td>
<td>$1,637,000</td>
</tr>
<tr>
<td>Injuries only (n=195)</td>
<td>Economic damage awards</td>
<td>$58,000</td>
<td>$1,145,000</td>
</tr>
<tr>
<td></td>
<td>Non-economic damage awards</td>
<td>$250,000</td>
<td>$652,000</td>
</tr>
<tr>
<td></td>
<td>Total damage awards</td>
<td>$358,000</td>
<td>$1,796,000</td>
</tr>
<tr>
<td>Deaths only (n=62)</td>
<td>Economic damage awards</td>
<td>$80,000</td>
<td>$336,000</td>
</tr>
<tr>
<td></td>
<td>Non-economic damage awards</td>
<td>$330,000</td>
<td>$798,000</td>
</tr>
<tr>
<td></td>
<td>Total damage awards</td>
<td>$573,000</td>
<td>$1,135,000</td>
</tr>
</tbody>
</table>

NOTE: Dollar amounts are rounded to the nearest thousand.

Figure 3.1—Aggregate Non-Economic Damages as a Percentage of Total Damage Awards

Effects of the MICRA Cap in All Cases

Forty-five percent of the 257 trials we analyzed had at least one plaintiff with a non-economic damage award originally rendered by a jury that exceeded the MICRA cap.
(see Figure 3.2).² Forty-one percent of injury cases also had original awards that exceeded the cap, while 58 percent of death cases had awards exceeding the cap.

In those cases in which the cap was imposed, aggregate total awards (e.g., total compensation for economic and non-economic damages) over the five-year span of trial verdicts were reduced by 37 percent as a result of the MICRA-triggered reduction (a 33 percent reduction in injury cases and 57 percent reduction in death cases).³ In all plaintiff awards, including those with non-economic award components below the cap and those with awards above the cap, the total savings to defendants⁴ from the original jury verdicts was 30 percent⁵ (25 percent for injury cases and 51 percent for death cases).⁶

The median reduction in total award size when the non-economic damage component was capped was 55 percent (52 percent for injury cases and 64 percent of death cases). When their awards were reduced, the plaintiffs in these cases typically lost many hundreds of thousands of dollars.

² Some of these trials may have had a non-economic damage award of more than $250,000 granted to one plaintiff while another plaintiff in the same case might have received less than the threshold amount or no award at all.

³ In capped cases, aggregate original jury verdicts for all types of claims were approximately $336.7 million ($273.6 million for injury cases and $63.2 million for death cases). With the MICRA cap imposed, aggregate final judgments in these cases fell to $211.6 million ($184.3 million for injury cases and $27.3 million for death cases).

⁴ The actual sums paid by defendants can differ from the final judgment entered in the case for a variety of reasons including post-trial settlements, insufficient assets, or new trials following an appeal. Our estimates of how MICRA might reduce defendant liabilities in the cases that reached a trial verdict ignore other post-verdict events.

⁵ A study by J. Clark Kelso and Kari C. Kelso (1999) of the University of the Pacific used a similar approach for assessing the change from original jury awards to final judgments occasioned by MICRA, although they found a somewhat smaller drop of 25 percent for California medical malpractice verdicts. However, that study used a period that was approximately 14 months longer than our time frame. They also excluded all verdicts in which only a total, undifferentiated compensatory award was reported (of the 310 verdicts for plaintiffs in the Kelso and Kelso data, more than a third were eliminated primarily because the reporter did not clearly break down the verdict into economic and non-economic awards). The study excluded verdicts in which the jury found the plaintiff to be contributorily negligent when comparing changes in the mean and median total damage awards (14 percent of our cases had such comparative damage reductions). In most other broad aspects of assessing how MICRA changed actual jury verdicts, however, our findings are similar to those in the Kelso and Kelso study. For example, that study found that 54 percent of the original verdicts contained non-economic damage awards of $250,000 or less (compared with 55 percent according to our data) and that the median total, economic, and non-economic awards granted by juries were $383,000, $62,000, and $250,000, respectively according to our data (our corresponding figures were $382,000, $61,000, and $250,000). On the other hand, non-economic damages constituted 31 percent of all damages awarded in the Kelso and Kelso data while the corresponding share in our study was 42 percent. The mean economic award in original verdicts cited in the Kelso and Kelso study was about the same as that in this study ($1.53 million versus $1.64 million), and the mean non-economic award was slightly larger ($705,000 versus $687,000). See Kelso and Kelso, 1999, pp. 17–20, 27.

⁶ In all plaintiff verdicts (including capped and uncapped awards), aggregate original jury verdicts for all types of claims were $420.6 million ($350.3 million for injury cases and $70.3 million for death cases). With the MICRA cap imposed, aggregate final judgments in these cases fell to $295.5 million ($261.0 million for injury cases and $34.5 million for death cases).
Table 3.2 shows the dollar reductions in non-economic awards in capped cases. The median amount was $366,000 for all cases, and the mean amount was about $1 million. Some cases were reduced by only a few thousand dollars, while others were cut by millions of dollars. The largest reductions are often held up by critics as evidence that a few plaintiffs are shouldering a disproportionate share of MICRA’s impact.

These reductions have a dramatic effect on average final judgments for the trials won by plaintiffs in our database. The mean award for non-economic damages in all cases would have been cut from $687,000 (refer back to Table 3.1) to $200,000 (see

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>Mean</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases (n = 116)</td>
<td>$1,079,000</td>
<td>$366,000</td>
<td>$5,000</td>
<td>$8,667,000</td>
</tr>
<tr>
<td>Injuries only (n = 80)</td>
<td>$1,116,000</td>
<td>$286,000</td>
<td>$5,000</td>
<td>$8,667,000</td>
</tr>
<tr>
<td>Deaths only (n = 36)</td>
<td>$996,000</td>
<td>$459,000</td>
<td>$50,000</td>
<td>$7,526,000</td>
</tr>
</tbody>
</table>

NOTE: Dollar amounts are rounded to the nearest thousand.
Table 3.3. The most striking finding illustrated in Figure 3.3, which graphically illustrates the change in awards due to the MICRA cap, is that death cases saw a drop in the median award for total damages from $573,000 to $291,000.

What Types of Cases Are Most Affected?

What sorts of claims are involved in cases in which MICRA is having the most dramatic impact? There are two ways to assess MICRA’s effects on awards: in terms of dollar size of the reduction in non-economic damages and in terms of the percentage reduction in the total award. We present the results of our analysis from both perspectives, while suggesting that percentage reductions may be a better indicator of overall impact.

Table 3.4 lists the injury cases that fall into the top 10 percent among the cases we studied in terms of the absolute size of the award reduction. As shown, most of the plaintiffs are newborns or very young children who needed lifetime medical care. The Kelso and Kelso study found that the median final judgment for total damages in these cases was 28 percent less than the median original verdict and 25 percent less when measured by the mean. Our corresponding figures were 23 percent and 30 percent, respectively.

While we do know the types of physical and physiological injuries and the extent of any residual disabilities being alleged in each of the non-fatal cases in our data, we know very little about the specific claims or losses being advanced in death cases by the decedent’s survivors, beneficiaries, dependents, or estate (other than an allegation that the patient died as a result of the error). As such, this discussion of MICRA’s impact on awards in specific cases focuses on non-fatal injury cases.

Table 3.4 and Table 3.5 exclude those cases in which we imputed the non-economic and economic damage award components when only an undifferentiated total compensatory verdict was reported. The individual award components in such cases might be interpreted as actual amounts when, in fact, they are only estimates.
treatment, long-term attendant and custodial care, and significant rehabilitation—needs that appear to have resulted in substantial economic damage awards. Another feature of these largest of reductions in injury cases is that they usually took place in the context of a verdict whose award for economic loss was nearly as large or even larger than the award for non-economic damages. Although their original awards for non-economic loss may have seen striking reductions, the total final judgment in almost all of these cases would have continued to range from $2 million to $26 mil-
lion. For this reason, these cases, with one exception, do not have the largest percentage reductions in total verdict size.\textsuperscript{10}

The fact that these awards generally remained quite large despite the imposition of the cap might be of little comfort to plaintiffs who saw their original compensation for the non-economic aspects of the injury cut by millions. But much of the final judgment would have been for estimated future expenditures for economic losses given that most of the plaintiffs described in Table 3.4 were quite young at the time of the injury. Even with MICRA’s provisions allowing for periodic payment of future losses,

<table>
<thead>
<tr>
<th>Age of Plaintiff</th>
<th>Type of Negligence</th>
<th>Injuries</th>
<th>Economic Damage Award (1999$)</th>
<th>Original Non-Economic Damage Award (1999$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 months</td>
<td>Incorrectly positioned breathing tube; failure to detect error and respond in time</td>
<td>Persistent vegetative state</td>
<td>$6.6 million</td>
<td>$8.9 million</td>
</tr>
<tr>
<td>8 months</td>
<td>Failure to diagnose meningitis (believed to be middle ear infection)</td>
<td>Permanent brain damage and spastic quadriplegia</td>
<td>$21.9 million</td>
<td>$6.6 million</td>
</tr>
<tr>
<td>6 years</td>
<td>Error in filling prescription (100mg Phenobarbital tablets given instead of 15mg), triggering seizures</td>
<td>Inability to speak or walk, incontinence, severe retardation</td>
<td>$26.2 million</td>
<td>$5.1 million</td>
</tr>
<tr>
<td>27 years</td>
<td>Perforation of duodenum during sphincterotomy</td>
<td>Severe pain, weight loss, scarring, multiple reconstructive surgeries</td>
<td>$10,500</td>
<td>$4.7 million</td>
</tr>
<tr>
<td>Newborn</td>
<td>Failure to treat borderline hypoglycemia resulting in seizures</td>
<td>Quadriplegia, seizures, cognitive impairment, severe developmental delay</td>
<td>$12.2 million</td>
<td>$4.2 million</td>
</tr>
<tr>
<td>Fetus</td>
<td>Failure to perform early delivery of compromised fetus resulting in infarcted bowel</td>
<td>Permanent bowel failure requiring lifetime total parenteral nutrition</td>
<td>$13.5 million</td>
<td>$4.1 million</td>
</tr>
<tr>
<td>49 years</td>
<td>Failure to order computerized tomography (CT) scan, negligent management of spinal fracture</td>
<td>Incomplete paraplegia, urinary and bowel incontinence</td>
<td>$2.3 million</td>
<td>$2.5 million</td>
</tr>
</tbody>
</table>

\textsuperscript{10} The sole exception in this list is the 27-year-old woman with the perforated duodenum (the fourth-largest dollar reduction in our sample) whose total recovery would have decreased from about $4.7 million to $270,000, an overall drop of 94 percent.
damages over $50,000, a family might have some degree of flexibility in how they might choose to use the reduced compensation for these generally catastrophic injuries. Arguably, the plaintiffs at trial (and their counsel who calculate their fees as a percentage of the total final judgment) who most strongly feel the effects of the cap would not necessarily be found in the cases with the largest absolute dollar reductions but instead might be among those listed in Table 3.5 who are in the top 10 percent in terms of percentage change in the total award size.

The final judgments entered in the cases listed in Table 3.5 ranged from 6 percent to 33 percent of the jury’s original total verdict. These may be the most striking instances in which a fairly substantial jury award was turned into something quite different after the verdict was modified following the trial. These sorts of claims (in which it was alleged that the medical errors resulted in a substantial loss in the plaintiff’s quality of life despite incurring relatively small out-of-pocket expenses) are not only cases in which plaintiffs would wind up with a much smaller relative recovery but are also those in which attorneys would find their contingency percentage-based fees reduced markedly as a result of the post-verdict cap. If, indeed, MICRA has caused many malpractice attorneys to be far more selective in taking on new clients because of the limits on award size, then, arguably, individuals with low-value economic losses (which presumably translate into lower economic damage awards), regardless of any potential for receiving an extremely large non-economic damage award from a jury, may be those who have the greatest difficulty in finding representation.

Death cases generally exhibit large relative losses in total awards when award caps are imposed. As illustrated by Table 3.6, the median change in the size of total awards in capped death cases was a drop of about 49 percent compared with injury cases with a median drop of 28 percent.

As suggested by Table 3.4, the presence of a large economic award helps to compensate, to some degree, for any MICRA-triggered decrease in the size of an award for non-economic damages. As the size of the economic damage award increases in capped cases, the median change in the total award size diminishes in both injury and death claims (see Table 3.7). But even the capped death cases with the largest economic awards (over $500,000) show median changes (–44 percent) that exceed the change (–32 percent) in injury cases with the smallest ($150,000 or less) economic awards.

Analysis of MICRA’s Effects by Type of Injury

In this section, we show the results of our analysis of MICRA’s effects by injury type. Table 3.8 includes those types of injuries in our sample that account for at least
Table 3.5
Top 10 Percent of Capped Injury Cases in Percentage Reduction of Total Award

<table>
<thead>
<tr>
<th>Age</th>
<th>Error</th>
<th>Injuries</th>
<th>Economic Damage Award (1999$)</th>
<th>Non-Economic Damage Award Prior to Cap (1999$)</th>
<th>Change in Total Award (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 years</td>
<td>Perforation of duodenum during sphincterotomy</td>
<td>Severe pain, weight loss, scarring, multiple reconstructive surgeries</td>
<td>$10,500</td>
<td>$4.7 million</td>
<td>–94</td>
</tr>
<tr>
<td>34 years</td>
<td>Failure to inform of non-surgical options, substandard surgery to repair injury to sphincter, failure to manage postoperative complications</td>
<td>Anal incontinence</td>
<td>$106,000</td>
<td>$1.9 million</td>
<td>–81</td>
</tr>
<tr>
<td>42 years</td>
<td>Failure to diagnose fracture in diabetic patient, failure to order X-rays</td>
<td>Loss of majority of heel, scarring, disfigurement</td>
<td>$37,000</td>
<td>$1.4 million</td>
<td>–80</td>
</tr>
<tr>
<td>42 years</td>
<td>Misdiagnosis of fibrocystic condition as cancerous</td>
<td>Unnecessary mastectomy of a breast, need for multiple reconstructive surgeries</td>
<td>$78,000</td>
<td>$1.5 million</td>
<td>–78</td>
</tr>
<tr>
<td>40 years</td>
<td>Incorrect and misleading advice as to extent of periodontitis leading to unnecessary removal of all teeth</td>
<td>Twenty-four teeth removed, need for multiple denture relining or replacement, and possible need for complete implants</td>
<td>$78,000</td>
<td>$1.2 million</td>
<td>–73</td>
</tr>
<tr>
<td>32 years</td>
<td>Severed lingual nerve during unnecessary tooth extraction</td>
<td>Permanent partial numbness in mouth with loss of taste and residual pain</td>
<td>$1,200</td>
<td>$913,000</td>
<td>–72</td>
</tr>
<tr>
<td>33 years</td>
<td>Nerve damage during surgical lymph node biopsy, failure to manage complications</td>
<td>Permanent nerve injury with pain, numbness, weakness, and loss of sensation to shoulder and neck leading to “dropped shoulder” and muscle atrophy</td>
<td>$131,000</td>
<td>$1.1 million</td>
<td>–67</td>
</tr>
</tbody>
</table>

NOTE: Dollar amounts have been rounded to the nearest thousand.

Table 3.6
Percentage Change in Total Award, Capped Cases Only

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>Mean (%)</th>
<th>Median (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases (n = 116)</td>
<td>–37</td>
<td>–32</td>
</tr>
<tr>
<td>Injuries only (n = 80)</td>
<td>–34</td>
<td>–28</td>
</tr>
<tr>
<td>Deaths only (n = 36)</td>
<td>–45</td>
<td>–49</td>
</tr>
</tbody>
</table>
Table 3.7
Percentage Change in Total Award by Size of Economic Damage Award, Capped Cases Only

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>Economic Damage Award</th>
<th>Median Change in Total Award Size (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases (n = 116)</td>
<td>Zero to $150,000 (n = 48)</td>
<td>–35</td>
</tr>
<tr>
<td></td>
<td>$150,001 to $500,000 (n = 25)</td>
<td>–44</td>
</tr>
<tr>
<td></td>
<td>Over $500,000 (n = 43)</td>
<td>–26</td>
</tr>
<tr>
<td>Injuries only (n = 80)</td>
<td>Zero to $150,000 (n = 34)</td>
<td>–32</td>
</tr>
<tr>
<td></td>
<td>$150,001 to $500,000 (n = 14)</td>
<td>–30</td>
</tr>
<tr>
<td></td>
<td>Over $500,000 (n = 32)</td>
<td>–25</td>
</tr>
<tr>
<td>Deaths only (n = 36)</td>
<td>Zero to $150,000 (n = 14)</td>
<td>–52</td>
</tr>
<tr>
<td></td>
<td>$150,001 to $500,000 (n = 11)</td>
<td>–49</td>
</tr>
<tr>
<td></td>
<td>Over $500,000 (n = 11)</td>
<td>–44</td>
</tr>
</tbody>
</table>

Table 3.8
Frequency of Capping in Various Types of Injury Cases

<table>
<thead>
<tr>
<th>Injury Category</th>
<th>Plaintiffs Claiming This Type of Injury (%)</th>
<th>Verdicts That Were Capped (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain damage (any degree) (n = 31)</td>
<td>16</td>
<td>65</td>
</tr>
<tr>
<td>“Catastrophic” loss (n = 30)</td>
<td>15</td>
<td>63</td>
</tr>
<tr>
<td>Paralysis (any body part) (n = 16)</td>
<td>8</td>
<td>56</td>
</tr>
<tr>
<td>Loss of consortium (n = 39)</td>
<td>20</td>
<td>49</td>
</tr>
<tr>
<td>Any injury to an arm (n = 13)</td>
<td>7</td>
<td>46</td>
</tr>
<tr>
<td>Any injury to an eye or reduced vision (n = 11)</td>
<td>6</td>
<td>45</td>
</tr>
<tr>
<td>Dental injuries (n = 17)</td>
<td>9</td>
<td>41</td>
</tr>
<tr>
<td>Any injury to a leg or hip (n = 17)</td>
<td>9</td>
<td>41</td>
</tr>
<tr>
<td>Any injury to a foot or ankle (n = 11)</td>
<td>6</td>
<td>27</td>
</tr>
<tr>
<td>Emotional or psychological (n = 31)</td>
<td>16</td>
<td>26</td>
</tr>
<tr>
<td>Head or face injury (n = 12)</td>
<td>6</td>
<td>17</td>
</tr>
</tbody>
</table>

5 percent of successful injury claims, listed from the largest to smallest percentage of cases exceeding the $250,000 cap for non-economic damages.11 One combined category, “Catastrophic” Loss, includes any case with claims of burns over more than 50 percent of the body, quadriplegia, paraplegia, becoming infected with HIV or al-

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11 Each category in Table 3.8 represents claims made in at least ten non-fatal injury trials with a verdict for the plaintiffs. The table lists only those injuries that were claimed to have had a specific impact on particular body parts or physical or mental functions or that were claimed to have damaged a marital relationship. Some personal injury claims in medical malpractice cases, such as increased susceptibility to disease in the future, lack of informed consent, or unnecessary treatment, do not always identify the organ or function that had been affected by the alleged error or omission and are not included in this table.
lowing AIDS to develop, severe brain damage, or blindness. The injuries in the list overlap to some degree. For example, a plaintiff claiming severe neurological trauma would be counted in both the Brain Damage category as well as the “Catastrophic” Loss category. Those plaintiffs with multiple types of injuries (such as an injury that affected both an arm and a leg) would also be counted in more than one category.

Sixty-five percent of verdicts for the plaintiffs with brain damage of any degree and 63 percent of the verdicts for the plaintiffs with a variety of catastrophic types of losses wound up with a reduced non-economic damage award (by way of comparison, 58 percent of the verdicts in death cases were capped following trial). In contrast, 26 percent of plaintiffs with emotional distress or other psychological injuries had MICRA-triggered reductions of their awards. In other words, plaintiffs with emotional or psychological claims in which the complaints may be primarily subjective in nature stand a better chance of receiving the entire compensation intended by the jury than plaintiffs with the severest physical consequences. It is not clear how proponents of the expansion of MICRA to other jurisdictions define the “frivolous” lawsuits they hope to prevent by instituting similar rule changes elsewhere, but if included in such a definition would be cases primarily involving allegations of emotional or psychological injuries, the potential of a capped award following trial on its own may not do much to deter the pursuit of such claims.

Although the number of cases in some categories is very small, the findings in Table 3.9 demonstrate that injury severity does not always translate into the largest relative drops in total award size. Table 3.9 presents the same classes of injuries as Table 3.8 does, but presents results for capped cases only in terms of percentage reductions in total awards, listed from highest to lowest median dollar reduction. We use the size of the reduction as a proxy for injury severity.12

Although cases involving paralysis, brain damage, or catastrophic injuries had median dollar reductions of more than one million dollars, the median change in total award size when the verdict was capped ranged from –19 percent to –26 percent. In contrast, for example, the much smaller reductions ($260,000) that took place in cases alleging dental injuries had median changes to the total award of –45 percent. Another point worth noting is that when the cap is triggered, emotional or psychological injuries have one of the smallest median dollar reductions ($156,000), and in such instances, the median percentage change in total award size was also one of the smallest: –25 percent.

12 The assumption here is that juries would tend to give the largest awards for non-economic loss to the plaintiffs who were believed to have suffered the greatest loss in the quality of their lives. However, it should be noted that the criteria for the categories may mask individual differences in the extent of the injury. For example, the Any Injury to a Foot or Ankle category would include both minor ligament sprains and complete amputation. Similarly, the Brain Damage (Any Degree) category would include those with the severest levels of residual disability (such as being in a coma) as well as far less serious problems.
Table 3.9
Reductions in Capped Awards for Various Injuries

<table>
<thead>
<tr>
<th>Injury Category</th>
<th>Mean Reduction (1999$)</th>
<th>Median Reduction (1999$)</th>
<th>Mean Change in Total Award Size (%)</th>
<th>Median Change in Total Award Size (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paralysis (any body part) (n = 9)</td>
<td>$2,010,000</td>
<td>$1,699,000</td>
<td>–26</td>
<td>–24</td>
</tr>
<tr>
<td>Brain damage (any degree) (n = 20)</td>
<td>$2,537,000</td>
<td>$1,239,000</td>
<td>–22</td>
<td>–19</td>
</tr>
<tr>
<td>“Catastrophic” loss (n = 19)</td>
<td>$2,243,000</td>
<td>$1,150,000</td>
<td>–27</td>
<td>–26</td>
</tr>
<tr>
<td>Any injury to an eye or reduced vision (n = 5)</td>
<td>$1,104,000</td>
<td>$498,000</td>
<td>–41</td>
<td>–47</td>
</tr>
<tr>
<td>Any injury to a leg or hip (n = 7)</td>
<td>$343,000</td>
<td>$410,000</td>
<td>–34</td>
<td>–34</td>
</tr>
<tr>
<td>Any injury to a foot or ankle (n = 3)</td>
<td>$568,000</td>
<td>$328,000</td>
<td>–54</td>
<td>–55</td>
</tr>
<tr>
<td>Dental injuries (n = 7)</td>
<td>$345,000</td>
<td>$260,000</td>
<td>–44</td>
<td>–45</td>
</tr>
<tr>
<td>Loss of consortium (n = 16)</td>
<td>$536,000</td>
<td>$212,000</td>
<td>–33</td>
<td>–31</td>
</tr>
<tr>
<td>Head or face injury (n = 2)</td>
<td>$183,000</td>
<td>$183,000</td>
<td>–35</td>
<td>–35</td>
</tr>
<tr>
<td>Emotional or psychological injury (n = 8)</td>
<td>$494,000</td>
<td>$156,000</td>
<td>–20</td>
<td>–25</td>
</tr>
<tr>
<td>Any injury to an arm (n = 6)</td>
<td>$481,000</td>
<td>$127,000</td>
<td>–30</td>
<td>–19</td>
</tr>
</tbody>
</table>

NOTE: Dollar amounts are rounded to the nearest thousand.

When looking at the change in the total payout in cases with awards both capped and uncapped (see Table 3.10), MICRA’s limits on non-economic damage awards reduced the aggregate verdicts for plaintiffs with emotional or psychological injuries by 13 percent, which is about half of the change (mentioned earlier) in aggregate awards for all injuries (–25 percent). Dental injuries, by contrast, had a 47 percent reduction in aggregate total award size even when original jury verdicts that did not exceed the cap are included.

Effects of Award Caps by Age of Plaintiff

As mentioned earlier, many of the injury cases in the top 10 percent of absolute reduction in award size involve plaintiffs who were children or infants at the time of the incident. Table 3.11 sets out our findings for plaintiffs of various ages.\(^\text{13}\)

\(^{13}\) It should be noted that Tables 3.11 and 3.12 present data at the plaintiff level rather than at the case level as found elsewhere in this report. Also, plaintiffs with only claims of loss of consortium in their marital relationship as a result of injuries to a spouse are excluded. Plaintiffs whose age at the time of injury was not reported were excluded from Table 3.11 and those whose gender was not identified were excluded from Table 3.12. As such, some numbers in those tables will differ slightly from totals shown elsewhere in this report.
Table 3.10  
Percentage Change in Total Awards for Various Injury Types, Capped and Uncapped Cases

<table>
<thead>
<tr>
<th>Injury Category</th>
<th>Change in Aggregate Total Awards (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional or psychological (n = 31)</td>
<td>–13</td>
</tr>
<tr>
<td>Paralysis (any body part) (n = 16)*</td>
<td>–16</td>
</tr>
<tr>
<td>Head or face injury (n = 12)</td>
<td>–21</td>
</tr>
<tr>
<td>Any injury to a leg or hip (n = 17)</td>
<td>–21</td>
</tr>
<tr>
<td>“Catastrophic” loss (n = 30)</td>
<td>–23</td>
</tr>
<tr>
<td>Brain damage (any degree) (n = 31)</td>
<td>–23</td>
</tr>
<tr>
<td>Any injury to an eye or reduced vision (n = 11)</td>
<td>–30</td>
</tr>
<tr>
<td>Any injury to an arm (n = 13)</td>
<td>–30</td>
</tr>
<tr>
<td>Loss of consortium (n = 39)</td>
<td>–35</td>
</tr>
<tr>
<td>Any injury to a foot or ankle (n = 11)</td>
<td>–38</td>
</tr>
<tr>
<td>Dental injuries (n = 17)</td>
<td>–47</td>
</tr>
</tbody>
</table>

* The low change in aggregate total awards for paralysis claims appears to be the result of a high proportion of uncapped cases with very large total awards in which the portion allocated for economic loss ranged from $2 million to $7 million, while the non-economic loss portion originally awarded by the jury was $250,000 or less. For the most part, these cases involved catastrophic injuries at birth or in early childhood for which the plaintiffs’ attorneys presumably would have emphasized the significant long-term expenses required to care for a completely disabled patient.

Table 3.11  
Effect of Award Caps on Plaintiffs by Age Category

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Percentage of Total Original Jury Award as Aggregate Non-Economic Damages (%)</th>
<th>Percentage of Plaintiffs with Capped Awards (%)</th>
<th>Median Reduction in Capped Awards (1999$)</th>
<th>Mean Change in Total Award in Capped Awards (%)</th>
<th>Median Change in Total Award in Capped Awards (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under one year of age (includes newborns and injured fetuses) (n = 14)</td>
<td>31</td>
<td>71</td>
<td>$1,506,000</td>
<td>–26</td>
<td>–22</td>
</tr>
<tr>
<td>One to nine years of age (n = 8)</td>
<td>25</td>
<td>63</td>
<td>$328,000</td>
<td>–31</td>
<td>–23</td>
</tr>
<tr>
<td>Ten to 21 years of age (n = 6)</td>
<td>41</td>
<td>50</td>
<td>$498,000</td>
<td>–33</td>
<td>–47</td>
</tr>
<tr>
<td>22 to 41 years of age (n = 76)</td>
<td>48</td>
<td>37</td>
<td>$253,000</td>
<td>–39</td>
<td>–33</td>
</tr>
<tr>
<td>42 to 64 years of age (n = 66)</td>
<td>66</td>
<td>2</td>
<td>$260,000</td>
<td>–42</td>
<td>–37</td>
</tr>
<tr>
<td>65 years of age and above (n = 18)</td>
<td>67</td>
<td>67</td>
<td>$138,000</td>
<td>–29</td>
<td>–27</td>
</tr>
<tr>
<td>All ages (n = 88)</td>
<td>39</td>
<td>41</td>
<td>$268,000</td>
<td>–36</td>
<td>–32</td>
</tr>
</tbody>
</table>

NOTES: Includes only plaintiffs whose age is known. Dollar amounts are rounded to the nearest thousand.
Plaintiffs under one year of age had a median dollar reduction in capped awards of about $1.5 million, by far the greatest amount of any age category, and their non-economic awards were capped 71 percent of the time (compared with 41 percent for all age categories). But 31 percent of the aggregate original jury awards for this group came in the form of compensation for non-economic losses, a rate that is less than half of what was realized by plaintiffs 42 years of age and older and about two-thirds of the figure for plaintiffs between 22 and 41 years old. When MICRA reductions are applied to the relatively smaller non-economic component of the verdicts for these plaintiffs, the median change in total award size was –22 percent (compared with a median change of –32 percent for plaintiffs in all age categories).

Two other age groups also have high frequencies of capped verdicts: plaintiffs between one and nine years of age (63 percent) and plaintiffs 65 years of age and older (67 percent). Both groups have median changes in total award size in capped cases that are less than the change for all age groups (–23 percent for young children and –27 percent for seniors versus –32 percent for all groups), but the two age groups differ in other measures. While 67 percent of the aggregate original jury awards for seniors were for non-economic damages, the amounts awarded for this type of loss are relatively low, so that when the award is capped, there is a median reduction of $138,000 (about half of the figure for all ages). Young children between one and nine years of age had a much smaller proportion of their original jury awards in the form of non-economic damages (25 percent), but when the cap is applied, the median reduction is higher ($328,000).

Undoubtedly, the fact that different age groups are likely to experience different sorts of injuries may play a role in the distinctions seen among the categories in Table 3.11. No plaintiff over the age of 65, for example, alleged that his or her injuries were the result of catastrophic errors made during labor. Because of the limited number of cases in our data, we were unable to control for injury type in our analysis of age groups.

**Effects of Award Caps by Gender of Plaintiff**

As Table 3.12 shows, both male and female plaintiffs have about the same likelihood of having an award capped. Males have larger dollar reductions when the cap is exceeded, but females have more of their original jury awards in the form of non-economic damages. The result is that females typically have larger cuts to their total verdicts—they have a median change of –34 percent versus –25 percent for males.

As with the various age groups, some of the differences seen between men and women in the frequency and impact of the cap’s imposition may be due to differences in the types of medical conditions for which they originally sought treatment.
Table 3.12
Effect of Award Caps on Plaintiffs by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage of Total Original Jury Awards as Aggregate Non-Economic Damages</th>
<th>Plaintiffs with Capped Awards (%)</th>
<th>Median Reduction in Capped Awards (1999$)</th>
<th>Mean Change in Total Award in Capped Awards (%)</th>
<th>Median Change in Total Award in Capped Awards (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males (n = 87)</td>
<td>33</td>
<td>44</td>
<td>$460,000</td>
<td>−31</td>
<td>−25</td>
</tr>
<tr>
<td>Females (n = 114)</td>
<td>39</td>
<td>39</td>
<td>$260,000</td>
<td>−39</td>
<td>−34</td>
</tr>
<tr>
<td>All (n = 201)</td>
<td>36</td>
<td>41</td>
<td>$286,000</td>
<td>−35</td>
<td>−30</td>
</tr>
</tbody>
</table>

NOTES: Includes only plaintiffs whose gender is known. Dollar amounts are rounded to the nearest thousand.

Again, we were unable to control for injury type in our analysis of gender differences because of the limited number of cases in our data.
In this chapter, we explore the effects of MICRA’s cap on non-economic damages on plaintiffs’ net recoveries and the effect of its limits on attorneys’ contingency fees.

**MICRA’s Effects on Attorney Fees**

MICRA’s “sliding scale” for maximum attorney fees in medical malpractice cases, as amended in 1987, limits the contingency fee percentages that are used to calculate plaintiffs’ attorney fees to 15 to 40 percent, depending on the size of the final judgment, settlement, or arbitration award (refer back to Table 1.2 for the range of percentages). We explored how MICRA affects attorney fees when cases reach a verdict by estimating the potential fee in each case. We did so using two different scenarios. The first scenario is one that reflects what an attorney is likely to be receiving in a case in our database: The fee is calculated using the final judgment in the case (after any MICRA-triggered non-economic damage award reductions) and using the maximum fee percentages allowed under MICRA. The second scenario is the fee that might be received in a “non-MICRA” world: The fee is based on the jury’s original verdict (without any reductions), and the fee percentage used assumes that attorneys would charge a contingency fee rate of 33-1/3 percent were it not for MICRA.1

1 There is nothing set in stone about the one-third rate as our assumption for a non-MICRA environment, although there is evidence to suggest that in medical malpractice cases attorneys generally were charging a similar rate prior to MICRA’s enactment in the mid-1970s. Based on data from one survey of 400 malpractice attorneys during the early 1970s, plaintiffs’ attorney fees and expenses averaged 36 percent of compensation paid by defendants. Kakalik and Pace, 1986, p. 41.

Other research suggests that for cases that reach the trial level, a one-third rate is the most common percentage when a contingency fee is part of the attorney-client agreement, although other rates and arrangements are certainly used as well. Using data obtained from a survey of contingency fee practitioners and direct observation and interviews, a study of Wisconsin attorneys found that “... [e]xcluding those types of cases for which fees are specifically governed by statutes or regulations, 58% of the cases in [the] sample involved retainers specifying a fee as a flat percentage of the recovery, 39% employed a variable percentage, and 3% employed some other type of contingency arrangement... Of the cases with a fixed percentage, a contingency fee of 33% was by far the most common, accounting for 92% of those cases. Five percent of the cases called for fees of 25% or less, 2% specified fees around 30%, and 1% specified fees exceeding 33%. Thus, only a little over half of the cases (53%) employed...
The combined effects of fee limits and non-economic damage caps have a dramatic impact on the amount of fees attorneys receive for representing plaintiffs at trial. Figure 4.1 illustrates our results for all 257 trials (injuries and deaths) in our sample with plaintiff verdicts. The top bar represents the amount of attorney fees in a non-MICRA environment, assuming an across-the-board 33-1/3 percent fee and no reduction of the original non-economic damage awards. In such a situation, aggregate fees over the five-year period we studied (1995 to 1999) would have been about $140 million. The second bar also assumes a 33-1/3 percent fee but adds a $250,000 limit on non-economic damages to the mix. The resulting total of aggregate fees is reduced by about 30 percent from the “non-MICRA” hypothetical situation to about $98 million. The third bar ignores any damage cap but uses the MICRA sliding scale for fees. The fee limits alone drop the total from the non-MICRA hypothetical by

![Figure 4.1—Effects of Fee Scales and Award Caps on Aggregate Attorney Fees](image)

Figure 4.1—Effects of Fee Scales and Award Caps on Aggregate Attorney Fees

the standard one-third contingency fee. . . . This figure is based only on those cases where the attorney had the leeway to charge a one-third fee. . . . The most common pattern for those cases employing a variable percentage called for a contingency fee of 25% if the case did not involve substantial trial preparation (or, in some cases, did not get to trial), and 33% if the case got beyond this point. . . . For those going to trial, the range was from 25% to as high as 50%.” Kritzer, 1998, pp. 285–286. In other words, in the 58 percent of the cases in the Kritzer study with a fixed percentage, nine out of ten set a flat one-third rate. In the 39 percent of fee arrangements with variable percentages, the “most common” was a one-third rate if the case went to trial (which is true with all of the cases in our sample), although there were some as low as 25 percent and some as high as 50 percent. While the percentage certainly can be adjusted depending on the circumstances of an individual case, a one-third percentage is a reasonable assumption for the limited purposes of this study.
46 percent to $76 million. MICRA’s dual limits on fees and awards, when both are in operation, are shown in the bottom bar. In combination, MICRA’s provisions act to drop the level of aggregate fees in our sample cases by 60 percent to $56 million. Using the same assumptions, the combined reduction in aggregate fees was 59 percent in injury cases and 65 percent in death cases.

Without question, post-verdict modifications do have a major impact on aggregate attorney fees. But fees in these trials appear to have been reduced more by the sliding scale than by the cap on non-economic damage awards. This observation suggests that fee restrictions do more to discourage new case filings than award caps do. It is difficult to see why a potential plaintiff, if he or she believed that a medical error had occurred, would decide not to pursue a claim simply because of a possible upper limit to his or her final non-economic damage recovery. On the other hand, the attorney would take both the fee limits and the award caps into consideration when screening potential clients and making the ultimate decision on whether to move forward on a claim. If fee limits loom larger than a possible reduction of a jury’s damage award in an attorney’s calculations of whether the case is economically viable, then this particular aspect of MICRA may be the primary force behind any reduction in the rate of new malpractice claims.

**MICRA’s Effects on Net Recoveries**

As indicated earlier in this report, part of the argument advanced for the imposition of the sliding scale for attorney fees is that it would help to offset the effects of the cap on non-economic damage awards. To determine whether this has been true, we calculated the plaintiff’s “take home” amount in each case by subtracting the estimated attorney fees from the estimated final judgment using the same assumptions as those shown in Figure 4.1. It should be kept in mind, however, that our estimates of net recoveries in these cases do not account for expenses incurred by the plaintiff during litigation or any modifications to the final judgment other than those occasioned by MICRA.

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2 The results shown in the figure do not mean to imply that malpractice attorneys in California experienced a 60 percent decrease in fees after MICRA took effect. Our jury verdict database tells us nothing about what might have happened in the much larger universe of settled cases, compensated informal claims, and medical malpractice incidents that never received compensation. As such, we cannot say whether attorneys have experienced a similarly steep reduction in aggregate fees for all matters that did not go to trial, especially if MICRA also caused a change in the criteria attorneys used for screening and accepting new clients.

3 In practice, fees are not the only amounts deducted from a plaintiff’s award or settlement. Typically, successful plaintiffs are also responsible for other expenses incurred during litigation such as expert witness fees, stenographic services during depositions, attorney travel costs, document delivery, and the like. In a hotly contested medical malpractice case in which the plaintiff may need one physician-witness to testify about extent of the injuries, another to testify about the medical standard of care, and a third to testify about causation, the additional costs may
The top bar in Figure 4.2 reflects a “non-MICRA” world: no caps on awards and no maximum fee limits, and assuming one-third of compensation for attorney fees. In this scenario, the aggregate net recovery for the 257 trials (injuries and deaths) in our five-year sample would be about $280 million. As shown by the second bar, after factoring in just the MICRA cap on awards, the net recovery drops by 30 percent to about $197 million. Obviously, a sliding fee scale alone would put more money in the pockets of plaintiffs, at least in the aggregate. As shown by the third bar, the plaintiffs would walk away with $345 million, 23 percent more than what they would have received in a “non-MICRA” world. But the fourth bar shows that the combined effect of limits on awards and on fees results in a net recovery of $240 million, 15 percent less than what winning plaintiffs, in the aggregate, would have received without any of MICRA’s restrictions (and 22 percent more than what plaintiffs in an award-cap-only regime would have received without any limits on fee percentages). The change in plaintiffs’ net recoveries is even smaller for injury cases alone; in such cases, aggregate recoveries under MICRA were 9 percent less than run into six figures. Also, the actual sums paid by defendants can differ from the judgment entered in the case as a result of post-trial adjustments independent of the MICRA cap. Our estimate of plaintiffs’ net recoveries do not take either expenses or other adjustments into account. We assume, however, that the effect on net recoveries occasioned by deductions for expenses or by non-MICRA adjustments would be the same regardless of whether MICRA was in effect for these cases.
in the non-MICRA scenario. Plaintiffs in death cases, on the other hand, lost 44 percent of the non-MICRA recoveries despite the more favorable fee arrangements.

However, these aggregate figures mask important differences among the individual cases in our data. Consider two examples, illustrated in Tables 4.1 and 4.2, which compare the net recoveries for two different plaintiffs with and without MICRA. The hypothetical plaintiff in Table 4.1 had an original jury award of $313,000 with $72,000 in economic damages and $241,000 in non-economic damages. Without MICRA, this plaintiff would have a net recovery of about $209,000, assuming a one-third contingency fee. Because the non-economic damage award is under the $250,000 cap, the only effect of MICRA on net recoveries is through reduced attorney fees as mandated by the sliding scale. This plaintiff would receive a net recovery that was approximately 7 percent larger as a result of MICRA.

The plaintiff in Table 4.2, on the other hand, had an original jury verdict with $522,000 in economic damages and $500,000 for non-economic damages. In a non-MICRA world, according to our assumptions (a one-third contingency fee and no change to the jury’s non-economic award), that plaintiff would have paid fees of $341,000 on the final judgment that totaled about $1 million, resulting in a net recovery of about $681,000. Under MICRA, the final judgment would be reduced to $772,000 because of the cap on non-economic damages. With MICRA’s sliding scale, maximum allowable fees would be $187,000, for a final net recovery of $585,000, approximately 14 percent less than the plaintiff would have received had MICRA not been in effect. As these examples suggest, MICRA continues to reduce net recoveries for those receiving relatively larger verdicts despite the smaller fees, while those with more modest awards actually wind up with more under MICRA.

<table>
<thead>
<tr>
<th>Table 4.1</th>
<th>Net Recovery to Plaintiff with Average-Sized Non-Economic Damage Award</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without MICRA</td>
</tr>
<tr>
<td>Economic damage award</td>
<td>$72,000</td>
</tr>
<tr>
<td>Non-economic damage award</td>
<td>+ $241,000</td>
</tr>
<tr>
<td>Final judgment</td>
<td>= $313,000</td>
</tr>
<tr>
<td>Estimated attorney fees</td>
<td>− $104,333</td>
</tr>
<tr>
<td>Net recovery</td>
<td>= $208,667</td>
</tr>
<tr>
<td>Change in net recovery</td>
<td>+7%</td>
</tr>
</tbody>
</table>

4 The example reflects the 50th percentile of awards for both non-economic damages and economic damages in injury cases in which non-zero amounts were awarded for both components of the total compensatory damage award.

5 The example reflects the 75th percentile of awards for both non-economic damages and economic damages in injury cases in which non-zero amounts were awarded for both components of the total compensatory damage award.
The aggregate net recovery for all of these trials under MICRA may be nearly as large as it would have been without the limits (especially in regard to injury claims), but as Figure 4.3 confirms, MICRA’s impact in individual cases is far from uniform. Cases in which the total non-economic damage awards were a million dollars or

Table 4.2
Net Recovery to Plaintiff with Large Non-Economic Damage Award

<table>
<thead>
<tr>
<th></th>
<th>Without MICRA</th>
<th>With MICRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic damage award</td>
<td>$522,000</td>
<td>$522,000</td>
</tr>
<tr>
<td>Non-economic damage award</td>
<td>+ $500,000</td>
<td>+ $250,000</td>
</tr>
<tr>
<td>Final judgment</td>
<td>$1,022,000</td>
<td>$772,000</td>
</tr>
<tr>
<td>Estimated attorney fees</td>
<td>– $340,667</td>
<td>– $187,467</td>
</tr>
<tr>
<td>Net recovery</td>
<td>$681,333</td>
<td>$584,533</td>
</tr>
</tbody>
</table>

Change in net recovery –14%

Figure 4.3—Change in Aggregate Recoveries by Size of Original Non-Economic Damage Awards
more had an average reduction in total net recoveries of 28 percent. Because death cases typically have a greater share of their original verdicts in the form of non-economic damages, the drop in aggregate net recoveries occasioned by MICRA in death cases with million-dollar-plus non-economic damages is 64 percent. On the other hand, cases with original verdicts for non-economic damages under $250,000 received aggregate net recoveries that were 19 percent larger than what would have been expected without MICRA.

\[6\] While small in number, this group has a disproportional influence on overall defendant liabilities. Verdicts with total non-economic damages of $1 million or more make up just 15 percent of all plaintiff wins, but total compensatory awards in such cases constitute 60 percent of all amounts awarded by juries in the cases we studied. In contrast, verdicts in which non-economic damages awarded to all plaintiffs totaled $250,000 or less (53 percent of all verdicts) represented 19 percent of all amounts awarded by juries.

\[7\] Because we assume a fee percentage of 33-1/3 for what attorneys might charge in the absence of the sliding scale, the net recoveries we calculated for the very smallest judgments ironically appeared to result in a worse outcome for plaintiffs under MICRA when the judgment was $50,000 or less (the maximum attorney fee percentage allowed by MICRA for such small recoveries is 40 percent). In actuality, the limits on fees and awards are likely to have no meaningful effect on net recoveries following trial in such cases.
The last key question we sought to answer in this study was, if the MICRA cap had been adjusted for inflation, what would have been the effect on the final awards in the trials we examined? In this chapter, we consider what would have happened with an indexed cap on MICRA.

MICRA and the Consumer Price Index

With the MICRA cap on non-economic damages remaining fixed at its 1975 levels in nominal terms, some observers have suggested that each year the nearly three-decade-old ceiling takes a progressively larger bite out of what juries believe are appropriate awards for compensation for non-economic losses. In their view, if $250,000 was a “fair” or “reasonable” cap in 1975, then only an adjusted cap with the same purchasing power would be equally fair or reasonable today. Over the years since MICRA was passed, there have been occasional attempts in the California Legislature to amend the law to link—or “index”—the cap to the rate of inflation, but none of these attempts have ultimately been successful.¹

Accordingly, we explored what would have happened if a provision for indexing had been part of the original legislative package and the $250,000 limit had been allowed to rise each subsequent year starting in 1976. Table 5.1 provides the value of this indexed cap for each of the five years of trials found in our data using the Consumer Price Index for urban consumers to adjust for inflation.²

¹ See, e.g., California Assembly Bill 1380, as amended May 24, 1999. This bill, which failed to receive approval from both houses of the legislature, would have adjusted the cap each year to reflect the cumulative percentage change in the Consumer Price Index (CPI), All Items, published by the U.S. Bureau of Labor Statistics. Critics of the bill suggested that because, in their view, non-economic damages are inherently non-quantifiable, adding a cost-of-living adjustment would have served no rational purpose. See Schiff, 1999.

² Bureau of Labor Statistics, n.d. By 2003, the indexed cap would have been about $855,000.
Table 5.1
Indexed Cap Values for 1995–1999

<table>
<thead>
<tr>
<th>Year</th>
<th>Indexed Value of MICRA Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>$708,000</td>
</tr>
<tr>
<td>1996</td>
<td>$729,000</td>
</tr>
<tr>
<td>1997</td>
<td>$746,000</td>
</tr>
<tr>
<td>1998</td>
<td>$757,000</td>
</tr>
<tr>
<td>1999</td>
<td>$774,000</td>
</tr>
</tbody>
</table>

The Impact of Indexing

How would the numbers cited earlier in this report that are subject to a fixed $250,000 cap differ as a result of a cap that had been adjusted for two decades of inflation? The effects of MICRA would have changed in the following ways if the cap had been adjusted:3

- Despite a tripling of the cap from 1975 levels in nominal terms, aggregate final judgments for our sample verdicts would rise by just under 13 percent from the levels seen with a $250,000 limit.
- Savings to defendants resulting from reduced judgments would be about 21 percent, compared with savings of 30 percent with a fixed cap.
- Nineteen percent of the verdicts in our sample would have a non-economic damage award that exceeded the indexed cap, compared with the 45 percent of cases in our study that exceeded the $250,000 cap.
- Catastrophic injury cases would be capped 40 percent of the time, compared with 63 percent of the time with a fixed cap.
- Median final judgments for all cases would rise 30 percent compared with the actual judgments under MICRA’s fixed cap.
- Total attorney fees paid in the cases in our study would increase by about 12 percent, and net recoveries would increase by about 13 percent.

Speculating about how trial outcomes would differ using one type of cap as opposed to another is just as problematic as comparing a non-capped environment with the one instituted by the original MICRA legislation. If MICRA had been indexed in the original legislation, the numbers and types of cases reaching the trial stage would no doubt differ from those in our sample. Indexing the cap would probably allow

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3 As we did when we determined whether a jury’s non-economic damage award exceeded the actual MICRA cap of $250,000, we compared the unadjusted original amount with the indexed caps described in this scenario. The final judgment, including any reduction from the indexed cap, was then adjusted to 1999 dollars.
more cases to be litigated, because every increase in the cap size would make some otherwise marginal claims into claims that might now be perceived as being economically viable by attorneys. For this reason, our comparisons of MICRA’s effects under indexing should be viewed as general indicators only.\footnote{Although the Kelso and Kelso (1999) analysis of the effect of an indexed cap used $750,000 as a possible alternative to the current statutory limit (whereas we used a range of $708,000 to $774,000, depending on the year of the trial), the Kelso and Kelso study reached findings that are similar to ours. They estimated that 50 percent more awards would be under the higher-level ($750,000) cap (our estimate was 47 percent). Aggregate payouts, compared with those in a $250,000-cap system, were estimated to rise by 9 percent (compared with 13 percent in our study). Kelso and Kelso, 1999, pp. 26–27.}
This study found that MICRA appears to have had the California Legislature’s intended initial result of limiting defendants’ expenditures arising out of medical malpractice trials. It demonstrated that final judgments following trials in 1995 through 1999 were reduced by 30 percent from the awards contained in the original jury verdicts. Whether such savings have translated into reduced premiums, greater availability of coverage, and a more stable health care delivery system—which were the California Legislature’s ultimate goals for MICRA—is a question not answered by the data in our study. The data can, however, describe the types of claims that have provided this 30 percent savings as a result of award reductions.

The cap on non-economic damage awards was imposed in 45 percent of all verdicts for the plaintiffs in the cases we studied. Plaintiffs with three types of claims (for the severest injuries, for injuries with relatively small economic loss but a large impact on quality of life, and for death) had the most profound changes under MICRA to their original jury awards:

- Plaintiffs with the severest injuries (brain damage, paralysis, or various catastrophic injuries) had their non-economic damage awards capped far more often than all plaintiffs with injury claims and had median reductions of more than $1 million (compared with $286,000 for all injury cases).
- Plaintiffs who lost the highest percentage of their total awards were often those with injuries that led to relatively modest economic damage awards (about $100,000 or less) but that caused a great loss to their quality of life (as suggested by the jury’s million-dollar-plus award for pain, suffering, anguish, distress, and the like). These plaintiffs sometimes received final judgments that were cut by two-thirds or more from the jury’s original decision.
- Death cases are capped more frequently than injury cases (58 percent versus 41 percent), and when they are capped, death cases have much higher percentage reductions in total awards than injury cases, with a median drop of 49 percent versus a 28 percent drop for injury cases.
We also show that MICRA has had a disproportionate effect on certain age groups and types of cases. Plaintiffs less than one year of age had their awards capped 71 percent of the time, compared with 41 percent of the time for all plaintiffs with direct injury claims whose ages are known. The median reduction in award size in that age group was $1.5 million compared with $268,000 for all plaintiffs with direct injury claims whose ages are known.

The sliding scale for allowable contingency-fee percentages appears to have a larger influence on attorney fees than does the damage cap. Our analysis indicates that, in the aggregate, attorneys lose 60 percent of the fees they might have received from these trials absent MICRA’s limits on contingency fees and its caps on non-economic damage awards. Had only the sliding scale been in place without any cap on damages in a non-MICRA environment, the reduction in aggregate fees from the non-MICRA environment would have been 46 percent. In contrast, a cap on damages alone would have resulted in a more modest 30 percent reduction in attorney fees.

Our analysis of the combined effect of the award cap and the sliding scale on attorneys’ fee percentages allows us to calculate that, in the aggregate, plaintiffs lost 15 percent of the net recoveries (judgments less fees) they would have obtained without MICRA. Overall, the reduced fees do appear to offset much of the reduction in awards. But the experience of individual plaintiffs would have varied considerably, with some losing much more than 15 percent in their net recoveries and others realizing a net increase as a result of MICRA. Cases with larger non-economic damage awards—those of a million dollars or more—had total losses in net recoveries of 28 percent as a result of MICRA. On the other hand, plaintiffs in cases in which non-economic damage awards were $250,000 or less had net recoveries 19 percent larger than what they would have been without MICRA because of the savings in attorney fees.

If MICRA caps had been indexed for inflation since 1975, the savings to defendants from reduced judgments in the cases we examined would have been 21 percent of the amount originally awarded, compared with 30 percent under the actual cap, assuming that the same number and types of trials would occur under these conditions. To put it another way, more than two decades of indexing that yielded a cap three times as large as the fixed cap would have resulted in a 13 percent rise in defendants’ liabilities from the current levels under MICRA. The proportion of cases with verdicts over the cap in the five-year period would have decreased by more than half, from 45 percent to 19 percent.
Caveats

While a study of how the MICRA cap reduces awards originally granted by juries can help in understanding the impact of MICRA on the California medical malpractice compensation process, our approach does have a number of limitations:

- Our focus on jury verdicts ignores MICRA’s effects on the much larger number of cases disposed before trial, claims that are never filed as formal civil actions, and health-care-related injuries that never develop into actual claims.
- Our analyses of defendants’ liabilities, attorney fees, and plaintiffs’ net recoveries assume that the same set of trials found in our sample would have taken place had MICRA not been enacted. However, MICRA likely changed the number and character of the cases that reached the trial stage during our study period from what they would have been had the law not been enacted.
- Our discussion of the effects of indexing the award cap assumes that the same set of trials found in our sample would have taken place with the higher award limits. However, it is likely that additional cases would have been filed and more trials would have taken place as limits increased each year with the indexed cap.
- The study does not address the very important issue of how MICRA may have ultimately affected medical malpractice premiums and the availability of this type of insurance coverage in California.
- The study does not address other issues related to MICRA such as quality of care, defensive medicine, the shifting of costs to other benefit providers, and transaction costs.

Implications

Adequacy of compensation for health-care-related injuries is an issue at the heart of the debate over changes in medical malpractice liability policy. Proponents of MICRA-like caps assert that with economic damages remaining unrestricted, a $250,000 maximum limit on non-economic awards will be large enough to insure that every plaintiff with a legitimate claim will be reasonably compensated. In their view, the MICRA cap merely trims the excess from a jury’s overly generous response to a plaintiff’s unfortunate situation. Critics of MICRA-like policies, on the other hand, suggest the jury’s original award should be respected as the appropriate standard for adequacy. They claim that any across-the-board reduction in the portion of that award for non-economic losses reduces the adequacy of a plaintiff’s compensation. While we do not address the issue of what might be the proper amount of non-economic compensation for any particular plaintiff, this analysis does identify the
types of cases and claimants that most often have an award capped and identifies those that experience the largest adjustments to the jury’s original award, both in absolute and relative terms.

Clearly, certain kinds of plaintiffs are finding their jury awards affected more often and to a greater degree by MICRA’s cap on non-economic damages than other plaintiffs. If such differences are believed to result in an inequitable application of the cap, policymakers favoring award limits might consider “carve-outs.” For example, one policy option discussed in Congress during its recent consideration of proposals to adopt MICRA-like rules nationally would exempt exceptionally tragic or egregious cases from the proposed cap.

One of the examples discussed in the congressional debates was the case of Jéssica Santillán, a young woman who received a heart and lung of the wrong blood type at Duke University Hospital in early 2003 and died as a result.1 What such a definition of an “egregious event” would entail is not clear as of this writing,2 but if the exception turns on the extent of the injuries (rather than the acts of the defendant) and if catastrophic consequences (as we defined them in Chapter Three) would qualify, then the number of capped verdicts in California injury cases during our study period would drop by 24 percent, and aggregate final judgments would rise 14 percent from current levels. If death claims were included as part of this egregious injury exemption (in addition to non-fatal catastrophic injuries), the number of capped awards of all types during our study period would drop by 47 percent, and aggregate final judgments would rise 27 percent. Because much of the overall savings to defendants occasioned by MICRA come from the very types of claims that are often considered as potential candidates for exceptions, how such carve-outs are defined can have a dramatic impact on defendant liabilities.

One of our most important findings is that MICRA has resulted in steep reductions in fees for plaintiffs’ malpractice attorneys as a result of the law’s combination of award caps and limits on maximum contingency percentages. The data also suggest that the savings to defendants and their insurers are funded by both plaintiffs and their attorneys. Because the fee limits help offset award reductions (aggregate net

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2 One modification to the restrictions in H.R. 5 (see Chapter One) that was discussed at the time would call for a much higher cap in cases involving severe disfigurement, severe physical disability, or death. Stolberg, 2003b, p. A21. Attempts in other jurisdictions to carve out exceptions to non-economic damage caps are sometimes found in cases in which the limits are raised or eliminated because of “egregious” injuries. For example, legislation recently passed in Florida (Senate Bill 2D, Session 2003 D, approved by the governor in August 2003, http://www.flsenate.gov/data/session/2003D/Senate/bill/billtext/pdf/s0002Der.pdf, accessed September 16, 2003) imposed a cap of $500,000 for non-economic damages in medical negligence cases, but as part of its exceptions for what was termed egregious injuries, allowed awards as high as $1 million if the injuries resulted in a “permanent vegetative state,” death, or a “catastrophic injury” (including paralysis, amputation, blindness, and other significant injuries), or if the judge found that the non-economic harm was particularly severe and a “manifest injustice” would occur if the $500,000 cap was imposed.
recoveries for plaintiffs are 15 percent less than they would have been without MICRA even though defendants are realizing a 30 percent drop in aggregate liabilities), the legislation’s provisions regarding awards and fees could be characterized as shifting some of the costs for compensating medical malpractice from defendants to not only plaintiffs but to plaintiff’s counsel as well.\(^3\)

It is not clear how much MICRA has discouraged California attorneys from practicing in this field, reshaped the criteria attorneys use for evaluating new claimants seeking representation, and changed how claims are litigated and settlements negotiated. But it appears that MICRA has caused a sea change in the economics of the malpractice plaintiffs’ bar in California. Even without MICRA, attorneys would be highly selective in evaluating new clients with a malpractice claim. Such cases have a low rate of plaintiff victories at trial in California (22 percent) and carry with them the high costs of expert medical witnesses, which can cost tens or hundreds of thousands of dollars and are almost always borne solely by the attorney if there is no recovery. Add in MICRA’s steep cuts in allowable fee percentages and a maximum ceiling of $250,000 for non-economic damages regardless of the severity of the injury and attorneys would be even more selective about taking on new malpractice clients, particularly those potential clients who have incurred low economic costs even if they might stand a good chance of receiving a high-value non-economic damage award from a jury.\(^4\) Clients most likely to find representation in malpractice cases may well be those with the most clear-cut claims of medical negligence and the most substantial economic losses.

\(^3\) To put it another way, defendants would have paid out $420.6 million without MICRA, but with the award cap aggregate liabilities were $295.5 million—a $125.1 million savings. Without MICRA, we estimate that plaintiffs would have received $280.4 million in net recoveries after fees were deducted, but with the award cap and the fee limits aggregate net recoveries were $239.5 million—a $40.9 million drop. The difference between the defendants’ savings and the reduction in plaintiffs’ net recoveries, approximately $84 million, would be in the form of reduced attorney fees.

\(^4\) One California medical malpractice attorney reported that the process by which his office initially screens potential cases for possible representation has been greatly affected by the provisions of MICRA: “It is . . . essential that I pick through the requests and evaluate only those that have a high probability of being ‘economically viable’ unless the potential client pays for the evaluation. . . . ‘Economically viable’ means that the chance of winning and the amount of the potential award are high enough to offset the enormous costs of time and money to pursue the case. The cases that are potentially ‘economically viable’ are those cases that are the most outrageous, include clear liability on the part of the healthcare provider and who’s [sic] ‘economic damages’ are in excess of a million dollars. The reason that the threshold for ‘economically viable’ is so high is due to the roadblocks to medical malpractice lawsuits created by the healthcare industry and its insurance companies, enacted by the California legislature in 1975 to keep YOU from successfully pursuing just and proper claims against healthcare professionals.” Bisnar & Chase, LLP, n.d.
Other Issues of Policy Concern

Although it is important to understand the effect of MICRA on actual jury awards, attorney fees, and plaintiffs’ net recoveries, these are by no means the only criteria that policymakers should use in evaluating whether MICRA has delivered on the promises made nearly 30 years ago, whether its direct and indirect effects are desirable ones, and whether similar legislation should be adopted elsewhere. Other research is required to fully inform the policy discussion. That research would include analysis of the following:

- the effects of MICRA on a patient’s access to attorney representation
- the comparative effects of MICRA on various demographic groups and between patients with various types of losses arising from malpractice incidents (e.g., those with low out-of-pocket expenses versus those with more substantial economic losses)
- the effects of MICRA’s trial award limits on the size of settlement offers
- the effects of MICRA’s impact on award and settlement size on other types of benefit providers, such as government programs or disability insurers
- the effects of current and proposed liability rules on medical errors and quality of care
- the effects of current and proposed liability rules on access to medical care
- the effects of various liability regimes on health care costs
- the impact of any savings to defendants from MICRA on medical malpractice insurance premium levels and the availability of coverage.

Balancing the need for a viable health care delivery system with the desire to adequately compensate individuals who are injured as a result of negligence within that system is just as complex and critical a task today as it was when the California Legislature grappled with it back in 1975. It is our hope that the information contained in this report may contribute to this important effort.
Other MICRA provisions that were not analyzed as part of this study are summarized as follows:

1. When jury awards for future damages exceed $50,000, the defendant is allowed to make periodic payments over an extended period of time rather than a lump-sum disbursement. If the plaintiff subsequently dies, the obligation of the defendant (other than for loss of future earnings) ends.1

2. Procedural changes include requiring a 90-day notice of the intent to initiate any lawsuit and shortening the statute of limitations for medical negligence in some instances.2

3. In a change to a long-standing common-law rule, MICRA allowed evidence of “collateral” sources in medical malpractice trials.3 Defendants are able to argue to the jury that, for example, the medical care costs, wage losses, or other expenses claimed by the plaintiff were actually covered by health insurers, disability insurers, or other sources. The jury is then free to reduce the size of its award by some or all of such collateral benefits.4

4. If such evidence is introduced, claims by those same collateral sources against the defendant health care professional(s) to recover prior expenditures are limited by MICRA, effectively shifting some of the costs for medical errors from medical malpractice insurers to other types of insurance entities and benefit providers.5

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1 California Code of Civil Procedure §667.7.
2 California Civil Code §364; California Code of Civil Procedure §340.5.
3 California Civil Code §3333.1(a).
4 The traditional common-law rule prohibits a defendant from introducing evidence at trial of any collateral benefits the plaintiff might have received. The reasoning is that despite the possibility for “double recovery” on the part of the plaintiff, the defendant should not reap the benefits of the plaintiff’s prudent decision to have obtained health, accident, or disability coverage. Also, many such policies contain subrogation or refund provisions that allow the benefit provider to recover any of its outlays for these sorts of costs from an award against the defendant (thus eliminating any double recovery). See, e.g., Helfend v. Southern California Rapid Transit District, 2 Cal.3d 1 at 9–11 (Cal. Sup. Ct., 1970).
5 California Civil Code §3333.1(b).
MICRA’s dual limits on non-economic damage awards and contingency fees in medical malpractice cases are not found in any other types of civil litigation in California. Nevertheless, medical malpractice cases have many procedural and substantive similarities with a wide variety of other types of cases and need to be viewed within the context of the overall civil justice system to better understand why there has been so much attention focused upon this particular line of litigation. This appendix compares California jury trial verdicts for which medical malpractice was the primary issue being litigated with verdicts in other types of civil litigation.¹

Types of Civil Cases and Their Frequency

In Tables B.1 through B.5, we divided civil trials into three broad groups according to the basis of liability that was asserted: those involving liability based on negligence or strict liability (typically tort claims in which personal injury or property damage is alleged), those involving intentional torts (most of which involve personal injury or property damage claims but some of which allege financial harm), and those involving disputes based primarily on a contractual or business relationship, which we term financial injury claims (some of which may include minor elements of personal injuries, such as emotional distress over a breach of contract). As Table B.1 suggests, these broad categories can be further divided into specific case types such as medical malpractice (those cases are italicized in the tables for emphasis), product liability, insurance litigation, and civil rights matters.

¹ In the chapters of this report, we used a narrower definition of medical malpractice litigation in which medical malpractice had to be the exclusive issue before the jury and in which only personal injury or wrongful death claims were involved. Each type of case listed in the following tables is the primary, although not necessarily exclusive, issue in each trial, and there are no restrictions on the types of claims being sought by the plaintiffs.
Table B.1
Examples of Common Civil Case Types

<table>
<thead>
<tr>
<th>Case Type Group</th>
<th>Specific Case Type</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligence or strict liability torts</td>
<td>Common carrier liability</td>
<td>Injuries to passengers during transportation on a common carrier, including injuries while boarding; damage to cargo</td>
</tr>
<tr>
<td></td>
<td>Medical malpractice</td>
<td>Errors during surgery; failure to monitor fetal heartbeat during labor; failure to remove sponge from body cavity; misdiagnosis of disease</td>
</tr>
<tr>
<td></td>
<td>Motor vehicle liability</td>
<td>Auto collisions; single-vehicle accidents; pedestrian collisions</td>
</tr>
<tr>
<td></td>
<td>Other malpractice</td>
<td>Professional negligence issues involving attorneys, accountants, cosmeticians, funeral directors, and such</td>
</tr>
<tr>
<td></td>
<td>Other negligence</td>
<td>Failure to secure dog on property; failure to supervise partygoers; failure to supervise children on a playground</td>
</tr>
<tr>
<td></td>
<td>Product liability</td>
<td>Inadequate warning labels; defective manufacturing process creating dangerous product; use of dangerous materials such as asbestos</td>
</tr>
<tr>
<td></td>
<td>Property and premises</td>
<td>Slips and falls on sidewalks; dangerous conditions with store shelves; inadequate security in hotels</td>
</tr>
<tr>
<td>Intentional torts</td>
<td>Civil rights</td>
<td>Unlawful imprisonment; failure to provide medical care while incarcerated; unlawful seizure of property</td>
</tr>
<tr>
<td></td>
<td>Intentional tort personal injury</td>
<td>Assault; battery; intentional infliction of emotional distress</td>
</tr>
<tr>
<td></td>
<td>Other intentional torts</td>
<td>Slander; libel; invasion of privacy</td>
</tr>
<tr>
<td>Financial injuries</td>
<td>Employment</td>
<td>Wrongful termination; permitting sexual harassment while on the job; breach of promise to promote</td>
</tr>
<tr>
<td></td>
<td>Insurance</td>
<td>Suits by insureds, beneficiaries, and third parties against insurance companies over issues arising out of a policy</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous business or contracts claims</td>
<td>Other financial injury matters not included elsewhere; includes routine business versus business and consumer versus business litigation</td>
</tr>
<tr>
<td></td>
<td>Real property</td>
<td>Nuisance; environmental liability; easements</td>
</tr>
</tbody>
</table>
To illustrate the frequency with which specific case types go before a jury, Table B.2 presents a breakdown by primary case type of the 7,489 California jury trials from 1995 through 1999 in our database. Torts involving motor vehicles are by far the most common issues deliberated by the state’s jury trial courts. What we call “property and premises liability” cases (slips and falls, inadequate security, etc.) make up the next-largest single share of verdicts. But medical malpractice trials are also relatively common, despite MICRA and other legislative initiatives directed toward reducing litigation in this area.

**Plaintiff Wins and Compensatory Damage Awards**

Medical malpractice trials are uncommonly difficult for plaintiffs to win. As Table B.3 shows, 22 percent of medical malpractice trials in California reach a result in favor of the plaintiff, the lowest plaintiff win rate of any case type in our database. The overall plaintiff win rate for all other cases is 53 percent; therefore, in medical malpractice cases, plaintiffs are less than half as likely to win as they would be in just about any other type of case.

<table>
<thead>
<tr>
<th>Case Type Group</th>
<th>Specific Case Type</th>
<th>Percentage of All Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligence or strict liability torts</td>
<td>Motor vehicle liability</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Property and premises liability</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Medical malpractice</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Product liability</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Other negligence</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Other malpractice</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Common carrier</td>
<td>1</td>
</tr>
<tr>
<td>Intentional torts</td>
<td>Intentional tort personal injury</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Civil rights</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Other intentional tort</td>
<td>1</td>
</tr>
<tr>
<td>Financial injuries</td>
<td>Employment</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous business or contracts claims</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Real property</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Insurance</td>
<td>2</td>
</tr>
</tbody>
</table>

2 Many of the trials involved issues that touch on multiple areas of the law. For example, a single “medical malpractice” action can also involve questions of product liability, intentional torts, or even motor vehicle accident liability. The categorization of the cases reflects RAND’s assessment of the primary case type classification of the claims and defenses argued before the jury.
### Table B.3
Plaintiff Win Rate by Case Type, California Jury Trials, 1995–1999

<table>
<thead>
<tr>
<th>Case Type Group</th>
<th>Specific Case Type</th>
<th>Percentage of Cases with Plaintiff Wins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligence or strict liability torts</td>
<td>Motor Vehicle Liability</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Other malpractice</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Other negligence</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Product liability</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Common carrier</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Property and premises</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Medical malpractice</td>
<td>22</td>
</tr>
<tr>
<td>Intentional torts</td>
<td>Other intentional torts</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Intentional tort personal injury</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Civil rights</td>
<td>26</td>
</tr>
<tr>
<td>Financial injuries</td>
<td>Miscellaneous business or contracts claims</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Real property</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Employment</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Insurance</td>
<td>50</td>
</tr>
</tbody>
</table>

Even though there is a relatively low chance of an outcome in favor of the plaintiff in a California medical malpractice trial, the trial can result in a compensatory award amounting to many hundreds of thousands of dollars (see Table B.4). Within the negligence or strict liability torts subgroup, medical malpractice verdicts yield the second-highest median and mean compensatory awards, behind only product liability claims. The dollar figures for medical malpractice cases in Table B.4 are for original jury awards prior to any post-verdict reduction triggered by MICRA.

### Punitive Damage Awards

MICRA addresses punitive damage awards only through its discouragement of low-value or uncertain litigation. There are other impediments to plaintiffs seeking punitive damage awards in medical malpractice cases that were implemented in the late

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3 A single outlier verdict from an automotive products liability case (Patricia Anderson, et al v. General Motors Corporation, et al, Los Angeles Superior Court case number BC 116-926, decided July 9, 1999) was dropped from the data used for the tables in this section because the combined compensatory and punitive damage verdict was nearly 17 times the size of the next-largest award in our data. The jury in Anderson, a case involving an allegedly defective automotive fuel tank design, awarded a group of six plaintiffs who were severely burned in a collision an unadjusted total of $4.9 billion ($107 million in compensatory damages and $4.8 billion in punitive damages). Had we left the case in our data, the products liability category in Table B.4 would have had much larger mean, expected, and maximum awards.
Table B.4

<table>
<thead>
<tr>
<th>Case Type Group</th>
<th>Specific Case Type</th>
<th>Median Award (plaintiff wins only)</th>
<th>Mean Award (plaintiff wins only)</th>
<th>Expected Award (all trials)</th>
<th>Largest Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligence or strict liability</td>
<td>Product liability</td>
<td>700,000</td>
<td>1,719,000</td>
<td>751,000</td>
<td>11,418,000</td>
</tr>
<tr>
<td>torts</td>
<td>Medical malpractice</td>
<td>388,000</td>
<td>1,599,000</td>
<td>347,000</td>
<td>31,304,000</td>
</tr>
<tr>
<td></td>
<td>Other malpractice</td>
<td>243,000</td>
<td>1,543,000</td>
<td>851,000</td>
<td>20,760,000</td>
</tr>
<tr>
<td></td>
<td>Other negligence</td>
<td>217,000</td>
<td>1,054,000</td>
<td>492,000</td>
<td>18,751,000</td>
</tr>
<tr>
<td></td>
<td>Property and premises</td>
<td>114,000</td>
<td>775,000</td>
<td>295,000</td>
<td>31,659,000</td>
</tr>
<tr>
<td></td>
<td>Common carrier liability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motor vehicle liability</td>
<td>53,000</td>
<td>507,000</td>
<td>212,000</td>
<td>8,654,000</td>
</tr>
<tr>
<td>Intentional torts</td>
<td>Other intentional torts</td>
<td>215,000</td>
<td>645,000</td>
<td>349,000</td>
<td>3,600,000</td>
</tr>
<tr>
<td></td>
<td>Civil rights</td>
<td>126,000</td>
<td>1,316,000</td>
<td>347,000</td>
<td>17,402,000</td>
</tr>
<tr>
<td></td>
<td>Intentional tort personal</td>
<td>95,000</td>
<td>794,000</td>
<td>371,000</td>
<td>13,446,000</td>
</tr>
<tr>
<td>Financial injuries</td>
<td>Insurance</td>
<td>464,000</td>
<td>1,721,000</td>
<td>855,000</td>
<td>31,593,000</td>
</tr>
<tr>
<td></td>
<td>Employment</td>
<td>224,000</td>
<td>602,000</td>
<td>332,000</td>
<td>25,000,000</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous business or</td>
<td>214,000</td>
<td>1,850,000</td>
<td>1,183,000</td>
<td>178,763,000</td>
</tr>
<tr>
<td></td>
<td>contracts claims</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Real property</td>
<td>203,000</td>
<td>1,210,000</td>
<td>723,000</td>
<td>17,646,000</td>
</tr>
</tbody>
</table>

NOTES: The compensatory damage awards are net of any reduction for comparative negligence. The dollar amounts are rounded to the nearest thousand.

The data in Table B.5 suggest that juries do not often find that what doctors or other health care professionals have wrongly done is so outrageous as to justify finan-
cial punishment in addition to paying compensation. Less than 1 percent of all California verdicts in which jurors found for a plaintiff in medical malpractice trials also included an award for punitive damages. Given that the plaintiff win rate for medical malpractice trials is about 22 percent, the effective rate of punitive awards for all medical malpractice cases that go to a jury is 0.16 percent.  

Table B.5 suggests that exceptions that would exempt exceptionally “egregious” cases from a proposed federal cap on medical malpractice awards may have only a minor impact on aggregate verdicts paid by defendants if the definition of egregious is related to the degree of negligence (rather than the severity of the injuries), and if such a test of the conduct of the defendant approaches the stringent one already used for the imposition of punitive damages in California.

It should be noted that jurisdictions differ in their criteria for awarding punitive damages, and it may be that while such awards are extremely rare in California medical malpractice trials, they might constitute a much larger share of judgments entered

<table>
<thead>
<tr>
<th>Case Type Group</th>
<th>Specific Case Type</th>
<th>Percentage of Cases in Which Punitive Damages Are Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligence or strict liability torts</td>
<td>Product liability</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Other malpractice</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Other negligence</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Medical malpractice</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Property and premises</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>Motor vehicle liability</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>Common carrier</td>
<td>0</td>
</tr>
<tr>
<td>Intentional torts</td>
<td>Other intentional torts</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Civil rights</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Intentional tort personal injury</td>
<td>24</td>
</tr>
<tr>
<td>Financial injuries</td>
<td>Insurance</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Employment</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous business or contracts claims</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Real property</td>
<td>18</td>
</tr>
</tbody>
</table>

---

6 Of the 1,255 trials in which medical malpractice was noted as the primary (though not necessarily the exclusive) issue in the case, 272 resulted in a verdict for the plaintiff. Of these, our data contain two instances in which a win for the plaintiff also included an award for punitive damages. As such, 0.16 percent of all medical malpractice trials in our database ended with a punitive award.

7 See Chapter Six for further discussion.
against health care providers in other states. Moreover, the potential size of such awards, even if they are granted only infrequently, may have a disproportionate influence on claims-handling practices and pre-trial settlement negotiations.
APPENDIX C
Methodological Challenges

In this appendix, we discuss some of the challenges we faced in conducting our analysis, including potential underreporting of jury verdicts, undifferentiated compensatory award amounts in our source material, and difficulties in assessing original jury awards and final judgments.

Underreporting of Trials in Jury Verdict Reporters

An obvious question that arises when using unofficial sources such as jury verdict reporters is how comprehensive their coverage is. Because voluntary reporting by attorneys is the reporters’ primary method for collecting data on trials, complete coverage of all jury verdicts is doubtful. Unfortunately, there is no practical means for precisely assessing the extent of any shortfall in the reporting of California verdicts, especially in regard to medical malpractice trials.

The California Administrative Office of the Courts (CAOC) does collect information on an annual basis on the number of “jury trials” and the number of dispositions that are “after trial by jury,”1 but both measures count any case in which a jury has been sworn in as a jury trial “disposition” even if no verdict was rendered. Many cases settle just after a jury is sworn in, or settle during the testimony phase, settle during deliberations, receive a directed verdict from the judge, are dismissed during trial, result in a mistrial, or end in a hung jury. None of these outcomes is counted as a jury verdict for our purposes even though they would be by the CAOC. Another distinction between our data and that of the CAOC is that the CAOC counts each case that is consolidated into a single trial as a separate jury trial disposition, whereas our database contains one record for a consolidated trial no matter how many individual actions it involves.

Moreover, there are no state-level numbers for medical malpractice jury verdicts that are rendered or even medical malpractice trials that are begun. While some

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1 See Judicial Council of California, Superior Courts Table 3 and Table 5, 2003.
counties in California do track medical malpractice trials, such counts are not uniformly collected or reported to the Administrative Office of the Courts, which divides up all civil matters involving more than $25,000 (the jurisdictional floor for the cases in our database) into two broad categories—“personal injury\property damage\wrongful death” and “all other.”

Nevertheless, the limited state-level data available to us suggest that the potential undercounting of cases may be significant. According to the CAOC, there were 15,345 juries sworn in “unlimited” civil trials during the fiscal years 1995–1996 through 1999–2000 and 15,747 juries sworn during the fiscal years 1994–1995 through 1998–1999. Using the midpoint of these two figures to approximate our study period (calendar years 1995 through 1999), 15,546 juries were sworn. Our database contains 7,588 jury verdicts rendered in California during the five-year period involving cases filed in state courts of general jurisdiction (the Superior Courts), a figure that is 49 percent of the reported number of juries sworn during a similar period. While this percentage for all case types may not reflect the reporter’s rate of coverage of relatively high-profile medical malpractice trials, and while some of the apparent shortfall in the number of verdicts is certainly due to the number of cases terminating without a jury verdict even when a jury was sworn and the results of the CAOC counting consolidated cases separately, it does suggest that some degree of undercounting is likely.

Attempts have been made to more precisely gauge how well reporters do in capturing all verdicts. One study that used three years of data (1988 through 1990) from 19 different reporters across the nation (including the California Jury Verdicts Weekly coverage of trials in Alameda, Fresno, Los Angeles, Sacramento, San Diego, and San Francisco Counties) estimated that the coverage of privately published reporters ranged anywhere from 75 percent to 95 percent of the number of actual verdicts. A previous RAND Institute for Civil Justice study that compared reports in the California Jury Verdicts Weekly with official court records from San Francisco County suggested that the actual coverage was 84 percent for two years’ worth of trials concluded in the early 1970s. The types of cases that appear to be most underrepresented in the CJVW include contracts/business cases and trials with smaller-than-average awards. Presumably, the problem of underrepresentation would be less for

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2 Recent discussions with the county-level staff at a selection of Superior Courts suggest that some local courts may now be collecting more detailed information that could provide accurate counts of the number of medical malpractice juries that are sworn. Unfortunately, the number of actual verdicts is still unavailable.

3 Judicial Council of California, Superior Courts Table 3, 2003.

4 This figure is slightly higher than the number of trials reported in Table B.2 in Appendix B because it includes a small number of cases in which money damages were not sought.

5 Daniels and Martin, 1995, p. 68.

medical malpractice trials resulting in large verdicts for the plaintiffs and average compensatory awards that exceed $1 million.

Nevertheless, without precise counts of actual medical malpractice jury verdicts rendered in California to compare with the number of reported trial summaries, as we stated above, we must treat the trials found in the CJVW (and subsequently recorded in our own data) as just a sample of all trials actually concluded during this five-year period. Such treatment of the data would in turn impact our findings for aggregate verdict awards and aggregate attorney fees calculated on the basis of those awards. The possible shortfall in the number of reported verdicts then raises a companion question of whether the claims types and outcomes of those cases that do make their way into a reporter differ in any significant way from the actual set of California medical malpractice cases that result in a jury verdict. Any underreporting taking place with cases in which the jury found for the plaintiff would affect our findings for estimated aggregate verdict awards and aggregate attorney fees. Given that some evidence suggests that smaller-value awards may be underreported, average award amounts cited in this report may be impacted as well.

**Difficulties in Assessing Original Jury Awards and Final Judgments**

While we believe that our approach to estimating how MICRA might change a jury’s verdict is a useful and appropriate one for gauging MICRA’s overall impact on plaintiffs’ recoveries, we are aware of some issues in this area: In a number of instances, limits on non-economic damages were not imposed even though they could have been; juries may have already taken the MICRA cap into account during their determination of award size; the source for our data may on occasion confuse a modified final judgment with what the jury originally awarded; and other events following the announcement of the verdict may have overshadowed any MICRA reductions. Each of these concerns is discussed next.

**Instances in Which the Cap Is Not Imposed Even When Damages Exceed Cap**

We assume that when a jury’s verdict for non-economic damages exceeded the MICRA cap, that portion of the award was always trimmed to $250,000 as a result of a post-verdict motion. It is possible, however, that a defendant may in fact choose not to move to have the verdict amended, perhaps if the matter was settled while the jury was still deliberating, settlement was reached soon after the trial, or the amount in excess of the cap was relatively small. We have no information on how often these situations occur, although it is likely that when they do, the decision not to seek a reduction of the award does not make much of a difference to the defendant’s ultimate liabilities.
It is also possible that a defendant’s attorney may fail to request that the jury’s verdict for compensatory damages be delivered in a way that would distinguish non-economic damages from economic damages and, as such, allow for the imposition of the cap if appropriate. Another possibility is that a defendant’s attorney may fail to move to have the cap applied prior to the entry of the final judgment. We expect that such errors happen infrequently. In any event, the trial judge always has the option of applying the cap on his or her own motion, even if the defense fails to do so.7

Juror Knowledge of Non-Economic Damage Caps

Another implicit assumption in this analysis is that the original non-economic damage awards in these cases were determined by juries that were operating under the belief that what they granted is what the plaintiff would receive. However, it is possible that in some of the trials in our database, jurors were aware of the MICRA limits and took them into account during their calculations of award size. Trial judges in California do have the discretion of informing a jury of the MICRA cap through jury instructions or allowing such information into the trial via the arguments of counsel,8 although this practice appears to be held in disfavor by the appellate courts.9 Perhaps a more likely situation would be one in which one or more jurors know about the cap from media reports or other sources and subsequently inform the other members of the jury during deliberations.

Armed with such knowledge, juries might “self-limit” their awards for non-economic damages to a maximum of $250,000, even though they might have awarded much more if they were unaware of this feature of MICRA. Alternatively, juries might misinterpret the meaning of the cap and view the limit as the extreme benchmark to be used for the most severe injuries and then award something less than $250,000 for more moderate injuries that might have received more (essentially, the range of zero dollars to unlimited amounts of money for non-economic damages would be scaled back to zero dollars to $250,000).

Whether these informed juries self-apply the MICRA limit to the non-economic damage award in the juror room or let the judge do it for them, they might

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7 One California Superior Court trial judge indicated that he generally applies the cap automatically without waiting for a party to make a motion.

8 Based on discussions with several medical malpractice attorneys in Los Angeles area, it appears that in most instances the jury is not directly informed of the existence of the cap. But, in Toland v. Vana, 271 Cal. Rptr. 457 (Cal. App. 4th Dist., 1990), although the opinion was not officially published for purposes of citation or precedent, the Court of Appeals in that case indicated that it would not be reversible error for a trial court to instruct the jury that the maximum damages that could be awarded for non-economic losses in a medical malpractice case would be $250,000.

9 In Schierbeck v. Haight, 9 Cal. Rptr. 2d 716 at 724 (Cal. App. 4th Dist., 1992), the Court of Appeals suggested, although did not require, that juries not be informed of the cap: “One approach, and one which we recommend for trials of medical malpractice cases, is that the jury not be told of the $250,000 ceiling for non-economic damages.”
choose to deal with the cap in a number of other ways. They might seek to offset what they perceive to be inadequate compensation for the plaintiff by a commensurate increase in their award for economic damages. Another possibility is that they might greatly inflate the non-economic damage award to make a public, although largely symbolic, statement of their feelings about the nature of the incident, the severity of the injury, or the cap’s restrictions, knowing full well that ultimately only $250,000 will be paid.

We cannot determine whether the jurors in these cases were aware (by whatever mechanism) of the cap during their deliberations. We cannot assume that every reported verdict for exactly $250,000 in non-economic damages is one that is tainted in some way by the jury’s awareness of MICRA’s provisions: Because awards for non-economic losses in medical malpractice trials are usually not directly linked to actual out-of-pocket losses, those awards often are large round numbers in multiples of $10,000 or $50,000. Nor can we determine from a reporter’s case description what should have been the “right” size of an award for non-economic or economic damages in order to identify cases in which it appears that the statutory cap was taken into account by the jury.

As such, if knowledge of the cap typically serves to reduce the awards juries grant, our estimates of the frequency with which awards exceed the cap and the size of those reductions understate the actual effect of the MICRA cap on cases that reach the trial stage. In other words, there would be a number of cases in which MICRA played a significant role in the size of the final judgment even if the original award for non-economic damages did not exceed $250,000. Or, if such knowledge typically causes jurors to inflate their awards for whatever reason, our estimates of the reduction in the size of awards might overstate the actual effect of MICRA. In any event, MICRA may well be serving to impact original trial verdicts even in situations in which the judge does not make any changes to the jury’s award; unfortunately, we cannot determine how often this situation happens or the magnitude of these “extra-judicial” adjustments.

**Final Judgments Reported as Original Jury Awards**

It is possible that some of the $250,000 non-economic damage awards cited in the reporters as “jury awards” are in fact final judgments following a judicial reduction. Without additional information in the trial reporters that might suggest post-verdict adjustments, it is not possible to determine the exact nature of these reductions.

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10 The possibility that jurors have self-limited their awards is a very real one: At the individual plaintiff level, 10.5 percent of non-zero awards for non-economic damages in our database were for $250,000. By comparison, 1.9 percent were for $200,000 and 3.3 percent were for $300,000. But even excluding the $250,000 verdicts, 87 percent of the other awards were multiples of $1,000, 58 percent were multiples of $10,000, 40 percent were multiples of $50,000, and 23 percent were multiples of $100,000. Distinguishing the truly self-limited awards from those that were merely “nice round numbers” reached with no knowledge of the cap is not possible with the limited information contained in the reporters.
modification, we can assume only that the amounts reported were those rendered originally by a jury and do not reflect any judge-ordered changes. Again, this possibility suggests that our findings may undercount the number of cases in which the cap was actually imposed.

Other Post-Verdict Changes
MICRA is not the only reason why jury verdicts and final judgments may differ. The amount of money ultimately paid by the defendants may differ from either what the jury decided or what was entered into judgment for several reasons: (1) the trial judge might adjust the size of the award through an *additur* or *remittitur* if he or she believed the verdict was inadequate or excessive; (2) the judge might grant a motion for a new trial; (3) the judge might set the verdict aside by entering a judgment in favor of the defendants notwithstanding the jury’s decision (also known as a *judgment non obstante veredicto* or JNOV); (4) the parties might reach a settlement independently following the verdict; (5) the parties might settle as a result of the trial judge’s indication that a new trial would be granted unless both sides agreed to a different amount; (6) the parties might have had a preexisting agreement to limit the defendant’s ultimate liabilities at trial regardless of award size; (7) an appellate court might order a new trial or change some other aspect of the judgment; or (8) a defendant’s assets may be insufficient to pay the judgment.

A study led by Neil Vidmar of Duke Law School found that 9 percent of California medical malpractice trials reported in the CJVW in which the verdict was in favor of the plaintiff described some sort of post-verdict adjustment other than a MICRA cap or comparative negligence reduction.11 This percentage likely undercounts the actual frequency of post-verdict changes because the reporter entries (usually published soon after a trial is over) are unlikely to contain complete information regarding actions by appellate courts, defendant bankruptcies or other difficulties in collecting judgments, settlements that are reached on a confidential basis, or settlements that do not take place within a short period of time following case disposition.

Results from a previous ICJ study on post-verdict adjustments that surveyed litigants in concluded cases tried in selected California counties and in Cook County, Illinois, concluded that 24 percent of all verdicts for plaintiffs in all case types had some sort of change, of which more than 80 percent consisted of downward adjust-

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11 Vidmar, Gross, and Rose, 1998. Of the 179 jury verdicts in the Vidmar, Gross, and Rose sample, two cases settled for a higher amount following the verdict, two cases settled for a lower amount, one award was increased through an additur, one verdict was set aside, eight verdicts were modified due to collateral source payments, and two were adjusted downward for unknown reasons. Another 36 awards were affected by comparative negligence reductions or statutory limits on non-economic damage awards. When these 36 additional types of reductions were included, the mean final payment was about 10 percent less than the mean original jury verdict.
ments. Overall, aggregate medical malpractice final payments were 67 percent of the original verdict. Unfortunately, the ICJ report did not distinguish the mandatory capping triggered by MICRA from other sorts of judicial modifications to the original verdict. Thus, these figures likely overestimate the frequency and size of post-verdict adjustments in malpractice cases beyond those required by MICRA.

The findings of these two studies suggest that other types of post-verdict events and rulings may have a greater impact on the ultimate recoveries of plaintiffs than does any non-economic damage award reduction triggered by the MICRA cap. Even in cases in which the cap reduction remains the single largest reason why the jury’s verdict differed from what the defendants ultimately paid, other post-verdict factors such as appellate court rulings or settlements might exacerbate plaintiffs’ concerns over what they perceive to be inadequate compensation.

Another issue that arises from the question of post-verdict modifications is in regard to our underlying assumption that, absent MICRA’s rules, the final judgments for the trials in our data would by and large be the same as the juries’ original awards. In fact, the possibility exists that some of the verdicts for more than $250,000 in non-economic damages would have been reduced or a new trial granted on the question of damages had they taken place in a “non-MICRA” world because the trial judge might have believed that the non-economic damage award was excessive. With the cap in place, however, the judge may feel less need to trim the award to a level that he or she considers appropriate or vacate it altogether in light of the evidence presented at trial.

Estimating the frequency with which a judge would have reduced an award or ordered a new trial in the absence of MICRA is problematic. To our knowledge, no data exist on post-verdict modifications in California medical malpractice trials prior to 1975. Studies using post-1975 California malpractice verdicts would be of limited use because the mandatory imposition of the cap in many such cases might overshadow all other possible post-verdict changes. Data from other states would likely provide little guidance because the characteristics of medical malpractice cases that reach the trial stage, the verdicts that are rendered in those trials, and the criteria that judges use in their review of juries’ decisions may differ markedly from jurisdiction to jurisdiction. Notwithstanding the lack of data in this area, it is clear that our as-

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12 Of the reductions in cases with original verdicts of $10 million or less, 62 percent were occasioned by settlements, 13 percent were the result of defendants failing to have adequate resources such as insurance or personal assets to satisfy the judgment, 23 percent were ordered by the trial judge or an appellate court, and 2 percent were for unknown reasons. Shanley and Peterson, 1987.

13 One study found that in a sample of 112 malpractice verdicts in the New York City metropolitan area, four were set aside as a result of a JNOV, 23 were reduced through a remittitur, and ten were reduced downward for unknown reasons. As such, as many as one-third of jury awards in that region were reduced or vacated by the judge. By comparison, out of 179 California medical malpractice verdicts rendered during a period of time when MICRA was in effect, only one was set aside by the judge and two were reduced downward for unknown reasons. However, California’s low rate of possible downward modification by judges was matched in Florida, which at
sumptions of how final judgments differ from original verdicts as a result of the MICRA cap do not take into account the related impact of other types of post-verdict adjustments.

Undifferentiated Compensatory Award Amounts

In some entries in the reporter we used, the jury appears to have returned a verdict with only a single, undifferentiated amount for total compensatory damages rather than amounts for the individual components. It is possible that those juries were not required to indicate how much of the total award was for economic or non-economic damages (perhaps because the issue was moot with a total verdict of less than $250,000, or because a party failed to make a timely request for the necessary jury instructions or special interrogatories). One more-plausible scenario is that the attorneys providing information to the California Jury Verdicts Weekly might have failed to include the jury’s breakdown of the award or indicated that it was an undifferentiated total amount when in fact the award was for either economic damages or non-economic damages exclusively. Another possibility is that the CJVW editors included only a total amount for compensatory damages even though more specific information was available.

For whatever reason, about 29 percent of the trials with reported damage awards did not have the economic and non-economic damages broken out into separate components. Sixty percent of these 75 verdicts with an undifferentiated compensatory award were $250,000 or less and, as such, could not have been affected by MICRA. But excluding such cases from our analysis, and excluding those whose undifferentiated compensatory awards were greater than $250,000, might

the time of the study did not have mandatory non-economic caps on awards granted at trial. Of 210 malpractice verdicts in that state, one was set aside, three were subject to a remittitur, and six were reduced for unknown reasons. In any event, the significant differences among plaintiff win rates at trial in medical malpractice cases for the three jurisdictions (52 percent, 44 percent, and 23 percent for New York City, Florida, and California, respectively) suggest that the post-verdict experiences for one location may not be relevant to another. Vidmar, Gross, and Rose, 1998.

15 The 29 percent figure is for the number of cases that did not have non-economic and economic damage awards broken out for all of the plaintiffs involved in the trials. A number of these cases had lump-sum compensatory awards reported for one or more of the plaintiffs but not any others. For individual plaintiff verdicts with non-zero awards, 26 percent were missing data on the separate components.
16 This percentage of cases with undifferentiated awards is smaller than what would be reflected by the original reporter entries. We assumed that undifferentiated awards for plaintiffs with only loss of consortium claims were awards for non-economic damages only. In a limited number of instances, we were able calculate award components by using information in the case report to tell us what would have been the most likely amount awarded for economic damages. Another need for interpretation was raised by the occasional reporting of future value of an award rather than the original jury award. Whenever possible, we used the original, rather than the discounted, award and assumed that unless the report indicated otherwise, the award given was for the original value.
have led to a distorted view of the impact of the award limits on medical malpractice trials. Prior studies that used the same source for California medical malpractice verdict reports chose to exclude such cases from their analysis.\textsuperscript{17} We were concerned that adopting this approach for our work would result in a loss of important data regarding case and claim characteristics. As such, we used other information in the case report to identify the likely portions of undifferentiated awards that were for economic and non-economic damages, and if that was not possible, we imputed the individual components by using a tree-structured regression model as described in the next subsection.\textsuperscript{18}

We performed this imputation at the plaintiff level because in some cases only one plaintiff had an undifferentiated total compensatory damage verdict reported while others involved in the same trial had their economic and non-economic damage awards reported separately. Because the law governing damages differs depending on whether a plaintiff is claiming for non-fatal injuries or for death, we performed separate imputations for each type of case.

**Method for Imputing the Ratio of Economic Damages to the Total Amount Awarded**

We had complete information on the verdict breakdown for the majority of winning plaintiffs, and our intent was to use these data to estimate the likely allocation of economic and non-economic damages awarded in the remaining cases that had missing information. As such, we needed to select a method for imputing the missing value of the ratio of economic damages to the total amount awarded. The limited size of the dataset and the type of analysis we intended to do after the missing data were imputed played a major role in our choice of imputation method.

We were primarily interested in providing descriptive statistics, such as the mean or median jury awards, for these trial outcomes. As such, we had little need for relatively sophisticated imputation methods, such as multiple imputation, that would require model specifications and distributional assumptions. Additionally, the small size of the dataset would not support such a complex approach.

A simple mean substitution (i.e., every case with missing data would be imputed with the mean of awards in the cases with complete information) represented an attractive option. However, the case records with known values for economic and non-economic damage awards varied widely in the characteristics of the parties and claims. This variability in the range of the amounts that the juries awarded for economic damages (from $0 to $25 million) and non-economic damages (from $0 to

\textsuperscript{17} In the Vidmar, Gross, and Rose (1998) study, 87 of 179 (49 percent) known verdicts for plaintiffs were dropped, and in the Kelso and Kelso study (1999, p. 17), 116 of 310 (37 percent) verdicts were dropped, primarily because the economic and non-economic damage components of those awards were not broken out.

\textsuperscript{18} See, e.g., Little and Rubin, 1987; Therneau and Atkinson, 1997; and Breiman et al., 1984.
nearly $9 million) is associated with the plaintiffs’ characteristics and the type and extent of the claimed injuries. Given that all the case and plaintiff characteristics are generally available for both the cases with complete information on awards and the cases with information on only the total compensatory award, it seemed that a regression imputation method (also known as conditional mean substitution) using available information on the cases and parties would outperform a simpler mean substitution. More precisely, we were looking for a method that would provide an unbiased estimate of the conditional expectation of the variable to be imputed given the other case characteristics.

We decided to employ a regression tree imputation method for a variety of reasons. First, the relationship between the variable to be imputed and the characteristics of the cases in our data does not seem to be linear. This fact made it difficult to specify a parametric model that would fit such data. Second, the set of predictors at hand was a mix of categorical and continuous variables and, in a number of cases, data were missing for some of these predictors. Regression trees, a non-parametric method, do not make assumptions on the form of the relationship between the variable to be imputed and the characteristics of the cases and can easily handle missing data at the predictor level.

More important, we wanted a method that could provide an unbiased estimate of the expectation of the ratio of economic damages to the total amount awarded given the rest of the case characteristics. Of course, we did not know what the true expectation would be, but the flexibility of regression trees was thought to be beneficial to this process. Ideally, for every case with a missing value for the ratio, we would have liked to find a set of cases with complete data that shared the same characteristics as the case with missing values and impute the missing value of the ratio with the mean of the ratio for those comparison cases. In practice, the dataset was too small to allow such an approach, but the regression tree method provided a good approxima-

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19 A regression tree is a piecewise constant function estimated from data by recursively partitioning the covariate space. Starting with the complete dataset, the tree-fitting algorithm first partitions the covariate space into two subsets on the basis of the values of a single predictor. For example, if the total amount of economic losses claimed and gender are two of the covariates, the tree might split the dataset into two partitions, one with observations with the total amount of claimed economic loss being less than $247,500 and the other with observations with total amount of claimed economic loss being greater than $247,500, or the tree might split the dataset into male and female subsets. The mean of the ratios within each partition is the predicted outcome for the group, and the groups are chosen to minimize estimation error. More precisely, the partitioning rules or splits are chosen to minimize the residual sum of squares. Eligible splits can occur between any observed values of any of the input variables. Each of these partitions is then further divided into two new partitions. The covariate space is now partitioned into four groups defined by the product of the two splits. The number of splits required to define the final partitions is referred to as the depth of the tree. Splitting continues recursively until the tree reaches the allowable depth. The depth of the tree determines the complexity of the tree with each additional split allowing for additional interactions between variables. Additional details on regression trees can be found in Breiman et al., 1984.

20 For more information on how regression trees deal with this type of missing value, see Therneau and Atkinson, 1997, Section 5.2.
Methodological Challenges

The regression tree “learns” about the relationship between the ratio and the other case characteristics and finds groups of cases that have similar values with such characteristics and predicts the value of the ratio for such a group by using the mean of the ratio of the cases in that group.

**Method for Injury Claims**

In our sample, there were 225 plaintiffs who received a non-zero award in a case that did not involve a death claim: 202 claimed direct injuries and 23 claimed a loss of consortium. Because none of the records with missing non-economic damage amounts involved spousal consortium claims, we performed our imputation using only those plaintiffs claiming direct injuries. In this group, 63 plaintiffs had incomplete information about the breakdown of the economic and non-economic damages awarded by the jury, while the remaining 139 plaintiffs had reliable numbers for both types of awards.

We fit the regression tree using the recursive partitioning algorithm *rpart* as implemented in the “R” statistical package. We included the following variables to fit the regression tree:

- Age of the plaintiff
- Whether the plaintiff claimed a continuing disability as a result of the injury
- The total amount of the “specials” being claimed (i.e., the total amount of past and future actual and estimated “out-of-pocket” expenditures that were presented to the jury as compensable losses)
- The types of injuries claimed by the plaintiff (including brain damage, cancer, burns, paralysis, or emotional/psychological injury)
- The types of events claimed to be the basis of the medical malpractice (including a failure to treat or diagnose, a failure to order tests or monitoring, unnecessary surgery or other unnecessary treatment, a failure to refer a patient to a specialist, obstetrics-related treatment, anesthesia-related treatment, or errors in diagnosis).

The variables listed above were chosen after reviewing various case and party characteristic data fields found in ICJ’s Jury Verdicts Coding Project data (see Chapter Two), which we believed could help in explaining the outcome of interest in these trials. We verified that our intuition was correct primarily through graphics such as box plots of the ratio of economic damages versus total damages for categorical vari-

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21 See, e.g., Therneau and Atkinson, 1997.

22 We created a dummy variable that assumed a value of 1 if the plaintiff was 17 years old or younger, and a value of 0 otherwise.
ables and scatter plots of the ratio versus one of the chosen covariates for continuous variables.

The use of graphical displays instead of more formal tests was dictated by the fact that, as we already mentioned, the ratio is not normally distributed and, hence, the usual tests are not applicable in this context. As an alternative, we could have used non-parametric tests based on ranks, for example, but the graphical displays seemed to offer strong evidence in favor of the association between the ratio and the covariates we considered. For example, the amount of economic damages awarded was assumed to be strongly associated with the total amount of the “specials” claimed by the plaintiff. Indeed, for some cases, the amount of specials claimed was almost a perfect predictor of the economic damages awarded.\textsuperscript{23} When it is not a perfect predictor, the severity of the injury and the age of the plaintiff appeared to help in predicting the amounts of damages awarded by the jury. For example, we expect that a young working adult that has suffered a severe brain injury and whose disability would interfere with many decades of employment will claim a large amount of economic damages, and at a trial in which liability for such an injury has been proven, the jury will likely award a similar large amount as the claimed economic losses for past and future economic loss.

The final regression tree partitioned the complete data into five groups using the initial set of variables described above. The final set of variables that defined each of the groups included the total amount of claimed economic losses, whether disability was claimed, and whether the plaintiff incurred a brain injury. The five mutually exclusive and exhaustive groups were as follows:

1. The total amount of “specials” claimed was less than $90,240 or the information about the “specials” claimed was missing and disability was not claimed.\textsuperscript{24}
2. The total amount of “specials” claimed was greater than or equal to $90,240, but less than $247,500.\textsuperscript{25}

\textsuperscript{23} For this particular variable, we performed a formal test in which we fitted a linear regression of the logarithmic transformation of amount awarded for economic damage on the logarithmic transformation of the amount of economic losses claimed. The estimate of the linear coefficient or slope was 1.00, and it was significantly different from zero with a p-value less than 0.01.

\textsuperscript{24} As explained above, the regression tree can handle missing data at the predictor level. For the cases within this grouping, the fact that the amount of “specials” claimed is missing is significant in that it suggests that a missing value for this variable really means that no “specials” were claimed by the plaintiff and that $0 were awarded by the jury as special damages. So while this result might seem to be surprising, it has a very simple explanation. A missing amount of “specials” claimed is a likely surrogate for a zero amount of “specials” claimed (91 cases fell in this group of which 36 had a missing ratio of economic damages to the total amount awarded. The mean ratio for this group was 0.13, and the standard deviation was 0.19.

\textsuperscript{25} Eighteen cases fell into this group, of which eight had missing ratios. The mean ratio for this group was 0.35 and the standard deviation was 0.12.
3. The total amount of “specials” claimed was greater than or equal to $2,167,500 and the plaintiff did not have a brain injury, or the total amount of “specials” claimed was greater than or equal to $247,500 and the plaintiff had some type of brain injury.26

4. The total amount of “specials” claimed was greater than or equal to $247,500 but less than $2,167,500 and the plaintiff did not have a brain injury, or the information about the “specials” claimed was missing while full disability was claimed.27

5. The total amount of “specials” claimed was greater than or equal to $247,500 but less than $2,167,500 and the plaintiff did not have a brain injury and partial disability was claimed, or the information about the “specials” claimed was missing and partial disability was claimed.28

By using the fitted tree, we predicted the missing ratio for the 63 injury cases with undifferentiated compensatory awards. Every case with missing information fell into one of the five groups. The fraction of an award that was for economic losses was estimated using the mean ratio for the cases falling into the same group for which both non-economic and economic damage awards were reported. We also estimated the uncertainty about each imputed value using the standard deviation of the ratio for the records falling into the same group.

**Method for Death Claims**

Our dataset contained 62 instances in which a plaintiff29 claimed that the malpractice resulted in a fatality and in which the jury awarded monetary damages for the claim. For 13 of these 62 records, we know only the sum of the economic damage and non-economic damage awards.

Death records differ in a number of ways from injury records. Compared with most injury cases, for example, the mean awards for economic damages in death cases are smaller, and non-economic damages tend to make up a larger share of the total amounts awarded by juries. We analyzed death records separately, although we used a method to impute the missing data that was similar to the method used on injury data.

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26 Thirty-four cases fell into this group, of which seven had missing ratios. The mean ratio for this group was 0.81 and the standard deviation was 0.16.

27 Fifteen cases fell into this group, of which three had missing ratios. The mean ratio for this group was 0.47 and the standard deviation was 0.27.

28 Forty-three cases fell into this group, of which nine had missing ratios. The mean ratio for this group was 0.27 and the standard deviation was 0.28.

29 As elsewhere in this document, the term “plaintiff” in death cases refers to both the decedent and the combined claims of the estate, survivors, beneficiaries, dependents, and others.
After an exploratory analysis, we found that the variables that help to predict the ratio of the economic damage award to the total amount awarded by the jury were as follows:

- Whether or not the plaintiff was an adult between 30 and 67 years of age
- Gender
- The total amount of claimed (past and future) economic losses
- Whether the medical malpractice involved a failure to treat or diagnose or involved a failure to order tests or monitoring.

After the initial testing, the final regression tree for death cases partitioned the complete dataset with respect to the total amount of specials and the decedent’s age, thus resulting in the classification of the 49 records with complete information in these three mutually exclusive and exhaustive groups:

1. The plaintiff claimed a total amount of specials that was greater than $550,000.  
2. The plaintiff claimed a total amount of specials that was less than $550,000, and he or she was between 30 and 67 years of age at the time of death.  
3. The plaintiff claimed a total amount of specials that was less than $550,000, and he or she was not an older adult at the time of death.

As we did with the injury cases, we predicted the missing ratio for each of the 13 death cases by using the mean ratio in the appropriate class derived from comparable cases within the same class that had complete information.

**Sensitivity of Award Imputation on Findings**

It is helpful to compare the results of our analysis that used imputed data with what we would have estimated had we dropped those 75 verdicts as other studies have done (as discussed earlier in this section). Tables C.1 through C.6 present such comparisons and include our analysis with and without the imputed missing data in regard to a $250,000 cap on non-economic damages.

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30 Eleven cases fell into this group, of which one had a missing ratio. The mean ratio for this group was 0.62 and the standard deviation was 0.19.

31 Thirty-one cases fell into this group, of which seven had missing ratios. The mean ratio for this group was 0.25 and the standard deviation was 0.21.

32 Twenty cases fell into this group, of which five had missing ratios. The mean ratio for this group was 0.07 and the standard deviation was 0.12.
**Table C.1**
Percentage Difference Between Aggregate Original Verdicts and Final Judgments

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>With Imputed Data</th>
<th>Without Imputed Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases</td>
<td>–29.7%</td>
<td>–27.4%</td>
</tr>
<tr>
<td>Injuries only</td>
<td>–25.5%</td>
<td>–21.5%</td>
</tr>
<tr>
<td>Deaths only</td>
<td>–51.0%</td>
<td>–52.4%</td>
</tr>
</tbody>
</table>

**Table C.2**
Percentage of Plaintiff Verdicts in Which Original Non-Economic Damage Award Exceeded the Cap

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>With Imputed Data</th>
<th>Without Imputed Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases</td>
<td>45.1%</td>
<td>50.6%</td>
</tr>
<tr>
<td>Injuries only</td>
<td>41.0%</td>
<td>45.9%</td>
</tr>
<tr>
<td>Deaths only</td>
<td>58.1%</td>
<td>63.3%</td>
</tr>
<tr>
<td>Catastrophic injuries only</td>
<td>63.3%</td>
<td>56.5%</td>
</tr>
</tbody>
</table>

**Table C.3**
Average Size of Final Judgment

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>With Imputed Data</th>
<th>Without Imputed Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases</td>
<td>Mean: $1,150,000</td>
<td>Mean: $1,354,000</td>
</tr>
<tr>
<td></td>
<td>Median: $293,000</td>
<td>Median: $337,000</td>
</tr>
<tr>
<td>Injuries only</td>
<td>Mean: $1,334,000</td>
<td>Mean: $1,624,000</td>
</tr>
<tr>
<td></td>
<td>Median: $293,000</td>
<td>Median: $337,000</td>
</tr>
<tr>
<td>Deaths only</td>
<td>Mean: $556,000</td>
<td>Mean: $623,000</td>
</tr>
<tr>
<td></td>
<td>Median: $291,000</td>
<td>Median: $372,000</td>
</tr>
</tbody>
</table>

NOTE: Dollar amounts are rounded to the nearest thousand.

**Table C.4**
Average Size of Non-Economic Damage Award Reduction, Capped Cases Only

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>With Imputed Data</th>
<th>Without Imputed Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases</td>
<td>Mean: $1,079,000</td>
<td>Mean: $1,010,000</td>
</tr>
<tr>
<td></td>
<td>Median: $366,000</td>
<td>Median: $367,000</td>
</tr>
<tr>
<td>Injuries only</td>
<td>Mean: $1,116,000</td>
<td>Mean: $973,000</td>
</tr>
<tr>
<td></td>
<td>Median: $286,000</td>
<td>Median: $287,000</td>
</tr>
<tr>
<td>Deaths only</td>
<td>Mean: $996,000</td>
<td>Mean: $1,084,000</td>
</tr>
<tr>
<td></td>
<td>Median: $459,000</td>
<td>Median: $460,000</td>
</tr>
</tbody>
</table>

NOTE: Dollar amounts are rounded to the nearest thousand.
Table C.5
Difference in Aggregate Attorney Fees Under MICRA Compared with Fees in a System Without Caps or Fee Scales

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>With Imputed Data</th>
<th>Without Imputed Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases</td>
<td>−60.1%</td>
<td>−59.5%</td>
</tr>
<tr>
<td>Injuries only</td>
<td>−59.1%</td>
<td>−57.8%</td>
</tr>
<tr>
<td>Deaths only</td>
<td>−64.7%</td>
<td>−66.7%</td>
</tr>
</tbody>
</table>

Table C.6
Difference in Aggregate Net Recoveries (Judgment less Fees) Under MICRA Compared with Recoveries in a System Without Caps or Fee Scales

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>With Imputed Data</th>
<th>Without Imputed Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases</td>
<td>−14.6%</td>
<td>−11.3%</td>
</tr>
<tr>
<td>Injuries only</td>
<td>−8.7%</td>
<td>−3.4%</td>
</tr>
<tr>
<td>Deaths only</td>
<td>−44.1%</td>
<td>−45.3%</td>
</tr>
</tbody>
</table>

Although there are some differences in the results when only the cases with complete award information are used, our core findings are essentially unchanged regardless of whether missing award values are imputed or dropped: (1) Defendants benefit substantially following modification of the jury’s verdict as a result of the MICRA cap (see Table C.1); (2) about half of all verdicts for plaintiffs involve MICRA award reductions (see Table C.2); (3) in such cases, the reductions typically involve hundreds of thousands of dollars (see Table C.3); (4) as a result of the award cap and sliding-scale fees, aggregate fees following trial are reduced by about 60 percent as compared with aggregate fees in a non-MICRA environment (see Table C.5); and (5) aggregate net recoveries for plaintiffs with injuries are very similar to what they might be in a “non-MICRA” environment, although in death cases a substantial reduction in recoveries is seen despite limits on attorney fees (see Table C.6).
Bibliography


Schiff, Adam B., Chairman, Senate Judiciary Committee, “Analysis of AB 1390 (MICRA: Cap of Noneconomic Damages),” 1999–2000 Regular Session, State Senate of California,


