

THE LARGE COST SAVINGS AND OTHER ADVANTAGES
OF AN EARLY OFFER "CRIMTORTS" APPROACH TO
MEDICAL MALPRACTICE CLAIMS*

Jeffrey O'Connell**

I. EXECUTIVE SUMMARY

Many observers have concluded that the medical malpractice litigation system needs improvement.¹ Medical malpractice cases are extremely complicated, requiring proof of injury, proof of the health care provider's fault,² and determination of economic and noneconomic damages.³ Some claimants who are injured through medical error receive significant awards or settlements, but often after long delay.⁴ In addition, the current system entails transaction costs, such that substantial shares of the medical malpractice insurance premium dollars go for litigation expenses and insurer

* This article is adapted, with permission, from the *Journal of Legal Studies* and Joni Hersch, Jeffrey O'Connell & W. Kip Viscusi, *An Empirical Assessment of Early Offer Reform for Medical Malpractice*, 36 (2) J. LEGAL STUD. S231 (2007). It is also adapted, with permission, from a report submitted to the U.S. Department of Health and Human Services ("HHS") through the Lewin Group, by JONI HERSCH, JEFFREY O'CONNELL & W. KIP VISCUSI, EVALUATION OF EARLY OFFER REFORM OF MEDICAL MALPRACTICE CLAIMS: FINAL REPORT 1 (2006), available at <http://aspe.hhs.gov/daltcp/reports/2006/medmalcl.pdf>. Unlike the *Journal of Legal Studies*' article and the HHS report, this Widener Crim torts Symposium article is contributed by Jeffrey O'Connell alone, and he bears sole responsibility for it. But he is grateful for the skilled research assistance of Suraj Balusu, University of Virginia School of Law, Class of 2009. Note that the content of this publication does not necessarily reflect the views or politics of HHS, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

** The Samuel H. McCoy II, Professor of Law University of Virginia; B.A., Dartmouth College, 1951; J.D., Harvard University, 1954.

¹ PAUL C. WEILER, MEDICAL MALPRACTICE ON TRIAL 1-18 (1991).

² DON DEWEES ET AL., EXPLORING THE DOMAIN OF ACCIDENT LAW: TAKING THE FACTS SERIOUSLY 100 (1996).

³ WEILER, *supra* note 1, at 54.

⁴ DEWEES ET AL., *supra* note 2, at 117.

overhead.⁵ Although many states have enacted medical malpractice litigation system reforms, such as caps on the amount of noneconomic damages, other reforms may have a more fundamental effect on medical malpractice litigation than these reforms.⁶ This article analyzes one specific alternative proposal, referred to as "early offers," by assessing its performance using a database of actual malpractice claims.⁷

The early offers plan proposed herein is a "Crimtorts"⁸ reform that provides a structured process for resolving medical malpractice cases not involving quasi-criminal misconduct shortly after they have been filed. If the defense chooses to do so, it may make a statutorily defined prompt financial offer, which the claimant can accept or reject. To comply with the early offer statute, the offer must completely cover the claimant's economic damages plus appropriate attorneys' fees. If the offer is rejected, the claimant's burden of proof at any subsequent trial is similar to a criminal prosecution, that is, evidence of egregious misconduct must be proven beyond a reasonable doubt. If the defense does not make an offer, the current system applies.

The basic goal of the early offer approach is to improve the performance of the system. For claimants, the advantage of the approach is that if they accept the offer, they are assured, within six months after filing a claim, of compensation for their economic damages instead of waiting years for any possible payment from the time of the claim that cases now require. For insurers and providers, if the offer is accepted, the damages amount paid is generally less than under the present tort system. Litigation expenses will be less, both for claimants and defendants. For claimants, defendants, and insurers, the early offer proposal reduces the uncertainty associated with the outcome of a prolonged litigation. But for cases inappropriate for such an expedited approach, the full panoply of corrective justice with quasi-criminal standards, is available.

⁵ WEILER, *supra* note 1, at 139.

⁶ *See id.* at 26-31.

⁷ JONI HERSCH, JEFFREY O'CONNELL & W. KIP VISCUSI, EVALUATION OF EARLY OFFER REFORM OF MEDICAL MALPRACTICE CLAIMS: FINAL REPORT 1 (2006), *available at* <http://aspe.hhs.gov/daltcp/reports/2006/medmalcl.pdf>.

⁸ *Id.*

A. Data

This article is a variant of an article by the author and co-authors, Kip Viscusi and Joni Hersch, now at the Vanderbilt Law School, in the *Journal of Legal Studies* ("JLS"),⁹ following a report to the United States Department of Health and Human Services ("HHS").¹⁰ The JLS and HHS pieces use medical malpractice data on closed claims from Texas (plus some from Florida) to assess the performance of the early offer proposal. The primary analyses use the data provided by the Texas Department of Insurance because of their greater comprehensiveness.¹¹ The analyses report uses malpractice data from Florida data to impute data not included, or with incomplete information, in the Texas files. The Texas data are from the time period 1988-2002, before Texas modified its medical malpractice law in 2003, which significantly limited the award of noneconomic damages.¹² Thus the data reflect the potential operation of an early offer law in a state without caps on noneconomic damages.¹³

The Texas data involve all claims that were closed for an award or settlement greater than \$10,000. The data document that most claims are settled, with fewer than one percent of the settlements or awards the result of trial verdicts. The distribution of closed claims is highly skewed. One percent of the claims involve awards or settlements greater than \$5 million,¹⁴ and ten percent are greater than \$1 million,¹⁵ but thirty-eight percent of the awards or settlements are between \$10,000 and \$100,000.¹⁶ The median

⁹ Joni Hersch, Jeffrey O'Connell & W. Kip Viscusi, *An Empirical Assessment of Early Offer Reform for Medical Malpractice*, 36 (2) J. LEGAL STUD. S231 (2007).

¹⁰ HERSCH ET AL., *supra* note 7, at 1.

¹¹ See Neil Vidmar et al., *Uncovering the "Invisible" Profile of Medical Malpractice Litigation: Insights from Florida*, 54 DEPAUL L. REV. 315, 319-22 (2005).

¹² TEX. CIV. PRAC. & REM. CODE ANN. § 74.301 (Vernon 2005). Such statutory limits on noneconomic damages are common. FRANK A. SLOAN ET AL., *MEDICAL MALPRACTICE* 107-34 (2008).

¹³ HERSCH ET AL., *supra* note 7, at 2. For more on the data base, *see id.* at 6, 16-17.

¹⁴ Hersch et al., *supra* note 9, at app. tbl.A3 (\$5,000,000 – 1.04 percent).

¹⁵ *Id.* (\$1,000,000 - \$5,000,000 – 9.28 percent).

¹⁶ *Id.* (\$10,000 - \$100,000 – 37.90 percent).

closed claim has a settlement amount or court award of \$156,707.¹⁷ Thirty-three percent of the closed claims involve the death of the victim¹⁸ and an additional fourteen percent involve severe nonfatal injuries.¹⁹

The average, as opposed to the median, claim involves a settlement or award of \$458,000,²⁰ of which just twenty-eight percent alone represents economic loss. Only three percent of cases involve a claim for punitive damages,²¹ with the average settlement or award in those cases being \$1,190,000,²² of which twenty-one percent is for economic loss.²³ These are the cases where an early offer is more likely to be rejected and therefore quasi-criminal standards will apply. Another four percent of cases involve an average settlement or award of \$404,000, but no economic loss.²⁴ The vast majority of cases (ninety-seven percent)²⁵ that do not involve claims for punitive damages have an average settlement or award of \$434,000²⁶ and an estimated economic loss of only \$124,000²⁷ (once again twenty-eight percent of the settlement or award).²⁸ The settlement or award includes claimant's attorney fees, normally set at one-third of any payment.

In the May 11, 2006 issue of the *New England Journal of Medicine* authors David Studdert and Michelle Mello and their colleagues reported on a closed-claims study of medical malpractice claims.²⁹ In addition to findings that dispute the widespread existence of nuisance claims, that is, manifestly invalid ones, their principal findings were that generally speaking the

¹⁷ HERSCH ET AL., *supra* note 7, at app. A.

¹⁸ Hersch et al., *supra* note 9, at app. tbl.A2 ("Fatality" – 33.14 percent).

¹⁹ *Id.* ("Serious Injury" – 13.97 percent).

²⁰ *Id.*

²¹ *Id.* at app. tbl.A1 ("Exemplary Damages Reported – N521 – 3.17 percent).

²² *Id.* at tbl.2.

²³ *Id.*

²⁴ Hersch et al., *supra* note 9, at tbl.2 (645 ÷ 16, 347 = 3.9 percent).

²⁵ *See id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.* (124 ÷ 434 = 28 percent).

²⁹ David M. Studdert et al., *Claims, Errors, and Compensation Payments in Medical Malpractice Litigation*, 354 NEW ENG. J. MED. 2024 (2006).

resolution of medical malpractice claims leads to the right result, if admittedly with many exceptions (over one-quarter when the outcome is wrong).³⁰ But even seeing the system in the best overall light, the study found that it takes far too long—on average five years from the occurrence, with one in three claims taking six or more years.³¹ Just as condemnatory, the study found the system chews up far too much in overhead costs, principally legal fees on both sides, amounting to more than half (fifty-four percent) of any compensation paid.³²

Even if the system was getting things right much more than it is, such long delays and huge transaction costs cry out for drastic change. In the words of the Studdert study, "Substantial savings depend on reforms that improve the system's efficiency in the handling of reasonable claims for compensation."³³

It is just such a change that this article proposes and purports to substantiate by the closed-claim study reprised below.

B. Methodology

The early offer proposal is a legal reform approach designed to provide prompt coverage of claimants' net economic losses and to reduce litigation costs. Under the early offer proposal for medical malpractice claims, liability insurers for health care providers (hereafter referred to as insurers and providers) have the option within 180 days after a claim is filed of making an offer, binding on claimants, of paying periodic payment equal to their net economic loss (*i.e.*, the loss beyond any other insurance applicable to the claim), plus reasonable legal fees, but nothing for pain and suffering damages. If the claimant does not accept this offer, the claimant can proceed with a normal tort claim for both economic and noneconomic damages, but as indicated above the legal standards of both the burden of proof and level of misconduct applied to the claim would be raised, with the claimant having to prove the defendant grossly negligent beyond a reasonable doubt. If the defense makes no early offer, the current tort system applies

³⁰ Studdert et al., *supra* note 29, at 2031.

³¹ *Id.*

³² *Id.*

³³ *Id.*

with its possibility of recovery for both economic and noneconomic loss.

Insurers would decide whether to make an early offer by comparing the cost of the early offer to their expected cost under normal tort rules if the claim is not settled under the early offer proposal. This expected cost would equal the net economic damages (medical expense and wage loss but, as stated, not pain and suffering) plus an allowable payment of the claimant's lawyers, which as an illustrative calculation can be presumed in the early offers statute to be ten percent of the value of the early offer. That is, the insurer will make an offer if the expected liability and litigation costs of the claim is not settled under the early offer proposal and are greater than the net economic damages and allowable claimant's legal fees.

Thus, the insurer will make an early offer when the amount of the early offer is less than the insurer's expected exposure from a full-scale tort claim. This formulation assumes that insurers act in a rational economic manner and are risk-neutral. This report emphasizes the amounts that would be saved from early offers, since such savings are a prerequisite to making early offers. But such savings by no means necessarily imply losses to claimants of an identical magnitude. Some of the savings are in terms of lowered transactions costs, such as attorneys' fees, which will be substantially reduced. Although claimants lose their normal recourse to full-scale tort litigation, such litigation has inherent uncertainties and delays, with transaction costs, including legal fees, which claimants must deduct from any payment. Under the early offer proposal, claimants lose any rights only after they are guaranteed prompt payment of medical expenses and wage losses, plus reasonable attorneys' fees.

Calculation of potential savings from the early offer reform requires a reference point for the computations. Three different points are possible using the Texas data: the insurer's initial reserve set aside for payment of the claim, its final reserve (just before settlement), and the ultimate settlement or award. Both initial and final reserves include estimated defense attorneys' fees, but the final reserve may be the most useful reference point because it is calculated at a point when more is known about the actual settlement or award and about actual defense attorneys' fees. But

the savings computed from this reference point involve several key assumptions. Most notably, it more heavily relies on hindsight that the defense's later reserve can *ex ante* correctly estimate the expected *ex post* value of the claim. An alternative reference point is the initial reserve. Being made much earlier, this point is less marred by hindsight, but proved less useful in the analyses in that many insurers typically underestimate this amount, making an early offer less likely.

C. Some main results

If the insurer's final reserve is the appropriate reference point for computing savings, the early offer reform could indeed generate even more impressive savings than with the initial reserve (though the latter are still impressive, as will be seen later). For claims measured by the final reserve where an early offer is desirable for the insurer, the average insurer savings are \$556,000;³⁴ overall, insurers would find it desirable to make an early offer in ninety-seven percent of the cases where payment is now made.³⁵

The savings mainly come from eliminating noneconomic (pain and suffering) damages supplemented by reduced legal fees. The early offers regime is projected to save an average of approximately \$136,000³⁶ in legal expenses in all cases and \$334,000³⁷ in cases of severe injury. Claims would also be paid over two years earlier than with present law.³⁸ Although, the extent to which these savings would be passed on through lower malpractice insurance premiums is unknown, assuming a competitive marketplace one certainly could expect that to happen.

The HHS report contains additional information on the early offer reform, including the likely results based on initial reserves and verdicts, and by type of injury (fatality, severe injury, etc.).³⁹ The report also explores the effect of setting minimum amounts for

³⁴ See *infra* app. 1.

³⁵ Hersch et al., *supra* note 9, app. tbl.A1.

³⁶ *Id.* at tbl.5.

³⁷ *Id.*

³⁸ *Id.* at tbl.4.

³⁹ HERSCH ET AL., *supra* note 7, at 12-15.

cases of severe injury or death.⁴⁰ A minimum of, say, \$250,000 would often result in higher payments to the claimant than under the basic early offer computations. But, the higher the minimum offer, the less likely the insurer would be to make an offer, therefore reducing the savings from the reform, and leaving more cases to the uncertainties and expense of further adversarial proceedings.

D. Early summary

Based on the above assumptions, the early offer reform could lead to insurer savings and speedy resolution of many cases if it were adopted. The main benefit to the claimant of the early offer reform is that if an offer is made and accepted, claimants receive assurance of payment that covers their net economic losses approximately six months after the claim is filed. In a conservative estimate, for the average case, payment will be received approximately two years sooner than from filing a claim under the current system.

The disadvantage to the claimant of accepting the early offer is that the possibility of receiving noneconomic damages is eliminated. Since noneconomic damages often involve greater sums than economic damages, this loss is admittedly significant.

II. THE EARLY OFFER PROPOSAL

As indicated, the early offer proposal is a legal reform approach designed to encourage prompt coverage of claimants' net economic losses and to reduce litigation costs. Insurers would decide whether to make an early offer by comparing the cost of the early offer to their expected cost under normal tort rules if the claim is not settled under the early offer proposal; this expected cost would equal the net economic damages (medical expense and wage loss but not pain and suffering) plus an allowable payment of the claimant's lawyers, which as an illustrative calculation is presumed to be ten percent of the value of the early offer. That is the insurer will make an offer if its expected liability and litigation

⁴⁰ HERSCH ET AL., *supra* note 7, at 12-15.

costs under normal tort law are greater than the claimant's net economic damages plus the allowable claimant's legal fees.

In keeping, then, with an assumption that insurers act in a rational economic manner, the insurer will make an early offer when the amount of the early offer is less than the insurer's expected exposure from a full-scale tort claim. Note that this formulation assumes that insurers are risk-neutral. Throughout this report we emphasize the amounts that would be saved by insurers by making early offers, since such savings are a prerequisite to making early offers. But savings to insurers do not necessarily imply losses to claimants of an identical magnitude. Some of the savings come from lowered transactions costs, as attorneys' fees will be reduced. Although claimants lose their normal recourse to full-scale tort litigation, such litigation has inherent uncertainties, delays, and transaction costs imposed on the claimants, wholly apart from the legal fees. In addition, under the early offer proposal, claimants lose any rights only after they are guaranteed prompt payment of medical expenses and wage losses, plus reasonable attorneys' fees.

Early offer proposals can differ in several key points: the percentage share of the award allocated for the claimant's legal expenses, the existence of an offset for payments from other insurance applicable to the claimants, that is, collateral sources, and the presence of a minimum payment level for different classes of injuries. The HHS report examines a base case early offer proposal and explores some representative sensitivity analyses, recognizing that the analysis does not exhaust all potentially attractive variants of the early offer approach.

The HHS report uses Texas and Florida medical malpractice data on closed claims to assess the performance of the early offer proposal. The primary analyses use the Texas data because of their greater comprehensiveness, but we also used the Florida data to impute data not included, or with incomplete information, in the Texas files. The Texas data are from the time period 1988-2002, before Texas modified its medical malpractice law in 2003 by, among other things, limiting noneconomic damages to \$500,000.⁴¹ The effect of such modifications on post-2002 Texas cases is

⁴¹ TEX. CIV. PRAC. & REM. CODE ANN. § 74.301 (Vernon 2005).

beyond the review of this study. Note too pertinent data used herein is based on the final award or settlement actually paid, whether by settlement, trial, or appellate decision.

The empirical analysis used here is structured by considering issues in the following order. First described is the calculation of the components of the early offer proposal: namely, the insurer's reserve set aside to pay the claim, as calculated both early and later in the claims process; the actual settlement amounts and court awards; and the claimant's economic losses. Then calculations are made of both the number of cases for which an early offer is attractive to the insurer as well as the average insurer savings if an early offer were in fact made and accepted. The calculations reported here are performed by analyzing the data by injury type, *e.g.*, fatality, severe, or lesser injury. (Not reported here are data, collected in the original HHS study and appearing in the *Journal of Legal Studies*, arranged by type of damages, for example, whether exemplary damages were claimed, whether only noneconomic damages were claimed, and whether both noneconomic and economic, but not punitive, damages were claimed.)⁴² The empirical assessment also examines alternative assumptions to include the effect of (a) \$100,000, (b) \$250,000, or (c) \$500,000 minimum payment amounts for deaths and severe injuries. Also calculated is how much time is saved if an early offer is made and accepted for each of these alternative specifications. In addition, the effect on litigation cost savings, which consist mostly of attorneys' fees, for both claimants and insurers is examined.

Throughout, all dollar values are adjusted to the dollar value of 2002 using the Consumer Price Index for All Urban Consumers.⁴³

⁴² Hersch et al., *supra* note 9.

⁴³ Adjustments to the dollar value of 2007 are noted *infra* note 62. Note also standard statistical terms are used throughout the HHS report. For convenience, the definitions of these terms are as follows. The sample mean, also called the average, is calculated by summing the data values and dividing by the total number of data values. The median is the value at which half the data values are larger than the median and half are smaller than the median. See Hersch et al., *supra* note 9, at app.

III. EARLY OFFERS AND THE MEDICAL MALPRACTICE CONTEXT

A. The medical malpractice context

Section III presents some of the main criticisms of current medical malpractice law.⁴⁴ They are reviewed here to identify both the impetus for reform proposals as well as the role that the early offer proposal discussed herein can play in addressing these criticisms. Section III goes on to relate the early offer proposal studied in this report to the medical malpractice reform debate. Section IV then presents the financial effects of such a reform.

As stated above in the Executive Summary, many observers view the current system of tort liability for personal injury as unworkable and in need of fundamental reform.⁴⁵ A claimant must prove not only the defendant's fault, but the economic value of noneconomic damages, mostly for pain and suffering.⁴⁶ In medical malpractice cases, isolating fault is often especially complicated, given the intricacies of medical decisions, the varied consequences of medical interventions and their interaction with the underlying characteristics of each patient.⁴⁷ Thus, the system is subject to uncertainties that allow many injured patients to receive comparatively little whereas comparably injured others receive much more than their economic losses.⁴⁸ One earlier finding

⁴⁴ They are adapted from Jeffrey O'Connell, *Statutory Authorization of Nonpayment of Non-economic Damages as Leverage for Prompt Payment of Economic Damages in Personal Injury Cases*, 71 TENN. L. REV. 191, 191-95 (2003). For a brief presentation of the inadequacies of current medical malpractice law, see Jeffrey O'Connell & Andrew S. Boutros, *Treating Medical Malpractice Claims Under a Variant of the Business Judgment Rule*, 77 NOTRE DAME L. REV. 373, 374-83 (2002). Two recent works, while purporting to rebut criticisms of medical malpractice law, nonetheless acknowledge its inadequacies in proposing substantial reforms, in the first instance even proposing a variant of early offers to reduce exposure to pain and suffering damages. See TOM BAKER, *THE MEDICAL MALPRACTICE MYTH* 90, 163-64, 172-74 (2005); David A. Hyman & Charles Silver, *The Poor State of Health Care Quality in the U.S.: Is Malpractice Liability Part of the Problem or Part of the Solution?*, 90 CORNELL L. REV. 893, 986-87, 992 (2005).

⁴⁵ WEILER, *supra* note 1.

⁴⁶ See *id.*; DEWEES ET AL., *supra* note 2.

⁴⁷ WEILER, *supra* note 1, at 52-54.

⁴⁸ *Id.* at 13-14.

indicated that only 28 cents of the medical malpractice premium reach claimants, and of that, only 12.5 cents compensates for the actual economic losses suffered by patients, with the rest going elsewhere.⁴⁹ All this uncertainty thus generates substantial transaction costs (mostly legal fees on both sides, documented in this report) and long delays in any payment that is made (usually measured in years, also documented in this report).⁵⁰ In the end, liability insurance does not lead to prompt payment to many needy victims; rather, it leads to prolonged, unpredictable, expensive fights over whether claimants are deserving and, if successful, what payment they deserve—a system that most often operates to the detriment of both health care professionals and injured patients, especially severely injured patients.⁵¹

The early offer reform addresses the main shortcomings of the current system. Before considering the benefits of early offers, it is useful to review their structure. Under such an approach, a defendant has the option (not the obligation) to offer an injured patient, within 180 days after a claim is filed, periodic payment of the claimant's net economic losses as they accrue. Economic losses under an early offer statute must cover medical expenses, including rehabilitation plus lost wages, to the extent that all such costs are not already covered by other insurance ("collateral sources"). An additional ten percent attorney's fee for the claimant's attorney must also be included. Therefore, a defendant cannot make a lesser or "low ball" offer and still be covered by the statute. Nor is there any need for a court to determine whether the early offer is fair. The early offer statute defines the fairness of the offer, similar to a workers' compensation statute for workplace accidents.

If an early offer is made and accepted, that, of course, settles the claim. If the defendant decides not to make an early offer, the injured patient can proceed as now with a normal tort claim for medical expense and wage loss plus pain and suffering. Alternatively, if the claimant declines an early offer in favor of litigation, (1) the level of misconduct is raised, allowing payment

⁴⁹ Jeffrey O'Connell, *An Alternative to Abandoning Tort Liability*, 60 MINN. L. REV. 501, 506-09 (1976).

⁵⁰ *E.g.*, Hersch et al., *supra* note 9, at tbl.4.

⁵¹ WEILER, *supra* note 1, at 13.

only where "gross negligence" is proven; and (2) the standard of proof is also raised, requiring proof of such misconduct beyond a reasonable doubt (or at least by clear and convincing evidence).

Consider a typical case to illustrate how the early offer law would work: A patient has been injured in the course of treatment. If the patient wins in court, she would be awarded \$1 million, but given the risks of litigation, she has only a fifty percent chance of winning. Roughly calculated, the patient has a claim worth about \$500,000 (fifty percent chance at \$1 million). Assume the cost of setting aside a corpus of money to pay the patient's net economic losses as they accrue is projected at about \$250,000 (an often realistic assumption, as the data below demonstrates). The health care provider's insurer would likely make the early offer, \$250,000 being clearly less than \$500,000. And the patient would likely accept, given that under the early offer proposal the claimant will have the normally insuperable burden of proving the rare case of her doctor being guilty of gross negligence beyond a reasonable doubt.

Now assume a change in the facts: same patient, same health care provider, and the same possible \$1 million verdict. But here assume this patient's chances of winning are only one in ten, with an expected value of \$100,000 (1/10 of \$1 million). Here the defendant's insurer would not make an early offer, \$100,000 being clearly less than \$250,000.

The fear of potentially higher costs to insurers under this early offer scheme is avoided because no defendants need make an offer if they would not do so without this statute, nor can claimants request an early offer to be made. So, defendants will make an offer only when it makes economic sense for them to do so, as shown in the above example.

But won't insurance companies thereby just "cherry pick" claims by making lower payments to clearly deserving claimants? No, because of the uncertainty and cost of determining both liability and pain and suffering damages under present tort law, it is likely, as indicated in Item iv above and the report itself below, that defendants in medical malpractice cases will make prompt early offers in many cases even when liability is unclear.

Note that while injury victims tendered early offers would lose their recourse to full-scale tort litigation, they would reduce their

uncertainty, delays, and transaction costs. Moreover, they would lose their recourse to tort litigation recourse *only* when guaranteed prompt payment of their actual economic losses plus attorney's fees. These prompt and certain payments will be especially advantageous to those severely injured patients whose losses have outstripped any other applicable coverage. Many claimants will, however, receive lower payment amounts unless there is a high minimum payment amount.

But why aren't early offers made now without a new law? Several factors make it unattractive for early offers to be made at present without an early offer statute. Defendants today are often confident of defeating or at least wearing down claimants, given the difficulties and delays in proving a tort claim. The long delay before trial may often enable defendants to bargain down even patients clearly entitled to tort damages because of their need for immediate money for accrued and accruing medical bills and wage loss. Furthermore, defendants may fear that an early offer to settle for claimants' net economic loss will be seen as a signal of weakness and encourage claimants⁵² and their lawyers to seek an even larger settlement than originally sought. Given the nature of bargaining, this mirrors the position of claimants and their lawyers, who similarly fear that an early offer to settle for only economic loss would be deemed an admission of weakness in their cases, resulting in either no payment or less than that otherwise sought.

Early offers will be a viable mechanism only if defendants, not claimants, are allowed to make binding early offers. Claimants and their counsel would lack sufficient incentives to weed out frivolous or nonmeritorious claims if they had the power to unilaterally bind defendants by their claims. This would result in a perverse incentive to exploit the system with marginal claims or worse which would nonetheless be binding on defendants. But defendants, as the parties making payment, when confronted with clearly meritless or very marginal claims will pay nothing and make no early offer, as shown in the example above. On the other hand, when faced with potentially meritorious claims, defendants

⁵² See Jeffrey O'Connell & Evan Stephenson, *Binding Statutory Early Offers by Defendants, Not Plaintiffs, in Personal Injury Suits*, 54 DEPAUL L. REV. 233, 237 (2005).

will have an incentive to explore whether the statutorily-defined early offer involves less expected cost than a full-scale tort suit with all its uncertainty and transaction costs. Thus, only defendants have the appropriate incentives to distinguish carefully between arguably meritorious and clearly nonmeritorious claims in order to reduce costs by promptly paying the required minimum benefits in suitable cases.⁵³

There are also several rationales for why no damages for pain and suffering are included in the early offer reform. The uncertainty of determining both liability and damages for noneconomic damages is the key to understanding the inefficiencies of tort law and to framing a balanced solution that attempts to be fair to both injured patients and health care providers. As stated above, pain and suffering damages are indeterminate and highly volatile.⁵⁴ Under an early offer system, the prospect of paying for pain and suffering damages still serves as a means to deter health care providers' medical mishaps in addition to providing an incentive to make early offers covering injured patients' essential economic losses. Furthermore, these offers will provide prompt crucial compensation to many victims of injuries that accompany the delivery of medical services. In effect, the *threat* of paying damages for pain and suffering, rather than the actual payments, will better serve injured patients as well as the public interest.

Pain and suffering damages also differ from economic damages from the standpoint of insurance. Because accidents and illnesses generally reduce the marginal utility of income, people do not generally find it desirable to purchase pain and suffering insurance as part, say, of their health or disability insurance.⁵⁵ Indeed, no such general insurance market has emerged. In contrast, risk-averse individuals will desire insurance coverage of their economic losses, which is the focal point of the early offer proposal.

⁵³ O'Connell & Stephenson, *supra* note 52, at 38-40.

⁵⁴ WEILER, *supra* note 1, at 139.

⁵⁵ See W. Kip Viscusi, *Pain and Suffering: Damages in Search of a Sounder Rationale*, 1 MICH. L. & POL'Y REV 141 (1996).

Because personal injury claims alone among all other damage claims routinely entail damages for both economic and noneconomic losses, defendants are uniquely positioned not only to make, but also to enforce by early offers, socially attractive settlements for only economic loss. In nonpersonal injury claims, where only economic damages are at stake, no comparably fair means are available to sanction a claimant who refuses to accept an offer of only a portion of the total losses claimed.

A complete no-fault plan for medical injuries does not seem feasible. It is difficult to define in advance when no-fault benefits should be paid for injuries that arise from medical treatment. Under no-fault auto insurance policies, an accident victim is compensated for an injury "arising out of the ownership, maintenance, or use of a motor vehicle." Under workers' compensation laws, an industrial accident victim is compensated for an "injury arising out of, and in the course of, employment." It is not feasible, however, to force all health care providers to pay patients for any and all adverse events arising in the course of medical treatment. It is often impossible to determine whether a patient was injured by the treatment rendered, or whether the adverse condition after treatment was just a normal extension of the condition which prompted treatment in the first place. A health care provider could not be expected to pay every patient whose condition worsens after treatment. So a comprehensive *ex ante* no-fault solution is unworkable. So in turn, when the facts are much better known, a post accident comparison is available of the cost of a tort claim versus the cost of an early offer. The result is a system of early offers that itself offers a uniquely workable, economical, equitable, and simplifying solution to most malpractice claims.

B. Some further operational features of the early offer plan

It is useful to address some questions regarding the time frame for operation of the early offer plan. Is the 180-day period too short a time for the defendant to decide to make an early offer? In general, insurers already compute their initial reserve amounts in a much shorter period, and the preliminary discovery process would be accelerated by the early offer structure. In addition to doing research to decide whether to bring a claim, claimants and their

lawyers can also take their time and press any discovery they deem necessary before responding to any early offer.

As stated above, court approval of the terms of an accepted early offer will no more be required than is court approval of the terms of a workers' compensation case.

There may be later disputes after an early offer settlement regarding what is due periodically as losses accrue in the future such as whether or how the claimant's condition has changed. But that commonly happens under workers' compensation or any major medical/disability policy extending into the future. The parties also might agree to a structured settlement, that is, present estimates which bypass the need for future recalculations of amounts as they are due.⁵⁶ In the case of death, the survivors would be due the amount, if any, that the decedent's earnings would have been expected to provide as support. Note that the Michigan no-fault auto law with its large wage loss coverage extending to the hundreds of thousands of dollars has been able to deal effectively with such matters.⁵⁷

As to the limit on claimant attorneys' fees to ten percent of the value of the early offer, this percentage is based on a comparison of the almost uniform minimum of one-third of the value of a full-scale tort settlement or verdict.⁵⁸

Note further that by definition there will be no trial expenses under early settlements. Note too that the early settlement will also greatly diminish pretrial expenses. It is also pertinent that the ten percent fee for claimant's counsel would be exacted only after deducting any other expenses. Because the Texas data do not provide information on these expenses, it is assumed for purposes of the calculations that they are sufficiently small enough to be ignored in our estimates. If the ten percent fee is manifestly too low because of special circumstances, claimant's counsel can petition the court for an augmentation that will be payable by the early offeror.

⁵⁶ HERSCH ET AL., *supra* note 7, at 11.

⁵⁷ *Id.* at 11-12.

⁵⁸ Thus the offeror's obligation of paying, in addition to claimant's losses, ten percent of those losses to cover claimant's attorneys' fees results in an obligation to pay 1.1 x claimant's economic losses. *See infra* app. 1 tbl.2, at note bb.

As to the defense legal expenses, not all of these will be saved if an early offer is accepted. Some costs will have to be incurred to decide whether to make an early offer. The normal claimant's attorney's legal fee is assumed to be one-third of any tort payment. Thus the presumed early offer payment of ten percent of net economic loss as a claimant's legal costs makes for payment of 10/33 of the tort contingency fee included in the early offer. Using this calculation, it is assumed the fraction 10/33 of defense legal expenses will be incurred in deciding to make the early offer. If the insurer decides not to make an early offer but to litigate the claim, this 10/33 fraction of defense costs plus the remaining 23/33 fraction will be incurred. But if the claim is settled by an early offer, the insurer is assumed to save the 23/33 fraction of legal expenses.⁵⁹

When an early offer makes sense, all the insurers involved in the case, should join together in making the early offer. If not, insurers not making an early offer would be left with a claimant now pursuing economic damages even if offset for collateral sources plus noneconomic damages. Indeed such a case would be financed by payment from any other insurer's early offer. So in the analysis of the data, insurers are treated as a collective entity. As a practical matter disputes over division of the ultimate cost to any given defendant's insurer would probably be handled later through arbitration.

Recall that claimants who turn down an early offer must then prove beyond a reasonable doubt that the provider was grossly negligent in order to collect full-tort damages. A good test of whether claimants would think this higher legal standard could be met, thereby rejecting the early offer, would be whether claims for punitive damages were reported to the Texas Insurance Department. In the analysis, all cases in which such claims are conservatively assumed to cause an opt out by the offeree of the early offer (whereas all claims without any claim for punitive damages were assumed to accept an early offer if one is made). This assumption is conservative because of the greater burden on a party rejecting an early offer by having to prove egregious

⁵⁹ See *infra* app. 1 tbl.2, at note aa.

misconduct beyond a reasonable doubt rather than by lesser burdens under current law.

In fact, some claimants who might gain punitive damages may accept the early offer, given the newer uncertainty as to whether such damages will be awarded. On the other hand, some claimants who would be expected to not receive punitive damages may choose to reject the early offer being overconfident of their chances of gaining such damages. *Overall not many will risk it though, since only 521 of the 16,437 claims paid under current tort law involved a claim for punitive damages, or about three percent of the claims.*⁶⁰

IV. THE STUDY'S RESULTS

A. Overview of the effects of early offers

Described below are the results of the statistical analysis of the early offer proposal which compares these results to the current medical malpractice outcomes. As indicated above, these statistics are based on extensive medical malpractice closed claim data required to be filed by pertinent insurers in Texas, supplemented where necessary by similar data from Florida.

It must be emphasized at the outset that in the following discussion, a distinction is made between the data from Table 1 of *An Empirical Assessment of Early Offer Reform for Medical Malpractice* (JLS article), which deals with cases wherein tort payment was made and the data from subsequent Tables therefrom and Appendix 1, Table 1 herein which deal with a subset of those cases wherein an early offer would be made.⁶¹

B. Severe nonfatal cases

The category of cases covered includes fatalities, severe nonfatal injuries, and less severe cases. The discussion herein begins with "severe nonfatal injuries," defined as brain damage and

⁶⁰ Hersch et al., *supra* note 9, at tbl.2.

⁶¹ In other words, Tables 3-6 from Hersch et al., *supra* note 9, and this article's Appendix 1, Table 1 are not derived from Table 2 of Hersch et al., *supra* note 9. See Appendix 1, Table 2 for a comparison of data from Table 2 of Hersch et al., *supra* note 9, as opposed to data from other Tables.

spinal cord injury and complications. The economic losses where any payment was made under the tort system for the 1,938 cases in this category average \$430,225.⁶² As the other corresponding lines show, that figure of \$430,225 far exceeds comparable figures presented below for fatal injuries and less severe nonfatal injuries.⁶³

A key to estimating the effect of early offers, as set forth in Item iv of section 3A above, is comparing the amount an insurer sets aside early on to pay a given tort claim (called the initial reserve) versus the amount that would be required to pay the claimant's net economic loss plus attorney fees. As seen, if the former is greater than the latter, an early offer will likely be made. (Discussions below also use the insurer's final reserve and the ultimate payout for such a comparison.)

Basing the insurers' decision on their initial reserves, of the 1,938 claimants suffering severe nonfatal injuries paid under tort law (excluding 521 claimants reporting possible punitive damages in the damages breakdown who, as indicated, might be expected to turn down an early offer⁶⁴), 1,186 (or sixty-one percent) would be tendered early offers under the proposed statute.⁶⁵ Such claimants would be paid on average 2.4 years (867 days)⁶⁶ faster than under tort law, with total litigation costs reduced by an average of \$225,200 per claim.⁶⁷ The savings to insurers from paying such claims would average \$583,989 per claim.⁶⁸ On the debit side, this

⁶² Hersch et al., *supra* note 9, at tbl.2. \$494,283, after adjusting for inflation. Calculations based on U.S. Dept. Of Labor: *2007 Consumer Price Indexes* ("CPI"), available at www.bls.gov/cpi.

⁶³ Hersch et al., *supra* note 9, at tbl.2.

⁶⁴ For claims that settle without a court decision, Texas insurers are requested to report the breakdown of damages into its four components of economic, noneconomic, exemplary, and prejudgment interest only if in the opinion of the individual completing the form, the settlement was influenced by demand for or possible award of one of the latter three damages components. The 521 claims noted above are claims for which exemplary damages are thus noted.

⁶⁵ See *infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3.

⁶⁶ Hersch et al., *supra* note 9, at tbl.4.

⁶⁷ *Id.* at tbl.5. \$258,731, after adjusting for inflation. See *supra* note 62.

⁶⁸ Hersch et al., *supra* note 9, at tbl.6. \$670,941, after adjusting for inflation. See *supra* note 62.

average payment would reduce payment to such claimants by \$321,583,⁶⁹ with only 2.75 percent of claimants receiving more under an early offer than under a tort claim. Claimants may receive more under early offers if most of their damages under the current system are economic loss, from which one-third is deducted for attorneys' fees.

These figures raise a legitimate question: given that early offers cover essential losses with far lower payments by insurers (and presumably with a resultant reduction, at least in the long run, in medical malpractice premiums), is the greater promptitude and certainty of efficient payments under early offers worthwhile? In this connection, as to the effect of deducting payees' coverage from their own or other collateral sources on the savings of insurers in calculating whether to make an early offer, deducting collateral sources leads to an average savings of \$583,989,⁷⁰ compared to similar savings of \$578,788⁷¹ without such a deduction. These values are similar because the data show collateral sources account for only twenty to twenty-eight percent of economic damages, which in turn comprise only one-third of total damages. Thus, although collateral sources may be available more quickly than payment under current tort law, these data indicate collateral sources provide only a small share of total economic loss. Two conclusions could be drawn therefrom. The self-reporting of collateral sources may be underestimated, or, if not, one sees how dependant on tort recovery are severely injured victims. (It should also be noted here that only Appendix 1, Table 1 *infra* reflects deducting collateral sources.)

To lessen the discrepancy between payments under early offers compared to payments under tort law for those suffering severe nonfatal injuries (or death), a provision could be added to an early offer statute requiring that an early offer must provide a minimum payment of either payment of net economic loss *or* a minimum of \$250,000. (Also listed in the report is the effect of

⁶⁹ Hersch et al., *supra* note 9, at tbl.6. \$369,465, after adjusting for inflation. *See supra* note 62.

⁷⁰ *See infra* app. 1 tbl.1. \$670,941, after adjusting for inflation. *See supra* note 62.

⁷¹ Hersch et al., *supra* note 9, at tbl.3. \$664,966, after adjusting for inflation. *See supra* note 62.

minimums of \$100,000 and \$500,000.) The number of claimants suffering severe but nonfatal injuries who lose an amount of compensation under the \$250,000 option is reduced from 1,055 to 498, with the percentage of claimants gaining in compensation rising from 2.75 percent to 29.12 percent.⁷² On the other hand, the number of severe nonfatal injury cases receiving early offers would be reduced from 1,186 to 539, with the remaining claimants consigned to the current tort claim system.⁷³

An important element of the report indicates that the initial (or early) dollar reserve allocated to pay a claim is often greatly underestimated compared to a paid claim's ultimate value. In this connection, for nonfatal severe injuries the average initial reserve was \$578,209,⁷⁴ compared to an actual settlement/award of \$1,257,676.⁷⁵ Note further, as stated earlier, that only \$430,225⁷⁶ of the average claim in the total universe receiving tort payment consisted of the claimant's economic loss, indicating roughly how comparatively attractive for insurers early offers will be based on the cost of paying only economic loss versus full damages. Because both final reserves and ultimate payouts are larger than initial reserves, insurers are more likely to make early offers if the decision could be based on what turns out to be final reserves or ultimate payouts. This would result in more early offer payees, prompter payment, lower litigation costs, and lower overall costs respectively, as shown by the following lettered Exhibits (wherein two columns mean the first reflects deducting collateral sources but not in the second).

⁷² Hersch et al., *supra* note 9, at tbl.6.

⁷³ See *infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3.

⁷⁴ Hersch et al., *supra* note 9, at tbl.2. \$664,301, after adjusting for inflation. See *supra* note 62.

⁷⁵ Hersch et al., *supra* note 9, at tbl.2. \$1,444,936, after adjusting for inflation. See *supra* note 62.

⁷⁶ Hersch et al., *supra* note 9, at tbl.2. \$494,283, after adjusting for inflation. See *supra* note 17; see also *supra* note 62.

Exhibit A

Number of Early Offer Payees, Based on⁷⁷:

Initial Reserve	1,186	1,055
Final Reserve	1,915	1,893
Payout	1,938	1,932

Days Saved, Based on⁷⁸:

Initial Reserve	867
Final Reserve	898
Payout	898

Litigation Cost Savings, Based on⁷⁹:

Initial Reserve	\$225,200
Final Reserve	\$333,671
Payout	\$560,406

Overall Savings to Insurers, Based on⁸⁰:

Initial Reserve	\$583,989
Final Reserve	\$1,469,950
Payout	\$1,176,792

The outcome comparisons for payees under early offers based on initial reserve, final reserves, and ultimate payout are as follows:

Exhibit B⁸¹

Average Claimant Reductions, Based on:

Initial Reserve	\$321,583 (2.75% gaining)
Final Reserve	\$357,452 (4.91% gaining)
Actual Payout	\$357,364 (5.33% gaining)

⁷⁷ See *infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3 (not deducting collateral sources).

⁷⁸ Hersch et al., *supra* note 9, at tbl.4.

⁷⁹ *Id.* at tbl.5.

⁸⁰ See *infra* app. 1 tbl.1.

⁸¹ Hersch et al., *supra* note 9, at tbl.6.

Average Claimant Reductions With \$250,000 Minimum,
Based on:

Initial Reserve	\$488,548 (29.12% gaining)
Final Reserve	\$371,583 (33.06% gaining)
Actual Payout	\$405,252 (29.03% gaining)

Requiring a minimum payment may increase average claimant reductions in compensation because the mix of claims affected by early offers changes. Such a minimum reduces the number of claims eligible for an early offer (compared to paying only net economic losses), with the result that the altered mix of cases entails only claims of higher value.

The important point here is that the larger the final reserve or payment compared to the initial reserve, the greater the incentive for insurers to set a more realistic and therefore higher initial reserve, leading in turn to more and higher early offers. In this connection, it should be noted that insurers' final reserve for all cases for claims involving severe nonfatal injury (not limited to cases attracting an early offer) averages \$1,892,127,⁸² which is much closer to the average settlement/award of \$1,257,676⁸³ than the average initial reserve of \$578,209.⁸⁴ Note that insurers cannot, of course, have knowledge of the later reserve or final payout at the time they are making the initial reserve. However, if the early offer proposal is adopted, insurers would have an incentive to do a more refined analysis of a claim at an early stage than at present. But even without adjusting upwards the value of initial reserves to reflect the likely greater early research that will occur in an early offer regime, the data still seem to indicate widespread opportunities for successful early offers in cases of severe injury.

⁸² Hersch et al., *supra* note 9, at tbl.2. \$2,173,853, after adjusting for inflation. *See supra* note 62.

⁸³ Hersch et al., *supra* note 9, at tbl.2. \$1,444,936, after adjusting for inflation. *See supra* note 62.

⁸⁴ Hersch et al., *supra* note 9, at tbl.2. \$664,301, after adjusting for inflation. *See supra* note 62.

C. Fatalities

The economic losses for the 4,609 cases in the death category receiving tort payment that do not report punitive damages average \$123,023.⁸⁵ Of these cases, 3,325 (or sixty-six percent) of the survivors would be tendered early offers under the proposed statute.⁸⁶ Such claims would be paid on average slightly over two years (726 days) faster than under tort law,⁸⁷ with total litigation costs reduced by an average of \$106,993 per claim.⁸⁸ The savings to insurers from paying such claims would average \$377,562 per claim.⁸⁹ On the debit side, on average this would reduce payment to such claimants by \$171,079, with only 1.40 percent of claimants in death cases receiving more under an early offer than under a tort claim.⁹⁰

As to the provision adding to an early offer statute that an early offer entail a choice for survivors of either payment of net economic loss or a minimum of \$250,000, the number of cases of fatal injuries who lose an amount of compensation under the \$250,000 option is reduced from 3,074 to 1,124 with the percentage of claimants gaining in compensation rising from 1.40 percent to 41.10 percent.⁹¹ On the other hand, the number of fatal injury cases receiving early offers would be reduced from 3,325 to 1,155, with the remaining victims formerly eligible for early offers now consigned to the current tort claim system.⁹²

The report shows that for all fatal injuries where tort payment was made, the average initial reserve was \$366,497,⁹³ compared to

⁸⁵ Hersch et al., *supra* note 9, at tbl.2. \$141,340, after adjusting for inflation. *See supra* note 62; *see also supra* note 61.

⁸⁶ Hersch et al., *supra* note 9, at tbl.3.

⁸⁷ *Id.* at tbl.4.

⁸⁸ *Id.* at tbl.5. \$122,924, after adjusting for inflation. *See supra* note 62.

⁸⁹ *See infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3. \$433,779, after adjusting for inflation. *See supra* note 62.

⁹⁰ Hersch et al., *supra* note 9, at tbl.6. \$196,552, after adjusting for inflation. *See supra* note 62.

⁹¹ Hersch et al., *supra* note 9, at tbl.6.

⁹² *See infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3.

⁹³ Hersch et al., *supra* note 9, at tbl.2. \$421,066, after adjusting for inflation. *See supra* note 62.

an actual settlement/award of \$490,373.⁹⁴ Note further, as stated earlier, only \$123,023⁹⁵ of that average settlement or award to all tort payees consisted of the claimant's economic loss, indicating roughly how comparatively attractive for insurers early offers will be based on the cost of paying only economic loss versus full damages. Again, the data from claims where an early offer would be made show even much more remarkable results if based on either the insurer's final reserve or ultimate payout versus the initial reserve in the items reported above, namely, more early offer payees, prompter payment, lower litigation costs, and lower overall costs as shown by the following lettered Exhibits:

Exhibit C

Number of Early Offer Payees, Based on⁹⁶:

Initial Reserve	3,325	3,074
Final Reserve	4,547	4,522
Payout	4,609	4,605

Average days Saved, Based on⁹⁷:

Initial Reserve	726
Final Reserve	738
Payout	734

Average litigation Cost Savings, Based on⁹⁸:

Initial Reserve	\$106,993
Final Reserve	\$146,945
Payout	\$240,492

⁹⁴ Hersch et al., *supra* note 9, at tbl.2. \$563,387, after adjusting for inflation. *See supra* note 62.

⁹⁵ Hersch et al., *supra* note 9, at tbl.2. \$141,340, after adjusting for inflation. *See supra* note 62; *see also supra* note 61.

⁹⁶ *See infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3 (not deducting collateral sources).

⁹⁷ Hersch et al., *supra* note 9, at tbl.4.

⁹⁸ *Id.* at tbl.5.

Average overall Savings to Insurers, Based on⁹⁹:

Initial Reserve	\$377,562	\$388,282
Final Reserve	\$675,489	\$652,102
Payout	\$509,956	\$483,062

The outcome comparisons for payees under early offers based on initial reserve, final initial reserves, and ultimate payout are as follows:

Exhibit D

Average Claimant Reductions, Based on¹⁰⁰:

Initial Reserve	\$171,079 (1.40% gaining)
Final Reserve	\$186,155 (2.48% gaining)
Payout	\$185,483 (2.61% gaining)

Average Claimant Reductions With \$250,000 Minimum, Based on¹⁰¹:

Initial Reserve	\$162,354 (41.10% gaining)
Final Reserve	\$127,692 (45.45% gaining)
Payout	\$170,266 (37.51% gaining)

Once again, the important point here is that the larger the final reserve or payment compared to the initial reserve, the greater the incentive for insurers to set a more realistic and therefore higher initial reserve, leading in turn to more and higher early offers. In this connection it should be noted that for cases where tort payment was made for death cases, insurers' final reserve averaged \$822,464¹⁰² and the average settlement/award was \$490,373¹⁰³ both higher than the average initial reserve of \$366,497.¹⁰⁴ Even

⁹⁹ See *infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3 (not deducting collateral sources).

¹⁰⁰ Hersch et al., *supra* note 9, at tbl.6.

¹⁰¹ *Id.*

¹⁰² *Id.* at tbl.2. \$944,924, after adjusting for inflation. See *supra* note 62.

¹⁰³ Hersch et al., *supra* note 9, at tbl.2. \$563,387, after adjusting for inflation. See *supra* note 62.

¹⁰⁴ Hersch et al., *supra* note 9, at tbl.2. \$421,066, after adjusting for inflation. See *supra* note 62.

without adjusting upwards the initial reserve values to reflect the likely greater research that will occur in an early offer regime, the data still seem to indicate widespread opportunities for successful early offers in cases of death as well as severe injury.

D. Less severe injuries

The economic losses for the 9,369 cases receiving tort payment in the less severe injury category that do not report punitive damages average \$60,473.¹⁰⁵

Of these claimants 7,470 (or eighty percent) would be tendered early offers under the proposed statute.¹⁰⁶ Such claimants would be paid on average 1.89 years (683 days) faster than under tort law,¹⁰⁷ with total litigation costs reduced by an average of \$50,085 per claim.¹⁰⁸ The savings to insurers from paying such claims would average \$126,613 per claim.¹⁰⁹ On the debit side, this average payment would reduce payment to such claimants by \$74,195,¹¹⁰ with only 1.79 percent of claimants receiving more under an early offer than under a tort claim.¹¹¹ (As to a provision added to an early offer statute requiring that an early offer entail a choice by severely injured victims, or survivors of those fatally injured, of either payment of net economic loss or a minimum of \$250,000, we assume such a provision would not apply to less severe injuries.)

The report shows that for less severe injuries when any tort payment was made, the average initial reserve was \$141,476,¹¹² compared to an actual settlement/award of \$235,541.¹¹³ Note

¹⁰⁵ Hersch et al., *supra* note 9, at tbl.2. \$69,477, after adjusting for inflation. *See supra* note 62; *see also supra* note 61.

¹⁰⁶ *See infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3.

¹⁰⁷ Hersch et al., *supra* note 9, at tbl.4.

¹⁰⁸ *Id.* at tbl.5. \$57,542, after adjusting for inflation. *See supra* note 62.

¹⁰⁹ *See infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3. \$145,465, after adjusting for inflation. *See supra* note 62.

¹¹⁰ Hersch et al., *supra* note 9, at tbl.6. \$85,242, after adjusting for inflation. *See supra* note 62.

¹¹¹ Hersch et al., *supra* note 9, at tbl.6.

¹¹² *Id.* at tbl.2. \$162,541, after adjusting for inflation. *See supra* note 62.

¹¹³ Hersch et al., *supra* note 9, at tbl.2. \$268,314, after adjusting for inflation. *See supra* note 62.

further, as stated earlier, that only \$60,473¹¹⁴ of that average settlement award consisted of the claimant's economic loss, indicating roughly once again how comparatively attractive for insurers early offers will be based on the cost of paying only economic loss versus full damages. Here too the data show even much more remarkable results if either the insurer's final reserve or ultimate payout is used, versus using initial reserve, in the items reported above, namely, more early offer payees, prompter payment, lower litigation costs, and lower overall costs, as shown by the following lettered Exhibits:

Exhibit E

Number of Early Offer Payees, Based on¹¹⁵:

Initial Reserve	7,470	6,917
Final Reserve	9,072	8,979
Payout	9,369	9,351

Average days Saved, Based on¹¹⁶:

Initial Reserve	683
Final Reserve	706
Payout	694

Average litigation Cost Savings, Based on¹¹⁷:

Initial Reserve	\$50,085
Final Reserve	\$79,643
Payout	\$108,737

¹¹⁴ Hersch et al., *supra* note 9, at tbl.2. \$69,477, after adjusting for inflation. *See supra* note 62; *see also supra* note 61.

¹¹⁵ *See infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3 (not deducting collateral sources).

¹¹⁶ Hersch et al., *supra* note 9, at tbl.4.

¹¹⁷ *Id.* at tbl.5.

Average overall Savings to Insurers, Based on¹¹⁸:

Initial Reserve	\$126,613	\$125,276
Final Reserve	\$303,920	\$289,048
Payout	\$241,659	\$224,041

The outcome comparisons for payees under early offers based on initial reserve, final reserve, and ultimate payout are as follows:

Exhibit F¹¹⁹

Average Claimant Reductions, Based on:

Initial Reserve	\$74,195 (1.79% gaining)
Final Reserve	\$89,250 (3.31% gaining)
Actual Payout	\$87,350 (3.49% gaining)

Here also, of course, the larger the final reserve or payment compared to the initial reserve, the greater the incentive for insurers to set a more realistic and therefore higher initial reserve, leading in turn to more and higher early offers. Insurers' final reserve here averages \$363,766¹²⁰ and the average settlement/award is \$235,541,¹²¹ both much higher than the average initial reserve of \$141,476.¹²² But here also even without adjusting the initial reserve upward to reflect the likely greater research that will result in an early offer regime, the data still seem to indicate widespread opportunities for early offers in cases of less severe injuries as well as for severe injury and death cases.

¹¹⁸ See *infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3 (not deducting collateral sources).

¹¹⁹ Hersch et al., *supra* note 9, at tbl.6.

¹²⁰ *Id.* at tbl.2. \$417,929, after adjusting for inflation. See *supra* note 62.

¹²¹ Hersch et al., *supra* note 9, at tbl.2. \$270,612, after adjusting for inflation. See *supra* note 62.

¹²² Hersch et al., *supra* note 9, at tbl.2. \$162,541, after adjusting for inflation. See *supra* note 62.

E. All cases together

The economic losses for the 15,916 cases in all categories when any tort payment was made that do not report exemplary damages average \$123,609.¹²³

Of these claimants, 11,046 (or sixty-nine percent) would be tendered early offers under the proposed statute.¹²⁴ Such claimants would be paid on average about two years (713 days) faster than under tort law,¹²⁵ with total litigation costs reduced by an average of \$82,648 per claim.¹²⁶ The savings to insurers from paying such claims would average \$241,533 per claim.¹²⁷ On the debit side, an average payment to such claimants would be reduced by \$124,785,¹²⁸ with only 1.79 percent receiving more under early offers than under tort claims.¹²⁹

The report shows that for all injuries where any tort payment was made, the average initial reserve was \$259,817,¹³⁰ compared to an actual settlement/award of \$433,796.¹³¹ Note further, as stated earlier, that only \$123,609¹³² of that average settlement award consisted of the claimant's economic loss, indicating roughly, how comparatively attractive for insurers early offers will be based on the cost of paying only economic loss versus full damages. Here, as before, the data show even much more remarkable results if based on either the insurers' final reserve or ultimate payout, versus initial reserve, in the items reported above, namely, more early offer payees, prompter payment, lower

¹²³ Hersch et al., *supra* note 9, at tbl.2. \$142,014, after adjusting for inflation. *See supra* note 62; *see also supra* note 61.

¹²⁴ *See infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3.

¹²⁵ Hersch et al., *supra* note 9, at tbl.4.

¹²⁶ *Id.* at tbl.5. \$94,954, after adjusting for inflation. *See supra* note 62.

¹²⁷ Hersch et al., *supra* note 9, at tbl.3. \$277,496, after adjusting for inflation. *See supra* note 62.

¹²⁸ Hersch et al., *supra* note 9, at tbl.6. \$143,365, after adjusting for inflation. *See supra* note 62.

¹²⁹ Hersch et al., *supra* note 9, at tbl.6.

¹³⁰ *Id.* at tbl.2. \$298,502, after adjusting for inflation. *See supra* note 62.

¹³¹ Hersch et al., *supra* note 9, at tbl.2. \$498,386, after adjusting for inflation. *See supra* note 62.

¹³² Hersch et al., *supra* note 9, at tbl.2. \$142,014, after adjusting for inflation. *See supra* note 62; *see also supra* note 61.

litigation costs, and lower overall costs respectively, as shown by the following lettered Exhibits:

Exhibit G

Number of Early Offer Payees, Based on¹³³:

Initial Reserve	11,981	11, 046
Final Reserve	15,534	15,394
Payout	15,916	15,3888

Days Saved, Based on¹³⁴:

Initial Reserve	713
Final Reserve	739
Payout	730

Litigation Cost Savings, Based on¹³⁵:

Initial Reserve	\$ 82,648
Final Reserve	\$130,651
Payout	\$201,849

Overall Savings to Insurers, Based on¹³⁶:

Initial Reserve	\$241,533	\$241,873
Final Reserve	\$556,429	\$527,257
Payout	\$433,219	\$400,517

The outcome comparisons for payees under early offers based on initial reserve, final reserve, and actual payout are as follows:

¹³³ See *infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3 (not deducting collateral sources).

¹³⁴ Hersch et al., *supra* note 9, at tbl.4.

¹³⁵ *Id.* at tbl.5.

¹³⁶ See *infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.3 (not deducting collateral sources).

Exhibit H

Average Claimant Reductions, Based on¹³⁷:

Initial Reserve	\$124,785 (1.77% gaining)
Final Reserve	\$150,854 (3.26% gaining)
Actual Payout	\$149,627 (3.49% gaining)

As before the larger the final reserve or payment compared to the initial reserve, the greater the incentive for insurers to set a more realistic and therefore higher initial reserve, leading in turn to more and higher early offers. For all cases, insurers' final reserve averages \$682,697¹³⁸ which is much closer to the average settlement/award of \$433,796¹³⁹ than the average initial reserve of \$259,817.¹⁴⁰ But even without adjusting upwards the initial reserve values to reflect the likely greater research that will occur in an early offer regime, the data still seem to indicate widespread opportunities for successful early offers in cases of all types across the board.

These data for all claims, large, small and neither, allow at least a rough calculation of the total savings available for medical malpractice claims in Texas under early offers, once again depending on which base is used.

Exhibit I

Total Cost Reductions, Based on:

Initial Reserve¹⁴¹
 $\$241,533 \times 11,981 = \$28,933,068$

¹³⁷ Hersch et al., *supra* note 9, at tbl.6.

¹³⁸ *See infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.2. \$784,346, after adjusting for inflation. *See supra* note 62.

¹³⁹ *See infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.2. \$498,386, after adjusting for inflation. *See supra* note 62.

¹⁴⁰ *See infra* app. 1 tbl.1; Hersch et al., *supra* note 9, at tbl.2. \$298,502, after adjusting for inflation. *See supra* note 62.

¹⁴¹ \$33,241,007, after adjusting for inflation. *See supra* note 62.

Final Reserve¹⁴²
 $\$556,429 \times 15,534 = \$86,435,680$

Payout¹⁴³
 $\$433,219 \times 15,916 = \$68,951,136$

An earlier economic model of the cost and other effects of the early offer proposal being analyzed here, along with an illustrative example, turned out to show similar results to the much more extensive empirical effort discussed above.¹⁴⁴ According to the model, with the parties stalemated after years of negotiation between \$279,780¹⁴⁵ and \$408,500,¹⁴⁶ an early offer of \$190,740,¹⁴⁷ covering claimant's net economic loss, plus ten percent for claimant's attorney's fee, would have netted claimant \$173,400¹⁴⁸ and settled the case promptly.

The model especially highlighted the "wedge" effect, that current medical malpractice law induces in placing a barrier between claimants and defendants, greatly inhibiting efficient settlements—a wedge that early offers greatly diminish.¹⁴⁹ A wedge effect exists when buyers and sellers must share a cost in consummating a transaction.¹⁵⁰ The wedge is the amount whereby the price to the buyer is raised with the selling price received by the seller reduced.¹⁵¹ For example, a sales tax. When litigation-

¹⁴² \$99,305,370, after adjusting for inflation. *See supra* note 62

¹⁴³ \$79,217,495, after adjusting for inflation. *See supra* note 62.

¹⁴⁴ Jeffrey O'Connell, Jeremy Kidd & Evan Stephenson, *An Economic Model Costing "Early Offers" Medical Malpractice Reform: Trading Noneconomic Damages for Prompt Payment of Economic Damages*, 35 N.M. L. REV. 259, 264-70 (2005).

¹⁴⁵ *Id.* at 264 tbl.1. \$320,541, after adjusting for inflation. *See supra* note 113.

¹⁴⁶ O'Connell et al., *supra* note 144, at 264 tbl.1. \$468,749, after adjusting for inflation. *See supra* note 113.

¹⁴⁷ O'Connell et al., *supra* note 144, at 265 tbl.2. \$219,140, after adjusting for inflation. *See supra* note 113.

¹⁴⁸ O'Connell et al., *supra* note 144, at 265 tbl.2. \$199,218, after adjusting for inflation. *See supra* note 113.

¹⁴⁹ O'Connell et al., *supra* note 144, at 280-97.

¹⁵⁰ *Id.* at 280.

¹⁵¹ *Id.*

based costs cause a wedge effect in the resolution of medical malpractice claims, the current tort system artificially delays and further complicates welfare-enhancing settlements and creates deadweight loss.¹⁵²

F. Effects on the number of claims and deterrence

An obvious question is whether more or fewer claims will be paid under an early offers regime. Admittedly one cannot now answer this question, in part because the Texas data are limited to paid claims, so one does not have a basis for analyzing the number of claims unpaid at common law that are likely to be payable by early offers. Pertinent too is that lawyers will not likely be passive in the face of early offers reform. But worthy of discussion are at least some of the issues that will affect the number of paid claims under early offers relative to the number of claims paid under the current tort regime.

From the standpoint of defendants' incentives, compared to present system the early offer regime will reduce the costs of settling a claim, including defense costs. Claimants will also be more induced to settle than under the present regime so that in terms of the theoretical structure of the settlement process, settlement of any given claim might be more likely than at present.

But a premise of the early offer regime is that defendants are not required to make an offer in any claim, including for claims not likely to be paid now. Data other than our own indicate that some sixty percent of medical malpractice claims now brought are closed without payment.¹⁵³ Our study shows that thirty-one percent of all claims now being paid will not lead insurers to make an early offer based on the analysis using initial reserves.¹⁵⁴ If early offers are calculated on the basis of final reserves or actual payout, the percentage of claims now paid that would also be paid under early offers rises to ninety-eight percent and almost one hundred percent respectively.¹⁵⁵

¹⁵² O'Connell et al., *supra* note 144, at 280. See especially Figure 2 at *id.*, compared to Figure 6 at 294, and discussion thereof.

¹⁵³ DEWEES ET AL., *supra* note 2, at 425.

¹⁵⁴ HERSCH ET AL., *supra* note 7, at 29.

¹⁵⁵ *Id.*

A key factor that will affect the attractiveness of making early offers would be high defense costs, especially for serious nonfatal injuries.¹⁵⁶ If any claim is serious enough that defense costs, coupled with even a relatively small risk of an adverse verdict, exceed the claimant's net economic loss, an early offer might be forthcoming. But insurers may be reluctant to make offers based primarily on avoiding defense costs because that may simply encourage more claims.¹⁵⁷ From claimant counsel's perspective, any claim not likely to have been initiated prior to the early offer regime, where the claimant's attorney received a one-third share of a full award, will probably not become more attractive when the payment of legal fees is limited to 10 percent of only the economic loss. The main offsetting influence is that payments to attorneys will be more immediate and entail less work.

On this subject of more claims under early offers, it is important to emphasize that a key premise of an early offer regime is to make better use of medical malpractice dollars now being expended, not to increase them. This is based on the perception that medical malpractice costs are already high. Although others often call for higher premiums in order to pay the many smaller claims not now being pursued due to high litigation costs,¹⁵⁸ that is a much vaster social undertaking with unknown new costs than the early offer proposal entails.

The issue of more—or fewer—claims, along with reduced costs, raises the question of more or less deterrence of unsafe delivery of health care under an early offer regime. In the first place there is currently no consensus regarding whether the present medical malpractice regime effectively deters lapses by health care providers.¹⁵⁹ (A study by the Harvard School of Public Health

¹⁵⁶ Hersch et al., *supra* note 9, at tbl.5.

¹⁵⁷ The model in O'Connell et al., *supra* note 144, indicates that more claims will be paid under an early offers regime but "the increase . . . will be too small to effect the savings." *Id.* at 295.

¹⁵⁸ *E.g.*, BAKER, *supra* note 44, at 172-79.

¹⁵⁹ For a review of some of the literature challenging the deterrent effects of current medical malpractice law, see Jeffrey O'Connell & Christopher Pohl, *How Reliable is Medical Malpractice Law? A Review of "Medical Malpractice and the American Jury: Confronting the Myths About Jury Incompetence, Deep Pockets, and Outrageous Damage Awards"* by Neil Vidmar, 12 J.L. & HEALTH

indicates that increased malpractice litigation under the tort system raises the prospect not of better health care but of "lower quality and availability of health [care]." ¹⁶⁰) At least one can argue that the early offer approach will be an improvement on the present system in providing timely and certain compensation with lower litigation costs, goals much more readily accomplished than improved deterrence. But arguably too incentives for responsible care will be provided as long as there is substantial internalization of the costs of medical mistakes. The certainty and greater promptitude of these internalizing payments under early offers will also enhance deterrence compared to the current system in that deterrence to be effective must after all be swift and certain, two things the present tort system surely does not provide.

V. CONCLUSION

The effects of the early offer reform on medical malpractice liability insurance will substantially reduce insurer liability costs, while making prompt payments to injured patients much more efficiently than under tort law. Three separate assumptions are used as to comparative costs based on insurers' initial and final reserves, as well as actual awards or settlements. Further examined are the effects of subtracting collateral payments along with the introduction of varying minimum payments from \$100,000 to \$250,000 to \$500,000 for fatalities and severe injuries. If insurers gain great savings, severely injured claimants in stressful need are also singularly advantaged. As to them, the low level of collateral sources available to claimants highlights how inadequate are the financial resources available to claimants during the long wait for tort payment. As a matter of fact, most injured patients, at least those victimized by only arguably negligence, as opposed to clearly egregious misconduct, should welcome prompt payment of their out-of-pocket losses instead of waiting years for only a possible payment from which, in light of that uncertainty, their

359, 359-75 (1997-98). For a contrary view see Hyman & Silver, *supra* note 44, at 914-47.

¹⁶⁰ Michelle M. Mello et al., *Caring for Patients in a Malpractice Crisis: Physician Satisfaction and Quality of Care*, HEALTH AFF., July/Aug. 2004, at 42, 51.

lawyers will deem themselves entitled to thirty percent or likely more. Savings in both overall insurer costs and litigation costs averaging hundreds of thousands of dollars per case are surely to be welcomed by both claimants and defendants, not to mention society as a whole.

It should be noted that the early offers proposal could be applicable either in more or less restricted fashion. For example, to only surgical malpractice cases or to *all* personal injury claims, including those from allegedly defective products of any kind, including, but not limited to, medical supplies or pharmaceuticals.¹⁶¹

In sum, in accord with the telling theories of Professor George Fletcher,¹⁶² the early offers neo no-fault proposal allows medical malpractice claimants and defendants to bypass full-scale fault-based litigation for the great mass of cases by prompt payment of economic losses, but preserves full fault-based claims for both economic and noneconomic losses (including punitive damages) for gross misconduct provable beyond a reasonable doubt. Thus, the plan seeks, in line with Professor Fletcher's views, to integrate "the closely related fields of [tort and] criminal law," the intersection of which, as Professor Fletcher points out, has long been surprisingly and regrettably overlooked.¹⁶³

The "Crimtorts" approach of an early offers program answers Professor Fletcher's call for an appropriate merger of tort and criminal law concepts.¹⁶⁴

¹⁶¹ The author and Dr. Patricia Born of California State University, Northridge, have recently completed an article on the effect of early offers on product liability claims, using the same methodology on Texas data applicable to such claims. Jeffrey O'Connell & Patricia Born, *The Cost and Other Advantages of Early Offer Reform for Product Liability Claims*, 2008 COLUM. BUS. L. REV. 423 (2008).

¹⁶² George P. Fletcher, *Remembering Gary—and Tort Theory*, 50 UCLA L. REV. 279 (2002).

¹⁶³ *Id.* at 292.

¹⁶⁴ An integration of tort and criminal law concepts would still be accomplished, if to a somewhat lesser degree, if the burden on a claimant rejecting an early offer were just to meet the state law standard for awarding punitive damages.

Appendix 1 Table 1.¹⁶⁵

Average Insurer Savings from Early Offer Proposal:

By Injury Type, Excluding Claims Reporting Exemplary Damages,
and *Deducting Collateral Sources*

	(1) Insurer Savings Based on Initial Reserve if Positive (\$) [N]	(2) Insurer Savings Based on Final Reserve if Positive (\$) [N]	(3) Insurer Savings Based on Total Settlement or Court Award if Positive (\$) [N]
a. Fatality [4,609]	377,562 [3,325]	675,489 [4,547]	509,956 [4,609]
b. Serious nonfatal injury [1,938]	583,989 [1,186]	1,469,950 [1,915]	1,176,792 [1,938]
c. Other nonfatal injuries and short form claims [9,369]	126,613 [7,470]	303,920 [9,072]	241,659 [9,369]
d. All claims without exemplary damages [15,916]	241,533 [11,981]	556,429 [15,534]	433,219 [15,916]
e. Fatality – minimum \$250,000 [4,783]	790,282 [1,155]	808,053 [2,946]	642,089 [2,658]
f. Serious nonfatal injury –minimum \$250,000 [2,022]	1,090,175 [539]	1,777,735 [1,458]	1,478,867 [1,399]
g. Fatality – minimum \$100,000 [4,783]	523,228 [2,123]	679,416 [4,196]	521,717 [4,088]
h. Serious nonfatal injury –minimum \$100,000 [2,022]	739,657 [882]	1,520,832 [1,809]	1,230,625 [1,802]
i. Fatality – minimum \$500,000 [4,783]	1,300,175 [560]	1,060,139 [1,724]	807,780 [1,505]
j. Serious nonfatal injury –minimum \$500,000 [2,022]	1,574,848 [329]	2,156,585 [1,094]	1,762,019 [1,052]

¹⁶⁵ HERSCH ET AL., *supra* note 7, at 33 tbl.3.

Appendix 1 Table 2.

A. This Appendix is designed to show a comparison between Table 2 of Hersch et al., *supra* note 9, covering all paid claims and other Tables (using Table 3 of Hersch et al., *supra* note 9, as an example) concerning only paid claims calling forth an early offer. This Appendix is based on serious nonfatal injuries excluding claims reporting exemplary damages and not deducting collateral sources.

B. Average Insurer Savings = Projected initial economic loss reserve + 23/33 initial defense expense reserve^{aa} – 1.1 economic loss.^{bb}

	(1) All serious nonfatal injury claims – see Table 1 of Hersch et al., <i>supra</i> note 9.	(2) Only serious nonfatal injury claims resulting in early offers based on initial reserve – See Table 3 of Hersch et al., <i>supra</i> note 9.
a. Number of claims	1,938 ¹	1,055 ³
b. Projected average total initial reserve	\$578,209 ¹	\$887,110 ⁴
c. Projected average initial economic loss reserve	\$493,258 ²	\$764,598 ⁴
d. Projected average initial defense expense reserve	\$84,951 ²	\$122,512 ⁴
e. Economic loss	\$430,225 ¹	\$246,534 ⁵
f. Average insurer savings		\$578,788 ⁶

^{aa} See *supra* note 59 and accompanying text.

^{bb} See *supra* note 58 and accompanying text.

Inserting numbers from column 2:

Insurer Savings = Projected initial loss reserve + 23/33 initial defense expense reserve^{aa} – 1.1 x economic loss,^{bb} or using the numbers above:

$$\$764,598 + (23/33) \times \$122,512 - 1.1 \times \$246,543 = \$578,788$$

¹ Shown in Table 2 of Hersch et al., *supra* note 9.

² Not shown in Table 2 of Hersch et al., *supra* note 9, but d(1) + c(1) = b(1) shown in Table 2 of Hersch et al., *supra* note 9.

³ Shown in Table 3 of Hersch et al., *supra* note 9.

⁴ Not shown in Table 3 of Hersch et al., *supra* note 9, but d(2) + c(2) = b(2).

⁵ Derived apart from data on any of the foregoing Tables but used above in being multiplied by 1.1 in the equation in B above.

⁶ Thus inserting figures in the equation at B above shows the following: $\$764,598 + [23/33 \times 122,512] \$85,378 = \$849,976 - [1.1 \times 246,543] \$271,188 = \$578,788$, also shown in Table 3 of Hersch et al., *supra* note 9.

^{aa} See *supra* note 59 and accompanying text.

^{bb} See *supra* note 58 and accompanying text.