

Chapter Two

The Medical Liability System: Current Debates

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Introduction

Liability law allocates the costs of accidents among individuals. Accidental injuries are frequent in modern society. One car rear-ends another, damaging property and causing personal injury; a soda pop bottle explodes, injuring a consumer; a physician misdiagnoses a patient's illness, resulting in medical complications when the illness is ultimately treated.

Liability law has two principal goals. The first goal is to provide compensation to parties injured in accidents. The "compensation" goal of liability law attempts to provide a form of social insurance against accidental injuries. The second goal is to provide potential injurers with the incentive to avoid accidents for which the social cost of prevention is less than the cost created by the accident—that is, to induce the best possible deterrence. The "deterrence" goal of liability law is designed to induce individuals to internalize the nega-

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tive externality created by engaging in careless behavior, by charging injurers for the accidents that they cause. If taking precaution against harming others is costly, and potential injurers are not required to pay for the harm that they cause, then they will in general take less precaution than is socially optimal; potential injurers will cause accidents that could have been prevented for less than the cost created by the accident.

In theory, by requiring people to pay compensation equal to the harm that they cause if an accident occurs, the law can induce potential injurers to take the efficient or socially optimal level of precaution—the level of precaution where the marginal cost of precaution equals the marginal benefit—by forcing them to internalize the externality.

In practice, however, the liability system serves neither goal well in markets for health care. The system has high transaction costs and fails to compensate injured parties appropriately. Only one in fifteen patients who suffer an injury due to medical negligence receives compensation, and five-sixths of the cases that receive compensation have no evidence of negligence.¹ Instead, the main determinant of whether an injury receives compensation is the extent of injury, not the extent of fault.² In addition, the system leads to inefficient precautionary care decisions by doctors and patients, or defensive medicine—precautionary treatments that have little medical benefit and are administered out of the fear of legal liability. Why does the medical liability system perform as poorly as it does? And which of the currently proposed policy reforms can help improve its functioning?

1. “Patients, Doctors, and Lawyers: Medical Injury, Malpractice Litigation, and Patient Compensation in New York,” *Harvard Medical Practice Study* (Cambridge, MA: Harvard University Press, 1990); P. C. Weiler et al., *A Measure of Malpractice: Medical Injury, Malpractice Litigation, and Patient Compensation* (Cambridge, MA: Harvard University Press, 1993).

2. Troyen A. Brennan, C. M. Cox, and H. R. Burstin, “Relation between Negligent Adverse Events and the Outcomes of Medical Malpractice Litigation,” *New England Journal of Medicine* 335:26 (December 26, 1996): pp. 1963–67.

In this essay, I evaluate the effects of three kinds of proposed reform: limits on liability, such as caps on noneconomic damages; expansion of liability to managed care plans, as in some versions of the “patients’ bill of rights”; and other reforms, such as medical practice guidelines, alternative dispute resolution, and no-fault insurance.

The Source of the Problem in Medical Liability

In theory, doctors and patients trade off the benefits and costs of precautionary medical care. For example, suppose a diagnostic test costs \$500 but gives patients an extra year of life with probability .01. If the patients value a year of life at \$50,000 or more, then they and their physicians will undertake the test; but if the patients value a year of life at less than \$50,000, then they will not.

In practice, however, doctors and patients only trade off the benefits against the costs of care that they bear directly. Because of health insurance, this generally accounts for a small part of the true total cost: the insured portion of expenses for drugs, tests, and medical services tends to be larger than the uninsured portion. In addition, although physicians are generally insured against the financial costs of malpractice, they are not insured against the substantial nonfinancial costs—including the harm to reputation, lowered self-esteem from adverse publicity, and time and unpleasantness of defending against a claim.

In this situation, even a liability system that functioned costlessly and awarded damages exactly equal to harm would lead doctors and patients to undertake precautionary treatments that had greater costs than benefits. The substantial transaction costs imposed by the liability system only increase the incentive to undertake low-benefit precautionary treatment. The combination of the adverse incentive effects of health insurance and the transaction costs of the liability system create an environment in which defensive medicine is the natural response.

Evaluating Proposed Policy Reforms

Limits on Liability

Previous research suggests that certain legal reforms that limit liability in medical care reduce the practice of defensive medicine. Table 2.1 lists eight common reforms to states' medical liability laws. The table categorizes these reforms in two groups, direct reforms and indirect reforms. Direct reforms include changes in laws that specify statutory limits or reductions in malpractice awards: caps on total or noneconomic damages, collateral source rule reforms (which require damages to be reduced by all or part of the dollar value of collateral source payments to the plaintiff), abolition of punitive damages, and mandatory prejudgment interest. Indirect reforms include changes that affect awards only indirectly, such as reforms imposing mandatory periodic payments (which require damages in certain cases to be disbursed in an annuity that pays out over time) and caps on attorneys' contingency fees, as well as the abolition of joint-and-several liability for total or noneconomic damages, creation of a patient compensation fund, and imposition of comparative negligence.

Table 2.2 compares the hospital expenditures and health of Medicare beneficiaries with severe cardiac illness in states with and without direct reforms. The table is based on the analysis of longitudinal data on all elderly Medicare recipients hospitalized for the treatment of a new heart attack, or acute myocardial infarction (AMI), or of new ischemic heart disease (IHD) in 1984, 1987, and 1990.³ (Because AMI is essentially a more severe form of the same underlying illness as IHD is, we can assess whether reforms affect more or less severe cases of a health problem differently by comparing AMI with IHD patients.) We study the effect of the tort law reforms adopted from 1985 to 1990 on total hospital expenditures

3. Daniel P. Kessler and Mark B. McClellan, "Do Doctors Practice Defensive Medicine?" *Quarterly Journal of Economics* 111 (1996): pp. 353–390.

Table 2.1 Eight Common Reforms to States' Medical Liability Laws

<i>Reform</i>	<i>Description of Reform</i>	<i>Potential Effect on Liability</i>
Caps on damage awards	Either noneconomic (pain and suffering) or total damages payable are capped at a statutorily-specified dollar amount	Direct
Abolition of punitive damages	Medical malpractice defendants are not liable for punitive damages under any circumstances	Direct
No mandatory prejudgment interest	Interest on either noneconomic or total damages accruing from either the date of injury or the date of the filing of the lawsuit is not mandatory	Direct
Collateral source rule reform	Total damages payable in a malpractice tort are statutorily reduced by all or part of the dollar value of collateral source payments to the plaintiff	Direct
Caps on contingency fees	The proportion of an award that a plaintiff can contractually agree to pay a contingency-fee attorney is capped at a statutorily specified level	Indirect
Mandatory periodic payments	Part or all of damages must be disbursed in the form of an annuity that pays out over time	Indirect
Joint-and-several liability reform	Joint and several liability is abolished for noneconomic or total damages, either for all claims or for claims in which defendants did not act in concert	Indirect
Patient compensation fund	Doctors receive government-administered excess malpractice liability insurance, generally financed through a tax on malpractice insurance premiums	Indirect

Source: Kessler and McClellan, "Do Doctors Practice Defensive Medicine?"

Table 2.2 Hospital Expenditures and Mortality Outcomes, in States with and without Direct Reforms, for Elderly Medicare Beneficiaries with Heart Disease, 1984–1990

	1-Year Total Hospital Expenditures				1-Year Mortality					
	1984	1987	1990	% Change 1984–87	1984–90 % Change	1984	1987	1990	% Change 1984–87	1984–90 % Change
<i>Patients Hospitalized for Heart Attack</i>										
States without Direct Reforms	\$10,194	\$11,810	\$12,618	15.9%	23.8%	40.2%	39.1%	35.7%	-1.1%	-4.5%
States with Direct Effect before 1985	\$10,513	\$11,722	\$13,022	11.5%	23.9%	40.1%	39.0%	35.4%	-1.1%	-4.7%
States Enacting Direct Reforms Effective from 1985 to 1987	\$11,304	\$12,595	\$13,186	11.4%	16.6%	39.5%	38.6%	35.3%	-0.9%	-4.2%
States Enacting Direct Reforms Effective from 1988 to 1990	\$8,960	\$9,865	\$10,925	10.1%	21.9%	41.9%	39.2%	35.7%	-2.7%	-6.2%
<i>Patients Hospitalized for Ischemic Heart Disease</i>										
States without Direct Reforms	\$9,439	\$10,859	\$12,083	15.0%	28.0%	14.1%	12.0%	11.0%	-2.1%	-3.1%
States with Direct Reforms in Effect before 1985	\$10,331	\$11,064	\$12,505	7.1%	21.0%	13.5%	11.7%	10.7%	-1.8%	-2.8%
States Enacting Direct Reforms Effective from 1985 to 1987	\$10,527	\$11,315	\$12,300	7.5%	16.8%	13.8%	11.6%	10.5%	-2.2%	-3.3%
States Enacting Direct Reforms Effective from 1988 to 1990	\$9,241	\$9,623	\$11,421	4.1%	23.6%	14.1%	12.3%	11.5%	-1.8%	-2.6%

Note: Hospital expenditures in 1991 dollars. Source: Kessler and McClellan, "Do Doctors Practice Defensive Medicine?"; Table 3.

on the patient in the year after AMI or IHD, to measure the intensity of treatment. We also model the effect of tort law reforms on important patient outcomes. We estimate the effect of reforms on a serious adverse outcome that is common in our study population: mortality within one year of the occurrence of cardiac illness.

The main hypothesis that we test is as follows. If reductions in medical malpractice tort liability lead to reductions in intensity but not to increases in adverse health outcomes, holding constant other state political and regulatory characteristics, then medical care for these health problems is defensive—that is, doctors supply a socially excessive level of care because of malpractice liability pressures. Put another way, tort reforms that reduce liability also reduce inefficiency in the medical care delivery system to the extent that they reduce health expenditures that do not provide commensurate benefits. We assess the magnitude of defensive treatment behavior by calculating the cost of an added year of life or an added year of cardiac health achieved through treatment intensity induced by specific aspects of the liability system. If liability-induced precaution results in low expenditure per year of life saved relative to generally accepted cost per year of life saved of other medical treatments, then the existing liability system provides incentives for efficient care; but if liability-induced precaution results in high expenditure per year of life saved, then the liability system provides incentives for socially excessive care.

The table reports conditional means for expenditure and mortality for patients from states adopting and not adopting direct reforms, unadjusted for patient demographic characteristics or other differences between states. The table reflects several well-known facts about the treatment of heart disease in the United States. Real resources spent on hospitalization for heart disease have grown dramatically everywhere in the United States. For example, expenditure for elderly patients with heart attacks grew from approximately 17 to 24 percent in real terms from 1984 to 1990, depending on the patient's state of residence. Coincident with this growth in resource use was a dramatic improvement in average mortality from heart

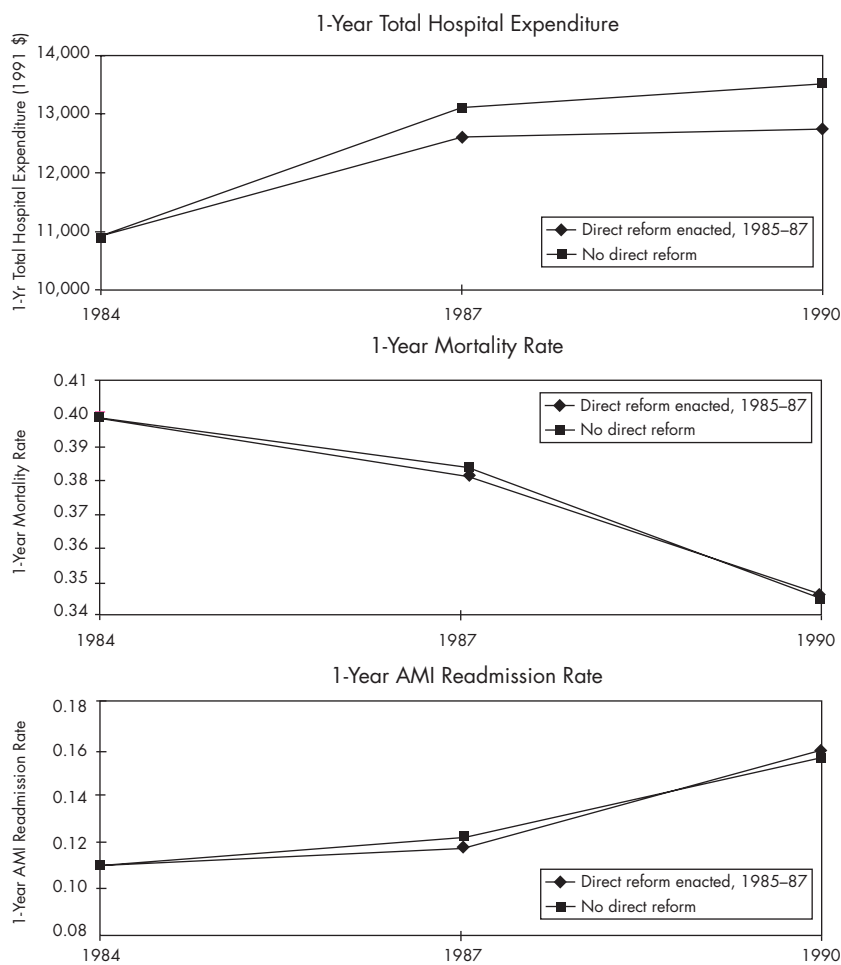
disease. In 1984, an elderly American had approximately a 40 percent probability of dying within one year of suffering a heart attack; by 1990, although the population had aged slightly, the probability of dying within one year of a heart attack had fallen to approximately 35 percent—*fully a 12.5 percent decline in one-year mortality (.35–.40/.40), in only seven years.* Thus, the average expenditure-benefit ratio of the increased treatment for heart attack in the 1980s was approximately \$50,000 per year of life saved.*

However, the *marginal* expenditure-benefit ratio of the *additional* increase in care attributable to high levels of medical malpractice liability pressure was much higher. As the table shows, patients from states without direct reforms experienced substantially greater growth in expenditures on heart disease without experiencing much greater rates of improvement in health outcomes, as compared with patients from adopting states. Expenditure growth was slower in the reform, compared with the nonreform, states for AMI, and trend differences were slightly greater for IHD. In contrast, mortality trends on average were quite similar for reform and nonreform states. These results suggest that doctors practice defensive medicine and that direct reform to the liability system improves productivity in health care by achieving reductions in resource use with no adverse effect on output, for example, patient health. These simple comparisons do not account for differences in trends in patient characteristics across the state groups, do not account for differences in the political and regulatory environments of states, and do not account for any effects of other potentially correlated reforms. Nonetheless, they anticipate the results that follow.

Figures 2.1 and 2.2 present regression-adjusted trends in hospital expenditures and patient health outcomes for elderly heart attack

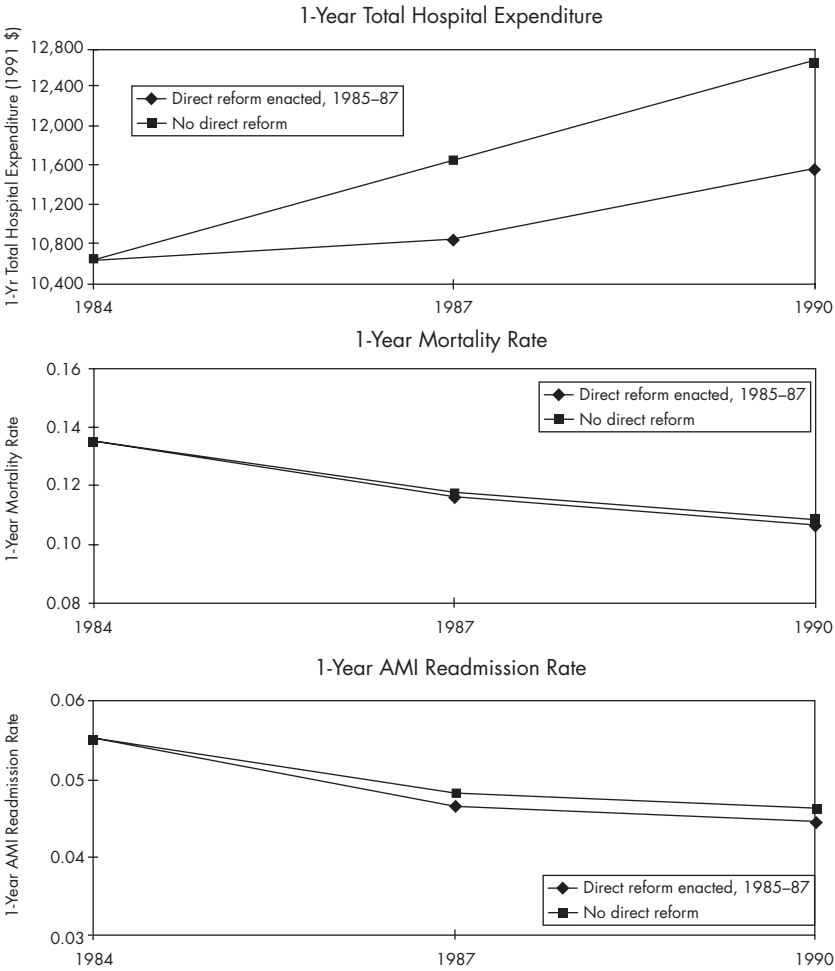
*This figure is based on the average expenditure for AMI in 1984 of \$10,881; average expenditure for AMI in 1990 of \$13,140; average mortality in 1984 of 35.4 percentage points; and average mortality in 1990 of 39.9 percent. Thus the average expenditure-benefit ratio of incremental intensity supplied from 1984 to 1990 was equal to $(13,140 - 10,881) / (.399 - .354) = \$50,200$.

Figure 2.1 Regression-Adjusted Expenditures, Subsequent Illness, and Mortality in Elderly Heart Attack Patients in States with and without Direct Reforms



Source: Daniel P. Kessler, "The Economic Effects of the Liability System," Hoover Institution Essays in Public Policy Number 91.

Figure 2.2 Regression-Adjusted Expenditures, Subsequent Illness, and Mortality in Elderly Ischemic Heart Disease Patients in States with and without Direct Reforms



Source: Kessler, "The Economic Effects of the Liability System."

and ischemic heart disease patients (respectively) from states enacting a direct reform in the period from 1985 to 1987, compared with all other states. The figures present estimates of the effects of reform on two important health outcomes: subsequent illness (whether the patient experiences a later AMI requiring hospitalization in the year following the initial illness) and mortality. The trends in the two kinds of states coincide exactly in the first year because the levels of expenditures and health outcomes in the figures are calculated controlling for fixed differences across states, for time-varying state political and regulatory characteristics, and for patient demographic characteristics—patient age, gender, black or nonblack race, and urban or rural residence. These estimates also control for the presence of “indirect” reforms at the time of treatment and therefore isolate the effect of direct reforms on defensive practices.*

Figures 2.1 and 2.2 confirm that the simple descriptive statistics presented in table 2.2 are not an artifact of differences across states that are correlated with both direct reforms and medical treatment patterns. For example, the top panel of figure 1 shows that expenditure on heart attack treatment grew 7 percent more rapidly in states without direct reforms, as compared with states adopting direct reforms from 1985 to 1987; this difference was statistically significant at conventional levels. Mortality trends in these two groups, in contrast, were nearly identical and were not statistically distinguishable. As calculations in the 1996 article by Kessler and McClellan show, the expenditure-benefit ratio for a higher-pressure liability regime is more than \$500,000 per additional one-year AMI survivor in 1991 dollars; even a ratio based on the upper bound of statistical confi-

*The estimates do not separately control for increase reforms because neither of the increase reforms is relevant to this study. The most common and important increase reform—comparative negligence—does not apply to medical malpractice cases (patients are never contributorily negligent). In addition, no state adopted or repealed prejudgment interest during the 1985–1990 study period.

dence intervals around the estimated effect of reform-induced treatment on mortality translates into hospital expenditures of more than \$100,000 per additional AMI survivor to one year.⁴ Results for outcomes related to quality of life—that is, rehospitalizations with recurrent AMI—also showed no consequential effects of reform.

Results for patients with IHD, presented in figure 2.2, are qualitatively similar to those just described for AMI. IHD expenditures also grew rapidly from 1984 to 1990. Direct reforms led to somewhat larger expenditure reductions for patients with IHD than with AMI, possibly reflecting the fact that IHD is a relatively less severe form of heart disease, for which more patients may have “marginal” indications for treatment. The effects of reforms on IHD outcomes are again very small. Thus direct liability reforms appear to have a relatively larger effect on the expenditure-benefit ratio of IHD treatments.

We estimated several additional models, discussed in detail in the 1996 article by Kessler and McClellan, to confirm the validity of these results. The main issue is whether differences in treatment between reform and nonreform states represent a true causal effect of reform or some other unmeasured difference between states. We estimated models controlling for statute-of-limitations reforms, to assess whether there were unobserved characteristics of states that were correlated with both the propensity to adopt legal reforms generally and medical treatment patterns, health care costs, and health outcomes. Statute-of-limitations reforms (which require that patients alleging injury file suit relatively sooner than has been traditionally required) should not have any effect on the treatment of elderly patients for heart disease because medical injury in this population is immediately apparent. We found that statute-of-limitations reforms had neither an economically nor statistically significant effect on expenditures and outcomes, consistent with the hypothesis

4. See note 3.

that these results were not biased by unobserved state-level factors that are correlated with direct reforms and health care decisions.

Patients' Bill of Rights

Would giving patients greater rights to sue their health plans lead to more appropriate care? Or would it lead to increased litigation, higher cost of treatment, and lower rates of health insurance coverage, without commensurate health benefits for patients?

These questions have been at the center of recent debates over the "patients' bill of rights." Current federal law, in the form of the Employee Retirement Income Security Act (Erisa) of 1974, has been interpreted as preempting most state law suits against health plans to recover damages for medical injuries. At the same time, Erisa sharply limits the plans' tort liability under federal law. Congress is considering expanding the patients' right to sue their plans, by reducing either the scope of Erisa's preemption of state tort law or Erisa's limitations on the plans' federal tort liability.

Unfortunately, because this expansion of liability for malpractice has no direct precedent, there is no hard evidence about its likely effects. (In existing state law, the expansions of plans' liability, such as those adopted by California, Georgia, Missouri, and Texas, are likely to have less dramatic consequences because their scope is limited by Erisa.)

The research above shows that incremental increases in malpractice liability lead to more defensive medicine. Recent work shows that this is true even in areas with high levels of managed care enrollment; more-parsimonious practices resulting from managed care's incentives have not fully eliminated defensive treatment behavior.⁵

To the extent that expanding liability for health plans increases

5. Daniel P. Kessler and Mark B. McClellan, "How Liability Reform Affects Medical Productivity," *Journal of Health Economics* 21 (2002): pp. 931–955.

malpractice liability, research suggests that it will lead to more wasteful treatment. For example, more liability for plans could lead to more-frequent malpractice claims and more physician involvement with the liability system. Other work suggests that physicians would respond to these changes in incentives with costly increases in treatment intensity that yield few health benefits for patients.⁶ But to the extent that expanding liability for plans shifts malpractice pressure from physicians to plans—and thereby decreases the pressure on physicians—it has the potential to reduce the cost of care and improve patients' well-being. Moreover, if plans have medical decision-making authority in practice, then it may enhance efficiency to reallocate tort liability from physicians to plans.

The devil is in the details. On the one hand, a patients' bill of rights that simply expands the number and complexity of malpractice suits has the potential to increase defensive medicine. On the other hand, a reform that lessens the malpractice pressure on physicians could lead to more efficient and effective medical care.

Other Reforms

Although direct reforms improve efficiency, they do little to improve the performance of the system in terms of the compensation goal. Caps on damages, for example, limit awards to those patients with the most serious injuries. For this reason, researchers and policymakers have suggested a wide range of largely untried reforms—some advocating radical changes to the allocation of responsibility for injuries—that seek to address both compensation and deterrence goals. These reforms can be divided into three classes. The most gradual class of reforms retains the current system of trial by judge

6. Daniel P. Kessler and Mark B. McClellan, "Malpractice Law and Health Care Reform: Optimal Liability Policy in an Era of Managed Care," *Journal of Public Economics* 84 (2002): 175–197.

and jury but adds new guidelines or other structure to the legal process. Alternative dispute resolution (ADR), the second class of reforms, retains a fault-based system of allocating damages but replaces the traditional judicial system with mediation or arbitration. The most radical reforms propose no-fault insurance for injuries, often coupled with some administrative mechanism for allocating fault.

Guidelines

Guidelines are a commonly suggested mechanism for improving the process of resolving medical malpractice claims, although the general principle behind them could be extended to other kinds of tort claims. Medical practice guidelines specify appropriate treatments for patients in particular clinical circumstances. Guidelines would affect mainly the fourth element of a tort claim—the determination of negligence. Traditionally, physician negligence depends on a jury's finding of noncompliance with community standards of care, as interpreted by one or more expert witnesses. This relatively unstructured inquiry has the potential to lead to inconsistent or unpredictable application of the negligence rule.⁷ Statutory reform to state liability law could allow defendants to use the compliance with practice guidelines to establish either an absolute or a rebuttable presumption of due care; conversely, guideline-based reforms could allow plaintiffs to use the noncompliance with guidelines to establish either an absolute or rebuttable presumption of negligence.

By systematizing the standard of care, guidelines may enable the liability system to process cases more quickly, more economically, and with fewer errors. In doing so, they may both improve compensation and reduce inefficient precautionary care. However, the design

7. Eleanor D. Kinney, "Malpractice Reform in the 1990s: Past Disappointments, Future Success?" *Journal of Health Politics, Policy, and Law* 20 (1995): pp. 99–135.

and implementation of a well-functioning system of guidelines is difficult. In health care, for example, *ex ante* specification of the relationship between illness and appropriate medical decision making would be at best extremely complex and would have to change rapidly with medical technology. Even the best-designed system of guidelines would most likely require expert testimony, case by case, to aid in interpretation and application.

Alternate Dispute Resolution

Under another proposal, states would replace the right to sue for certain kinds of injuries in tort with mandatory binding alternative dispute resolution (ADR), such as arbitration or mediation. ADR proposals generally transfer power to resolve claims into an administrative system with a specialized expert fact-finder and decision maker who operates under fewer constraints than civil court judges do. In this way, the goals of ADR are similar to those of guidelines: to provide a more rapid and accurate means of delivering compensation and apportioning responsibility for injury. ADR may offer substantial promise. But to the extent that an ADR system seeks to preserve all the evidentiary and due process rights that the parties would have in a tort case, it would be less likely to offer substantial advantages.

No-fault

No-fault systems are the most radical suggestion for the reform of the liability system. No-fault would also limit or remove patients' right to sue for certain injuries and instead compensate them according to a schedule of damages, an administrative hearing, or both, generally at a more modest level than occurs in tort, regardless of the fault of the alleged injurer. Most no-fault proposals are coupled with an additional administrative system that seeks to monitor the behavior of potential injurers, to preserve incentives for appropriate accident avoidance.

A well-functioning no-fault system offers the obvious advantage of improving compensation and reducing transaction costs. But our experience with automobile no-fault insurance systems suggests two serious drawbacks. The first is their expense—arising from no-fault’s goal of compensating everyone who is injured rather than just those injured negligently. Indeed, the expense of a no-fault system is proportional to its success in compensating injured parties, particularly the severely injured. One response to this is to compensate only less severely injured parties through the no-fault system and to allow more severely injured parties to sue in tort. Many states have adopted limited no-fault approaches to compensating people injured in automobile accidents. However, although limiting the reach of a no-fault system may reduce its costs of operation, it would also reduce its benefits.⁸ The second drawback to no-fault systems is that they eliminate the beneficial deterrence of the tort system. Empirical research in law and economics largely finds that automobile no-fault systems lead to increases in the fatal accident rate, with some earlier papers finding no effect.⁹

8. Stephen J. Carroll et al., “No-Fault Approaches to Compensating People Injured in Auto Accidents,” Rand Report R-4019-ICJ. See especially chapter 4 for discussion.

9. Daniel P. Kessler and Daniel Rubinfeld, “Empirical Study of the Civil Justice System” in *Handbook of Law and Economics*, ed. A. Mitchell Polinsky and Steven Shavell (Amsterdam: North Holland Publishers, forthcoming).