

Malpractice Liability and Medical Error Prevention:

Strange Bedfellows?

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AUTHOR'S NOTE

This paper represents a synthesis of several other works, some of which are currently under peer review. The paper draws most heavily from Michelle M. Mello & Troyen A. Brennan, "Deterrence of Medical Errors: Theory and Evidence for Malpractice Reform," *Texas Law Review* 2002;80(7):1595-1637.

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I. Introduction

Tort law has been and continues to be a major source of regulation of medical quality and patient safety. Direct government regulation of health care quality has traditionally been quite thin, dominated by a philosophy that medical professionals can and should regulate themselves (Brennan and Berwick 1996). Medical malpractice litigation serves as means of filling the gap between public expectations for safety and quality and what the profession actually delivers.

American health care today sits at the intersection of two disturbing phenomena: a perceived epidemic of medical errors and avoidable adverse events, and a new “tort crisis” in which professional liability insurance has become unaffordable or unavailable for many providers. The concern over medical errors has brought demands for increased regulation in the interest of patient safety, including regulation through the tort system, but rising professional liability costs have created strong political pressure to decrease malpractice litigation. Many have begun to wonder how effective the tort system is in deterring medical errors, and whether its benefits are worth its costs.

It is also becoming apparent that patient safety improvement suffers from a “two cultures” problem. Many plaintiffs’ attorneys view themselves as safety crusaders and believe that the threat of litigation makes providers practice more safely. But the tort approach to safety regulation—which is punitive in orientation, individualistic in focus, and adversarial in process—is in serious conflict with the nonpunitive, systems-focused, cooperative approach of the “patient safety movement.” The clash between the incentive structures erected by these two approaches to safety improvement has left many providers paralyzed and unwilling to participate in error reduction initiatives.

In this paper, I explore the troubled and increasingly uncomfortable relationship between the tort law and patient safety. Three issues are discussed. First, how strong is the evidence that the tort law improves medical quality? Second, what impacts has the tort law had on the efforts of the patient safety movement? Finally, are there policy reforms that might lead to a more productive interface between the medical liability system and the individual and institutional providers from whom we have demanded safer health care?

II. Does the Tort System Deter Medical Errors?

A key issue in the policy debates over tort reform is the extent to which the tort liability system is effective in deterring medical negligence and improving the quality of medical care. In the following section, I discuss the available evidence concerning the impact of malpractice litigation on medical quality, borrowing liberally from a 2002 review (Mello and Brennan 2002a). Although there is some limited evidence that malpractice litigation deters clinical negligence, overall the evidence is rather thin.

A. Deterrence Theory

According to law-and-economics theory, deterrence is the primary rationale for tort law, more important than its compensation or corrective justice functions (Schwartz 1994). The costs

of litigation create an incentive to take safety precautions. This theory assumes that health care providers are rational actors who determine their optimal level of precaution-taking on the basis of a careful weighing of the risks, costs, and benefits of the various alternatives. Additionally, it assumes that providers actually internalize a significant proportion of the costs of their own negligence—an assumption called into question by the prevalence of liability insurance among physicians and hospitals. What evidence exists that these assumptions hold in American health care, and that malpractice litigation does deter medical negligence and improve the quality of care?

B. The Evidence

1. Defensive Medicine

Analyses of the effect of tort liability on medical quality often focus on the phenomenon of defensive medicine. Defensive medicine is care provided primarily to reduce the probability of litigation (Office of Technology Assessment 1993). Because some of the increase in intensity of health services attributable to defensive medicine is thought to be medically inappropriate, a defensive-medicine response to perceived malpractice risk is really a measure of overdeterrence or excessive precaution-taking, rather than true deterrence of substandard care.

Defensive medicine has long been invoked by chronic defendants (physicians, hospitals, and their liability insurers) as a rationale for enacting tort reform. However, the overdeterrence rhetoric has not been firmly grounded in fact. Empirical findings from defensive-medicine studies have been mixed, with most failing to demonstrate any real impacts on medical practice arising from higher malpractice premiums or prior experience of being sued. The now-defunct Office of Technology Assessment of the United States Congress (OTA) comprehensively reviewed existing studies in 1994 and found little in the way of convincing evidence (Office of Technology Assessment 1994). OTA also surveyed several thousand physicians using clinical scenarios to elicit their perceptions of defensive medicine. These surveys revealed some evidence that malpractice concerns spurred defensive practices, but the effect was weaker than previously believed.

Later studies of obstetric care—an area in which defensive medicine is widely believed to be especially significant—have produced conflicting results. Some well-designed studies have found that higher malpractice risk increased the probability of delivery by cesarean section (Dubay et al. 1999; Localio et al. 1993), others have found the opposite (Tussing 1992), and still others have found no association (Sloan et al. 1995; Baldwin et al. 1995). One group of researchers has identified defensive-medicine effects in other clinical settings, but their methodology was somewhat peculiar (Kessler and McClellan 1996).

It is likely that defensive medicine has diminished somewhat over time in response to the growing presence of managed care. In a fee-for-service system, the economic incentive structure encourages defensive medicine, but physicians in capitated practices lose money with each additional service ordered. Even if physicians ignore the economic incentives, their ability to order tests and procedures of questionable medical necessity is increasingly circumscribed by the oversight of cost-conscious managed care payers.

2. Adverse Event Rates

There is little evidence of true error deterrence stemming from medical malpractice liability. Studies of obstetric care have failed to identify any differences in the quality of care rendered by obstetricians with varying histories of malpractice claims. A review of obstetric-care medical records for sentinel markers of errors and other indicators of substandard care found no relationship between the provider having been “punished” by the malpractice system and having fewer future deviations from the standard of care (Entman et al. 1994). Other studies examined the effect of malpractice threat on a range of birth outcomes and found no systematic improvement in any of the outcomes associated with a physician’s prior claims experience (Dubay et al. 1999; Sloan et al. 1995).

Studies have also been conducted on the relationship between physicians’ past malpractice claims experience and their chances of being sued again (Taragin et al. 1995). It is tempting to view these as deterrence studies because a positive finding would suggest that the experience of being punished for negligence reduces the likelihood of further negligence. However, the deterrence question cannot be answered by these studies for two reasons. First, an absence of lawsuits against a physician does not imply an absence of negligence, since only a tiny fraction of patients injured due to negligence file a claim. Second, it might be the case that physicians’ perceived malpractice risk exerts a stronger influence on their practice behavior than their actual claims experience. If so, then studies that focus on the actual claims experience rather than perceived litigation risk as the variable of interest may miss the mark.

Perhaps the most thorough deterrence analysis to date is that performed as part of the Harvard Medical Practice Study (HMPS) (Weiler et al. 1993). The HMPS researchers abstracted information from hospital medical records and malpractice claims files to ascertain rates of hospital adverse events, negligence, and malpractice claims in New York in 1984. To examine the deterrence question, the investigators undertook a relatively sophisticated econometric analysis of the association between a hospital’s past claims experience and its current patterns of care and adverse events rates. They determined that hospitals facing the highest tort risk had per-patient hospital care costs that were higher than the statewide average, while hospitals with the lowest tort risk had significantly lower per-patient costs, suggesting a deterrent effect.

However, when other measures of the impact of tort risk on medical practice were tried, the result proved unstable. Although the variable representing malpractice risk was negatively associated with the proportion of hospitalizations involving adverse events and the proportion of adverse events involving negligence, the association did not achieve statistical significance at the conventional level. The HMPS investigators struggled with how to interpret these results and ultimately settled on this conclusion: “Although we did observe the hypothesized relationship in our sample—the more tort claims, the fewer negligent injuries—we cannot exclude the possibility that this relationship was coincidental rather than causal” (Weiler et al. 1993).

The lack of robustness of the estimates of deterrence is a critical issue. The one HMPS model that did show a pronounced deterrent effect used measures of the intensity of services provided as the dependent variable. Increased per capita quantity or cost of services does not necessarily reflect better quality care or lower error rates, however. It may reflect several different phenomena: (1) increased ordering of services that are not medically necessary

(defensive medicine); (2) ordering of services that are medically indicated and improve the overall quality of care, but do not effect a reduction in the number of adverse events; (3) ordering of services that do reduce the number of adverse events (deterrence); or (4) ordering of services necessitated by an adverse event. Of these, only the third possibility is an indicator of deterrence.

Recognizing the limitations of the initial HMPS analysis, a different subgroup of the investigators later took a second stab at modeling deterrence, incorporating more sophisticated measures of deterrence. They ran a number of different models, which again produced mixed results. A statistically significant negative association (i.e., a deterrent effect) was found for a model using the number of claims against the hospital per 1000 discharges as the malpractice-risk measure and the number of adverse events per 100 hospitalizations as the outcome variable. However, none of the other models evinced a statistically significant deterrent effect.

The overall picture that emerges from the existing studies of the relationship between malpractice claims experience and medical errors is that evidence of a deterrent effect is (a) limited and (b) vulnerable to methodological criticism. The study findings, while far from solid, are provocative enough to suggest that further empirical study would be appropriate. The findings also raise a question as to why the existing evidence does not provide stronger support for deterrence theory.

C. Barriers to Deterrence

1. Non-Experience-Rated Liability Insurance

An important factor enervating deterrence is that physicians are nearly universally insured against medical malpractice. The existence of insurance always dampens incentives for taking safety precautions, but this is especially true where, as in malpractice insurance, premiums are not experience rated. The possibility of experience-rating individual physicians has been experimented with by a few states and many major insurers, but is generally thought to be unworkable (Sloan et al. 1991). It is probably impossible to come up with a highly predictive rating formula for individual physicians, because the statistical correlation between instances of negligent care and instances of lawsuits is poor, and the degree of autocorrelation in most physicians' claims experience over time is low. The situation for hospitals is somewhat different. Experience rating does occur on a widespread basis for hospitals, which have a more consistent longitudinal claims profile than physicians. As a result, the incentive-dampening effect of insurance is a less serious problem than for individual physicians.

2. Poor Fit Between Negligent Injury and Claiming

Even in a world of perfect experience rating, the deterrent signal would still be blunted by a second problem: the poor fit between instances of negligence and suing. Research has found that most instances of medical negligence never give rise to a malpractice claim, and that many malpractice lawsuits are brought and won by patients even though expert reviewers can identify no evidence of negligent care.

The Harvard Medical Practice Study found less than 2% of patients who were injured in the hospital by negligence in New York in 1984 filed a malpractice claim. Additionally, only

about a sixth of all claims filed in connection with hospitalizations in 1984 actually involved both negligence and a cognizable injury (Localio et al. 1991). When the HMPS investigators tracked the disposition of the 46 claims closed within a 10-year period, the results were dispiriting: 10 of the 24 cases that expert reviewers judged to have no evidence of an adverse event resulted in a payoff to the plaintiff (mean payment \$28,760), as did 6 of 13 cases judged to involve an adverse event but not negligence (mean payment \$98,132). Conversely, 4 of the 9 cases judged to involve negligent injuries resulted in no payoff to the plaintiff. In a multivariate analysis, the presence of negligence was not a statistically significant predictor of the outcome. Rather, the most important driver of damages was the severity of the plaintiff's injury, whether due to negligence or not (Brennan et al. 1996).

These findings were validated by a later study of adverse events and malpractice claims in Utah and Colorado (Thomas et al. 2000). Using 1992 data from 28 hospitals, researchers determined that adverse events occurred in about 3% of all hospitalizations, and that about 33% and 27% of adverse events were due to negligence in Utah and Colorado, respectively. Thus, about 1% of hospitalizations involved a negligent injury. When these data were matched against records of malpractice claims filed through 1996 relating to incidents from 1992, it showed that only 2.5% of the patients who were injured due to negligence filed a malpractice claim. In total, the group of patients represented in the sample of medical records reviewed for adverse events filed 18 malpractice claims. The investigators determined that 14 of these claims involved no negligence and 10 involved no adverse event. Only 4 claims (22%) actually involved a negligent injury. The Utah/Colorado study did not examine payoff amounts and their correlation with negligence.

While there is evidence that those injured due to negligence are more likely than those injured by non-negligent treatment to file a claim, overall these studies do not provide support for the notion that the malpractice system sends a strong deterrent signal to providers. Providers who are negligent face only a small risk of being sued, and providers who have not acted negligently cannot feel secure that they will not be sued.

3. Cost-Externalization

Insurance effects and the problem of poor fit combine to undercut deterrence by severely limiting the extent to which the tort system can force hospitals to pay the costs of negligent adverse events. There is no question that medical errors exact a profound societal toll: in addition to their human costs, preventable adverse events in the United States are estimated to produce national economic costs in the range of \$17 billion to \$29 billion annually (Kohn et al. 2000). These costs take several forms, including additional acute-care costs, long-term care and maintenance of the disabled, lost income, and lost household production. Researchers have attempted to spur cost-minded hospitals to pursue error reduction by disaggregating error costs to the hospital level and arguing that reducing adverse events can save hospitals money. However, such statistics mask the fact that hospitals do not internalize all of these costs.

In fact, most of the costs of errors in the U.S. accrue to other payers, including private medical insurers, Medicare and Medicaid (the government's health insurance programs for elderly, disabled, and very low-income Americans), state disability and income support programs, and injured patients and their families. There exist only two mechanisms through

which hospitals internalize error costs. One is by absorbing the cost of additional medical care necessitated by adverse events. The other is through payments associated with malpractice claims.

It is unlikely that these mechanisms either individually or jointly result in a high degree of cost internalization. Health care costs (including outpatient and long-term care costs) account for only about half of the total cost of errors (Thomas et al. 1999). Moreover, physicians who are paid on a fee-for-service basis and hospitals that receive per-diem payments may be able to obtain reimbursement for many of these care costs from insurance payers. Payments associated with malpractice claims also do not represent a large portion of the cost of errors. Only a tiny fraction of all adverse events due to medical negligence result in malpractice claims, and only a fraction of claims filed result in a payoff to the plaintiff. Furthermore, the lack of experience rating in physician malpractice insurance premiums means that providers do not feel the full economic consequences of their mistakes.

The foregoing suggests that the structures of the current tort system and liability insurance system combine to produce a situation in which much of the costs of medical errors are externalized and health care providers have little economic incentive to improve patient safety. But the relationship between tort law and patient safety is more pathological than a simple failure to send positive incentives. The punitive, adversarial, negligence-based system of medical justice gives providers strong *disincentives* to participate in initiatives that are likely to lead to real improvement in patient safety. I discuss these disincentives below, and then discuss legal reforms that would create a more fertile field for a culture of safety to take root in health care.

III. Impact of Tort Law on Error Prevention Initiatives

A. Provider Concerns

The success of patient safety initiatives hinges on the cooperation of individual and institutional health care providers. Unfortunately, the current malpractice environment thwarts safety advocates' efforts to secure physician "buy-in" to initiatives that involve reporting of adverse events and the circumstances surrounding them. Physicians have long viewed themselves as being under siege by malpractice litigation: a survey from the early 1980s, for example, found that physicians radically overestimated their risk of being sued in response to negligence (Lawthers et al. 1992). Providers' malpractice fears are generally articulated in rather vague terms, with references to predatory plaintiffs' attorneys and out-of-control juries. The extent to which physicians (and, to a lesser extent, institutions) really understand the factors that drive malpractice litigation is questionable. However, their sense that things have gotten worse in the malpractice environment reflects several very real phenomena.

First, the release of the Institute of Medicine's (IOM's) report on medical errors in December 2000 made the American public much more aware of the prevalence and seriousness of medical errors. A poll conducted by the Kaiser Family Foundation (1999) shortly after the release of the report found that 51 percent of Americans were closely following the errors stories in the newspaper and 42 percent believed that the report identified medical errors as a "serious

problem” resulting in a large number of preventable deaths. The IOM report resulted in a staggering number of stories about medical errors in the popular media: a LEXIS/NEXIS search of newspaper stories reveals over 600 stories concerning medical errors published in the first month after the report’s release alone, and another 2,200 published during 2000. Though no studies have been published linking these reports to the recent increase in claims frequency, other media research suggests that publicity about health risks leads to lawsuits (Schuck 1995).

A casual tour of websites created by plaintiff’s malpractice attorneys suggests that attorneys may be capitalizing on the new public interest and anxiety about medical errors. A surprising number of these sites contain direct references to the IOM report and its eye-popping mortality estimates. “According to a report by the Institute of Medicine, medical errors are responsible for at least 44,000 deaths each year,” reads one example, “If you believe that you or someone you love has been the victim of medical malpractice, contact us immediately. We are here to help” (Weissman 2002). The Pennsylvania Trial Lawyers Association also has run radio spots claiming that “medical errors are now the third-leading cause of death in the country,” an erroneous extrapolation from statistics cited in the IOM report (Hinkelman 2002).

Second, this greater public awareness has resulted in a large pool of people who view themselves as potential plaintiffs, in the sense that they believe they or their family members have been the victim of a medical error. A recent public opinion survey found that 42% of Americans believed that they or someone in their family had been the victim of a medical error at some point in their life; 24% reported that an error had caused “serious health consequences” (Blendon 2002).

Third, there is evidence that the public has misinterpreted the message of the IOM report. Although IOM focused strongly on the notion of systems improvement rather than individual negligence, 32 percent of surveyed individuals in the Kaiser Family Foundation poll incorrectly believed that the report recommended tougher malpractice laws for those who committed medical errors, and 29 percent mistakenly thought the report called for more severe punishment of doctors and nurses who made errors (Kaiser Family Foundation 1999). A December 2002 survey found that although providers tend to view system improvements as the most effective means of reducing medical errors, the public tends to favor solutions that ferret out and punish instances of individual provider negligence (Blendon 2002). For example, 50 percent of Americans queried said that suspending the licenses of health professionals who make errors would be a very effective solution. In response to a scenario involving a medication error leading to harm to the patient, 69 percent of lay respondents said the responsible physician ought to be sued for malpractice (as compared to 30 percent of physician respondents). The combination of a public widely informed about the gravity of the medical errors problem but unpersuaded that the focus should be on systems improvement rather than blaming and punishing seems to create the conditions for greater public tolerance of and interest in medical malpractice litigation.

Fourth, the nature of media coverage of malpractice litigation may further encourage would-be plaintiffs. Because most members of the public did not personally read the IOM report, the role of the mass media in shaping public perceptions of the content of the report and the nature of the problem of medical errors cannot be understated. Studies of media coverage of personal injury suits indicate that the popular media are much more likely to report verdicts for

the plaintiff than verdicts for the defense, and are especially likely to report verdicts with very high damage awards and punitive damage awards (Garber and Bower 1999; Bailis and MacCoun 1996). This bias may lead persons who believe themselves to be victims of medical errors to file suit because they overestimate their probability of success in litigation and their expected damages award.

Finally, there is general agreement that we are now in the throes of another “tort crisis.” Since the mid-1970s, health care providers have endured several such crises, in which the frequency and costs of lawsuits have grown so high that liability insurers raise premiums to unaffordable levels or exit the market altogether and providers are disturbed in their core functions. Today, major physician insurers are dropping out of medical malpractice underwriting (Warner 2002), and liability insurance premiums available from surviving insurers are increasing drastically (Newman 2002; Treater 2002). In states as diverse as Nevada, Pennsylvania, and West Virginia, physicians are leaving practice or limiting their scope of practice (Clines 2002; Gorman 2002). Physicians are practicing in an environment in which a single malpractice claim—whether successful or unsuccessful—may lead to termination of their liability insurance policy, and in which they may be unable to find alternative coverage at an affordable price.

To summarize, providers’ perception is that they are being asked to cooperate in reporting and disclosure of medical errors with no guarantee of legal protection at a time when litigiousness may be on the rise and when malpractice insurance is becoming increasingly expensive and difficult to find. Their reluctance to buy in is not difficult to understand. This reluctance has manifested itself in several ways, but two of the most important are underreporting to adverse event reporting systems and chilled communication with patients and others about errors and error prevention.

B. Manifestations of Tort/Patient Safety Tensions

1. Underreporting to Adverse Event Reporting Systems

Adverse event reporting systems have emerged as a leading policy strategy for detecting, investigating, and preventing adverse events in the hospital. Reporting systems provide a structured means of collecting data about the prevalence of and circumstances surrounding adverse events and medical errors. Mandatory reporting systems require hospitals to report certain adverse events that are associated with serious injuries or death. Voluntary reporting systems encourage providers to report information about a range of adverse events, including those from which no serious harm to patients resulted. Sixteen states currently mandate reporting to state agencies of adverse events by general and acute care hospitals, one state has a voluntary reporting system for adverse events, and one has pending legislation to establish a mandatory system.¹

¹ Reports by the National Academy for State Health Policy (2000, 2001) list a larger number of states with mandatory and voluntary reporting systems. However, my confirmatory review of state reporting laws did not support the inclusion of several of these states. Some states have legislation requiring that hospitals report certain events, but the reportable events do not fit the Institute of Medicine’s definition of adverse events. Other states’

The central challenges facing reporting systems are how to motivate health care providers to report errors and how to maintain the data in a way that is systematic and useful from a research and quality management perspective (Kohn et al. 2000). Unfortunately, these two goals may conflict with one another. Data that are useful to researchers and quality managers are also potentially useful to malpractice attorneys pressing legal claims on behalf of patients injured by adverse events. Thus, the more organized and comprehensive a reporting system database is, the greater the legal threat it may pose to providers. This threat serves as a powerful disincentive for providers to report adverse events.

The preferred way out of this dilemma has been to shield reporting system data from use by malpractice attorneys. Most states have adopted some form of protection for adverse event data, either by providing by statute that the data are not discoverable in legal proceedings or by implementing practical measures, such as anonymous reporting or the deletion of identifying information, that reduce the usefulness of the data to plaintiffs' attorneys (National Academy for State Health Policy 2000). Even with these measures in place, however, there remains widespread concern on the part of providers that attorneys and patients will be able to access the data and use it in malpractice litigation.

Fear of legal liability in a punitive environment chills providers' willingness to generate information about errors and thus limits what we can learn about how, when, and where medical mistakes occur (Kohn et al. 2000). Empirical evidence suggests that individual providers may alter their clinical behavior in order to minimize their legal exposure (Bovbjerg 1991; Bovbjerg et al. 1996; Charles et al. 1985; Lawthers et al. 1992; Office of Technology Assessment 1994). It is likely that this responsiveness to the legal system is also present in clinicians' and institutions' reporting behavior. If providers perceive state reporting system data to be publicly accessible and believe that the circumstances leading to the adverse event might be construed (correctly or incorrectly) as negligence, they may be unwilling to report the event.

A survey by the National Academy for State Health Policy (2000) revealed that state licensing authorities consider underreporting of adverse events to be one of the top two problems with mandatory reporting systems. Although no studies have yet examined physicians' and hospitals' reasons for not reporting events to state reporting systems, studies from related systems provide some insight into the relationship between legal fears and reporting rates. The Food and Drug Administration (FDA), for example, maintains a mandatory reporting system for drug and medical device manufacturers to report adverse reactions to their products, as well as a voluntary reporting system for physicians. Physician reports are given some protection from use in litigation by FDA regulations, but appear to be legally discoverable in some circumstances (American Medical Association 1994). American physicians report to the database at approximately 25% of the rate of physicians in Denmark, and 50% of the rate of physicians in Great Britain (Edlavitch 1988). Empirical studies suggest that at least a small percentage of physicians (between 3 and 8 percent) do not report to the system because of the fear that they might increase their liability (Scott et al. 1990; Rogers et al. 1988).

statutes require that hospitals collect and record information on adverse events, but do not require reporting to the state.

Underreporting of medical errors has a number of deleterious effects. Failure to disclose a medical error to the patient may deprive her of the opportunity to obtain prompt treatment for iatrogenic injuries. The attendant increase in the ill effects suffered by the patient exposes the physician to greater liability, if the error was due to negligence. Moreover, concealment of an error may make it easier for a plaintiff to establish a causal nexus between the physician's conduct and her injury (Kapp 1997). Failure to report adverse events also stymies research efforts to determine the prevalence and root causes of errors in the hospital, hampering quality improvement initiatives.

Thus, providers' anxieties about legal exposure are a significant policy problem. Unfortunately, there are no data available to confirm or dispel these fears. The question of whether reporting system data actually are being used in malpractice litigation has not been answered and merits empirical investigation. Some have suggested that providers' fears are "overblown," noting that "no link between reporting and litigation has ever been demonstrated" (Leape 2002).

However, in matters relating to malpractice risk, as in politics, perception is everything. Providers' perception is that they are being asked to cooperate in voluntary and mandatory reporting and disclosure of adverse events with no guarantee of legal protection when the frequency and severity of lawsuits is on the rise and malpractice insurance is becoming increasingly expensive and difficult to find (Mello and Brennan 2002b). Recent physician surveys found that an overwhelming majority of physicians believe that fear of malpractice exposure is a barrier to adverse event reporting and that reported information should be confidential (Robinson et al. 2002; Blendon et al. 2002). Thus, while research should be conducted into the extent to which adverse event reporting really does heighten providers' legal exposure, taking immediate action to provide greater assurance of legal protection to providers is warranted.

2. Chilled Dialogue About Errors

In addition to discouraging formal reporting of errors to government agencies, the tensions between tort law and patient safety have also impaired a range of other forms of communication about errors. There is some evidence that malpractice concerns are impacting the relationship of trust between physician and patient and physicians' willingness to disclose errors, but study findings are not unequivocal. A recent survey by Common Good (2002) found that 38% of physicians reported that their relationship with patients is "less personal" because of liability concerns—but, somewhat surprisingly, the same survey found that only a minority of physicians (15%) felt that liability concerns had made them less candid with their patients. In fact, nearly half (43%) felt malpractice concerns had had the opposite effect. Only a minority of physicians (39%), nurses (20%), and hospital administrators (14%) felt that the likelihood that physicians would disclose errors has decreased over time.

Since July 2001, hospitals have been required by the Joint Commission on the Accreditation of Healthcare Organizations to inform patients when an adverse event has occurred (Joint Commission 2002). Yet a survey of hospital administrators conducted a year after implementation of the JCAHO requirement found that although nearly all hospitals reported that they sometimes informed patients or their families when an adverse event occurred, only about

half did so routinely (Lamb et al. 2003). Fear of malpractice litigation was the most commonly cited barrier to disclosure.

Advocates of disclosure argue that patients who are dealt with openly and honestly will actually be less inclined to sue (Witman et al. 1996; Levinson 1997; Hickson et al. 1992). However, empirical evidence concerning the impact of hospital disclosure policies is scant (Kraman and Hamm 1991; Pietro et al. 2000). The study that is generally cited in support of the loss-prevention hypothesis comes from the Veteran's Administration system, in which the physicians cannot be sued and institutional liability is limited (Kraman and Hamm 1991; Brennan and Mello 2003). So far, a "business case" for disclosure has not been established.

IV. Implications for Legal Reform

The tensions identified between the tort system and the patient safety movement highlight some directions for legal and policy reform. Before proceeding to a discussion of specific policy changes, it is worthwhile to begin with some basic principles that should animate reform efforts.

A. Guiding Principles

First, reform should *build on the available evidence*. Empirical evidence about how the tort law actually impacts providers' behavior is, unfortunately, fairly scant. However, we do have some valuable information about how deterrence operates. We know, for example, that it is more likely to occur at the level of the institution than the individual, and that it does not differentiate between negligent and nonnegligent adverse events (Mello and Brennan 2002). We also have a relatively good body of evidence about how no-fault compensation schemes function. Domestically, we can draw from the experience with workers' compensation schemes, no-fault auto insurance, and birth-related neurological injury compensation funds in Florida and Virginia. Internationally, we can examine evidence from Sweden, New Zealand, Finland, and Denmark. Reform should begin with a thorough appraisal of what we know.

Second, *focus liability on the party in the best position to prevent errors*. Generally, the tort law aims to place liability on the party who is in the best position to prevent accidents, so that injuries can be avoided at the least possible cost (Calabresi 1970). The present tort system inadvisably focuses liability on individual physicians rather than the larger organizations in which they practice. Hospitals and other enterprises are much better situated than individuals to control and change problematic systems of care that are associated with avoidable injuries (Mello and Brennan 2002a). As chronic defendants, hospitals also are much more likely than individual physicians to respond to the deterrent signal that a large payout to an injured patient sends. Thus, there is a compelling efficiency argument for moving towards greater enterprise liability.

Third, *focus on incentives rather than punishment*. The objective of the medical justice system should be to provide incentives for providers to reduce avoidable adverse events. The existing tort system, with its focus on "naming, blaming, and shaming," takes too narrow a view of how these incentives can operate. Negative incentives can be a powerful means of influencing

behavior, but only if they are properly channeled. In the absence of experience-rated insurance, for example, the negative economic incentives of the tort system are not strongly conveyed to the individual physician. The physician experiences the negative psychological ramifications of being sued, but these impacts do not necessarily motivate physicians to change their behaviors in the ways we would like. They may instead have counterproductive effects, stimulating defensive practices and distrust of patients and the legal system. We should strive to create a medical justice system that does transmit economic incentives to providers. Moreover, those incentives should be both positive and negative. In addition to “taxing” providers for substandard care through the liability system, we should be willing to pay for better safety.

Some states have already begun to create financial incentives for providers to invest in error reduction (Mello and Brennan 2002b). Pennsylvania has provided a mechanism through which hospitals that are certified as having reduced serious adverse events may receive a discount on their liability insurance (Healthcare Services Malpractice Act, H.B. 1802, 186th Leg., Reg. Sess. [Pa. 2002], Pub. Law 154, No. 13, § 5104), and a Massachusetts bill proposed to provide a one-time financial bonus to providers who implement computerized provider order entry systems (An Act Relative to Provide for the Payment of a One-Time Bonus to Health Care Providers for the Implementation of Medical Error Reduction Technology, S.B. 571, 182nd Leg., Reg. Sess. [Ma. 2001]). Similar initiatives are also underway in the private sector by organizations such as the Leapfrog Group (Mello et al. 2003).

Fourth, *create conditions for honesty and learning about errors*. To goad providers in to reporting errors, patient safety advocates have appealed to providers’ professional ethical obligations (ABIM Foundation 2002) or tried to build a “business case for safety” (Mello and Brennan 2002a). However, as long as reporting and may increase providers’ risk of suit, such arguments will always be trumped by providers’ legal anxieties. Enhanced protections for patient safety data must be put in place to create a true culture of safety in which honesty is not penalized.

Finally, *maximize accountability*. Patients and their families want to know that providers will be held accountable for adverse events that could reasonably have been avoided. It is, however, a mistake to view accountability as synonymous with tort liability. Accountability refers generally to the obligation of providers to give a justification and be held responsible for their actions, and the processes through which these obligations are satisfied (Emanuel 1996; Emanuel and Emanuel 1996). The tort system serves an accountability or corrective-justice function by requiring negligent parties to make whole those who are injured by their negligence. But it performs relatively poorly on this function because so few instances of substandard care actually result in a claim being filed. Additionally, because many malpractice cases are settled without an apology or admission of liability, essential elements of the concept of accountability are often absent from the litigation process.

Limiting tort liability without providing alternative avenues for assuring accountability in medicine would be misguided. But assuming that no alternatives exist is also wrong. Government and nongovernmental regulators, payers, patients, and providers themselves all have roles to play in assuring accountability. Reforms to tort liability can and should be complemented by measures to boost the power and efficacy of these roles. Regulators can include safety information in licensure and accreditation requirements—and indeed, many are

now doing so (Mello and Brennan 2002b). Much better use could be made of disciplinary procedures by state boards of medicine to react to serious deviations from quality care. Payers can select providers on the basis of safety records. Peer review and hospital credentialing processes provide vehicles for greater physician involvement in auditing and requiring explanations for avoidable adverse events. Safety report cards can give consumers important information they need in order to “vote with their feet” for high-quality providers (Emanuel 1996). Creative responses to the twin “epidemics” in health care consider the full range of tools at our disposal, rather than focusing narrowly on the question of how to wield tort liability to deter errors.

B. Possible Reforms

Among the most salient and disturbing features of current policy reform efforts is the fact that tort reform and patient safety improvement are being pursued separately, with little regard for how they may undermine one another and little insight into how they might be integrated. Tort reformers continue to press traditional solutions, such as caps on noneconomic damages, that aim at the limited goal of reducing the costs of the medical liability system rather than the broader objective of improving its functioning. Patient safety advocates press reporting and disclosure initiatives but, in many cases, have not carefully crafted legal protections to encourage provider compliance.

The intersection of tort and patient safety concerns has created a highly charged political environment that may lead to gridlock on both the tort reform and the patient safety fronts. But this juncture also presents an opportunity—a “teachable moment”—to demonstrate how tort and patient safety concerns can be more thoughtfully reconciled in liability system reform. Two avenues of reform hold particular promise: enhanced legal protections for patient safety data and trials of alternative compensation systems.

1. Enhanced Legal Protections for Patient Safety Data

The phenomenon of underreporting to state adverse event reporting systems strongly suggests the need to reassure providers that reported information will be protected from legal discovery. It should be noted that providing legal protections is not cost-free: permitting anonymous reporting, deleting identifying information, or restricting access to information impedes the ability of researchers and institutional quality management personnel to determine the prevalence and sources of medical errors. It also runs counter to IOM’s mission of heightening public awareness of the problem of medical errors and increasing the transparency of the institutional factors that lead to errors. This suggests the need for very careful evaluation of possible approaches to data protection.

To date, states have pursued one or more of three strategies: reliance on state peer review statutes, insertion of confidentiality provisions in the reporting system legislation itself, and designing reporting system data collection and storage schemes to minimize the use and disclosure of identifying information. The strengths and weaknesses of these strategies have been discussed in detail elsewhere (National Academy for State Health Policy 2001; Kohn et al. 2000).

In brief, reliance on peer review statutes is a suboptimal strategy because the statutes vary widely from state to state and state courts take different approaches to interpreting the scope of the privilege (Liang 2000; Scheutzow and Gillis 1992/1993). Moreover, because most peer review laws predate the establishment of reporting systems, they do not explicitly include reporting systems in their definition of a “review organization.” The definition in some statutes seems clearly not to apply to reporting system. New Mexico, for example, limits the peer review privilege to organizations established by a health care provider, an association of health care providers, a nonprofit health plan, an HMO, or a PSRO (N.M. Stat. Ann. § 41-9-2-E).

Because of these limitations of peer review laws, it is preferable to insert confidentiality provisions or system design features directly in the authorizing statutes for reporting systems. There is at present considerable variation across states in the types and effectiveness of the protections provided. An important weakness that most state statutes share is that they fail to distinguish between uses of the data for litigation purposes and use for research purposes. No significant learning about medical errors can take place unless the data in adverse event reporting system are useful from a research standpoint and accessible to researchers. Deleting patient-level and facility-level identifiers (particularly clinical diagnoses and procedure codes) from reports has profound implications in this regard. There also is no obvious reason why the same restrictions on access to reporting system data that apply to plaintiffs’ attorneys should apply to researchers.

Enacting legislation that provides strong protections against the use of reporting system data in litigation but maximizes the research utility of the data should be a top legislative priority for states as well as any federal reporting system initiatives. Reliance on peer review statutes is insufficient; even if such statutes seem clear to state authorities, providers and their counsel will always feel insecure about their scope and applicability. Access restrictions and/or system design features should be inserted in the reporting system authorizing statute itself and should be specific as to (1) what information is and is not protected, (2) what it is and is not protected from (e.g., public disclosure, legal discovery, admission into evidence), and who it is and is not protected from (e.g., the affected patient, the public, journalists, attorneys, researchers). The protection should be ironclad, leaving no room for provider doubt or legal wrangling. Special provisions should be made for researchers to use the data, including necessary identifiers, pursuant to a valid data use agreement. This approach has been used by other federal agencies for decades to good effect.

2. Trials of Alternative Compensation Systems

In order to better serve the goals of deterrence and compensation, the medical liability system should move toward a system emphasizing greater enterprise liability and characterized by three features: channeling, experience rating, and limited no-fault compensation. Legal academics have long advocated a statewide move to no-fault compensation, but such proposals have been viewed as politically infeasible, due to the strength of the trial lawyers’ lobby and concerns over costs. Recent proposals for a voluntary, provider-based system have enjoyed a warmer reception (Mello and Brennan 2002a; Florida Governor’s Select Task Force on Healthcare Professional Liability Insurance 2003). The profile for such proposals has been raised by their inclusion in the Institute of Medicine’s November 2002 report on system demonstrations (Corrigan et al. 2002).

IOM proposed two types of administrative claims resolution systems: provider-based early payments (“Option 1”) and statewide administrative resolution (“Option 2”). The essential features of the two demonstrations are described in Table 1. In Option 1, states would authorize institutional health care providers to voluntarily set up systems to offer early and reasonable compensation to injured patients through an administrative process. In Option 2, a state would set up a statewide insurance system which all providers would be required to pay into and which would process claims filed by injured patients, much like a workers’ compensation system. In exchange for participating in these systems, providers would be granted immunity from tort liability. Both options share four important features: channeling, experience rating, no-fault compensation, and limitations on noneconomic damages.

a. *Channeling.*

Channeling refers to the aggregation of individual physicians into larger enterprises—such as hospitals, hospital networks, or health plans—by consolidating malpractice insurance coverage in a single carrier. The enterprise covers the cost of malpractice premiums for its affiliated physicians and the insurer mounts a joint defense to claims brought against both the hospital and individual physicians. The enterprise passes some of the cost of malpractice premiums back to individual providers.

Although it was not mentioned in the IOM report, channeling proposals are generally understood to entail a move to greater enterprise liability. Enterprise liability runs counter to the American tradition of focusing liability on the individual physician, but makes much more sense than individual liability from the standpoint of deterrence. Hospitals and hospital systems are probably the best locus of channeling and liability, though IOM and others have suggested that health plans could also serve this role. Hospitals are better situated than health plans to control and change processes of health care—that is, to improve the quality of care and reduce medical errors in response to tort incentives. Because they are chronic defendants, hospitals also are much more likely than individual physicians to respond to the malpractice deterrent signal (Mello and Brennan 2002a).

Full-fledged enterprise liability, involving elimination of individual physician liability, is not politically feasible in the United States at this time. However, enterprise liability through channeling programs is practicable. Existing malpractice arrangements in many American hospitals involve channeling, because there are clear efficiencies in malpractice defense in combining the institutions with the individual physicians. Such arrangements are especially prevalent in university teaching hospitals, where faculty are closely linked to the hospital and health care systems. For example, the Harvard Medical Institutions in Boston and the Federation of Jewish Philanthropies in New York already have channeling arrangements in place based on a hospital self-insurance mechanism (Studdert and Brennan 2001). There is probably enough channeling in the existing health care system to allow certain organizations to undertake a trial of enterprise liability.

b. *Experience Rating.*

Experience rating of hospitals’ malpractice premiums is an essential feature of the proposed system. The aggregation of providers into an enterprise is a crucial prerequisite to

making experience rating an effective tool for deterrence. Experience rating for individual physicians has been tried and has failed, for very good reasons. The proposed system would be similar to that employed by leading hospital mutual insurance companies in the United States. Claims against physicians and hospitals would be aggregated on an annual basis. The resulting experience rating for policyholders would be adjusted for hospital-specific risk factors unrelated to provider performance, such as specialty mix, presence of intensive care units, and payer and case mix. After this adjustment, it would be possible to identify outliers from the mean and use standard actuarial techniques to calculate premium surcharges or premium returns.

c. No-Fault Compensation.

In the proposed demonstrations, claims falling within a predefined class of avoidable adverse events would be automatically paid by the insurer or insurance system without a formal finding of negligence. The term “avoidable” is generally used to refer to events caused by one or more errors, while “negligent” refers to a subset of avoidable adverse events that are the result of substandard care. Models for avoidability determinations have been developed in the academic literature (Tancredi and Bovbjerg 1991) and in other countries such as Sweden (Studdert and Brennan 2001). For example, an injury is compensable under the Swedish no-fault compensation system if (1) it resulted from medical treatment, (2) the treatment was medically justified, and (3) the outcome was avoidable. A key difference between the concept of avoidability and the concept of negligence is that avoidability invokes the idea of error reduction through changes in systems of care, whereas negligence suggests that errors can be reduced by greater diligence by individuals.

Using an insurer-based administrative system to identify and compensate the subset of adverse events that are avoidable would reduce the costs associated with the determination of compensable cases, which currently proceeds through a showing of breach of the standard of care in a malpractice suit. Additionally, a focus on avoidable adverse events would overcome the problematic connotations that the concept of negligence has taken on in the minds of health care providers. As many writers have made clear over the course of the last twenty years, physicians tend to equate negligence with moral misbehavior (Leape 1994). Consequently, they view errors as something to be hidden when they occur. An avoidability standard would create the conditions for more open exchange about the circumstances that lead to errors.

d. Limitations on Noneconomic Damages.

Under both of the proposed demonstrations, states would prospectively set limits on noneconomic damages awards, including “pain and suffering.” IOM was (perhaps deliberately) vague as to the level and form such limits should take. The two main approaches would be a flat cap and a damages schedule. A flat cap imposes a single ceiling for all claims regardless of severity of injury; for example, the malpractice reform bill recently passed by the U.S. House of Representatives (H.R. 4600) proposes a flat cap of \$250,000. A damages schedule establishes permissible noneconomic damages awards for various levels of injury severity; some proposals also take into account the injured patient’s age. Damages schedules avoid the most common criticisms of low-value flat caps—that they radically undercompensate patients with the most severe injuries.

3. Potential Criticisms of the Provider-Based Demonstrations

a. *Feasibility.*

The political feasibility of a state-run no-fault system is questionable at best, due in part to the strength of the trial lawyers' lobby. Prospects for a voluntary provider-based system are much brighter. The feasibility of such demonstrations hinges on the extent to which providers can be persuaded that there is a business case for moving to administrative compensation, and/or that such a move would enable them to achieve high-priority patient safety goals.

There is a reasonable chance that some hospitals will wish to participate in a no-fault demonstration (Mello and Brennan 2002a). The liability premiums from the system will be greater than their current premiums, but the increase can be addressed by cost shifts between the hospital and its channeled physician affiliates. Moreover, hospitals and health plans might find that their customers like the alternative to tort. They could market themselves as a responsible organization committed to providing prompt and fair compensation for avoidable injuries. Patients, who have been sensitized to the prevalence and seriousness of medical errors by the IOM report on medical errors, may find it attractive to be cared for by such providers.

The system may also appeal to hospitals and health plans because it more readily synchronizes with their efforts to improve patient safety. Moving to a system that does not penalize clinicians for reporting adverse events would result in increased reporting and thus increased learning about how to avoid errors. Organizations will realize cost savings from successful error reduction.

Clearly it is unrealistic to expect that all, or even most, hospitals would voluntarily move to an administrative compensation system, especially in the early years when its impacts on costs and market share are unproven. In particular, smaller hospitals that do not find it economically feasible to self-insure for malpractice would be unlikely to participate. Additionally, channeling will not work for all physicians; some solo practitioners who admit patients to several different hospitals will be difficult to tie into a single enterprise.

While these issues are real, it is quite possible that circumstances will change over time. Market trends are tying formerly independent physicians more and more tightly into hospitals and health systems. Market forces also continue to promote consolidation of hospitals and other provider institutions into larger organizations that are more capable of self-insurance and of absorbing a greater proportion of the costs of injuries. Additionally, as evidence regarding the efficacy of an enterprise liability/no-fault system in promoting quality gathers into a critical mass, providers' initial reluctance to move to such a system may be overcome.

b. *Cost.*

The costs of medical injury compensation under an administrative scheme are somewhat uncertain. These costs will be a function of several factors, including (1) the administrative costs, relative to the tort system; (2) the type and level of limitations imposed on noneconomic damages; and (3) the number and severity of claims brought under the system, compared to those that would have been brought in tort.

With respect to administrative costs, there is good evidence that no-fault systems result in very significant savings relative to tort. The tort system has overhead costs in the 50-60% range, as compared with 5-30% for most other social compensation schemes, such as workers' compensation and Social Security Disability Insurance (Schwartz 1994) (Table 2).

With respect to noneconomic damages, the allowable compensation is a system design feature that can take on many forms and need not reflect existing systems. In lieu of a low-level flat cap on damages, currently the favored strategy of tort reformers, a sliding scale could be developed that is both more sensitive to varying levels of injury severity and more generous in compensating the most serious injuries.

The big unknown is how claims frequency would change under an administrative compensation system. At present, only a tiny fraction (estimated at around 2%) of patients who are injured due to negligence file malpractice claims (Localio et al. 1991; Studdert et al. 2000a). One objective of no-fault systems is to increase the fraction of injured patients who receive compensation. Because administrative compensation schemes decrease some of the barriers to bringing claims (such as the need for legal representation and the time and hassle involved), it is likely that the number of claims would go up. But it is impossible to know by how much, or to what extent the new claimants would be persons with minor versus major injuries.

Previous research has estimated the costs of alternative no-fault schemes for hospitals in New York, Utah, and Colorado (Studdert et al. 2000b). This research suggests that it would be possible to compensate many more injuries than are compensable under the current negligence standard and provide a reasonable range of covered losses without increasing the total cost of the liability system. The cost savings arise from the substantial reduction in administrative costs associated with eliminating the negligence determination in malpractice claims. The costs of a no-fault system could be dialed up or down by selecting different definitions of compensable injuries and compensable losses.

c. Impact on Deterrence.

No-fault schemes are often considered synonymous with no-deterrence, but in fact, most no-fault systems do integrate deterrence through experience-rated insurance premiums (Mello and Brennan 2002a). Aggregating claims at an institutional level and applying an experience rating addresses the insurance effects that presently obstruct deterrence. The use of channeling makes it possible to incorporate physician risk information into insurance premiums despite the fact that risk rating physicians individually is not feasible.

The proposed demonstrations would also address the problem of poor fit by introducing an administrative mechanism through which avoidable injuries can be compensated more swiftly and accurately than under the current tort system. By eliminating some of the current barriers to bringing claims, such as the protracted and adversarial nature of litigation, the system increases the likelihood that victims of avoidable adverse events will seek compensation for their injuries. The system also increases the accuracy of the scheme—that is, the match rate between cases of avoidable injury and cases in which a payout is made. The problematic notion of negligence is replaced by the more straightforward finding of whether or not the alleged injury fits within predetermined categories of avoidable adverse events. Many of the variables that can lead to

inaccurate outcomes at trial, such as the use of hired experts and lay juries, are replaced by a simple administrative system.

The use of an avoidability standard and an administrative claims processing mechanism will result in a greater percentage of avoidable injuries being compensated than are compensated under the present system. Increasing the certainty of the economic sanction for poor-quality care should provide heightened incentives for care improvement. Furthermore, the use of experience rating and channeling makes certain that these sanctions will actually be felt by the providers, rather than simply absorbed by their insurance carriers. Because the proposed system would attack the present barriers to deterrence—insurance effects, the poor fit problem, and externalized costs—there is every reason to believe that it would be effective in strengthening deterrence.

d. Impact on Patient Safety Initiatives.

One of the strongest arguments in favor of the proposed system is its greater synchrony with patient safety initiatives (Mello and Brennan 2002a). By moving the focus away from individual negligence determinations, the system removes many of the current barriers to physician and nurse reporting of adverse events. The use of channeling and experience rating also creates incentives for hospitals and other enterprises to pursue error reduction initiatives. The use of experience rating helps ensure that the economic effects of these payouts are felt by the providers rather than simply absorbed by their insurance carriers.

Although the system retains disincentives for individual clinicians to report medical errors because of the use of experience rating, the individual doctor as reporter will see only no change in compensation (or only a very slight change) as a result of any one report to the channeled enterprise. While hospitals will see an increase in premiums associated with an increase in claims, arguably the benefits of knowledge about preventable events outweigh the costs associated with short-term premium increases. This knowledge can be used to design system improvements to prevent error recurrences, which will lead to lower premiums in the long run.

V. Conclusion

The emergence of two perceived “epidemics” in medicine—medical errors and malpractice litigation—have inspired reflection about the traditionally troubled relationship between tort law and medical quality. Tort litigation and error reduction initiatives both aim to improve patient safety, but operate in ways that are counterproductive. Reconciling these approaches requires reforms that allow providers to feel safe in acknowledging errors and providing the information necessary to learn from them, and allow patients to feel that providers will be held accountable for avoidable injuries. Reinforcing legal protections for patient safety data is an important first step. The broader goal should be to evolve the medical liability system beyond negligence-based tort toward administrative compensation arrangements in which both physicians and hospitals have incentives to improve patient safety.

Table 1. Liability Demonstration Projects Proposed by IOM

	OPTION 1 Provider-based	OPTION 2 Statewide
Compensable injuries	“Avoidable” adverse events, as determined by state	
Elements of compensation	Full economic damages + limited noneconomic damages (determined by state)	Injury threshold must be met
Patient opt-out	Yes, through their choice of provider or health plan	No
Insurance arrangements	Channeling of providers; enterprises are self-insured or commercially-insured	Providers contribute money to state insurance system, like workers’ compensation
Experience rating	Yes	Yes
Tort immunity	Yes	Yes
State government role	Determine compensable events and damages schedule Pass tort immunity law Pass authorizing statute	Administer adjudication system
Federal government role	Provide reinsurance for enterprises	

Table 2. Comparison of Tort and Administrative Compensation Schemes[†]

Function	Tort Liability System	Administrative Schemes
Compensation:		
Administrative costs	40-60% of total costs	5-30% of total costs
Accuracy	Many false positives and false negatives	Fewer false positives and false negatives because no need to prove negligence
Ability to scale damages costs up or down	Dependent on local factors such as supply of plaintiffs' attorneys, tort reform, and jury propensity to make large damages awards	Readily adjustable using eligibility criteria
Deterrence:		
Public nature	All efforts made to hide fact of litigation, underlying adverse events, and outcomes	Lack of emphasis on fault allows more open approach
Reporting potential	Physician fearful of reporting to patients and reporting facilities	Physician reporting to patient integral to system—no fear of individual litigation
Experience rating	Not actuarially possible due to insufficient number of suits against individual providers	Usually operates on an enterprise liability basis, enabling experience rating
Corrective justice:	Present, but leads to provider animus toward system	Not a punishment-based system, so no traditional corrective justice

[†] From Brennan and Mello 2003.

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