Topics in Medical Economics: Medical Malpractice

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J Bone Joint Surg Am. 2008;90:1777-1782. doi:10.2106/JBJS.G.00951

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Our system of addressing medical malpractice is broken. We can say that the system is broken not so much because insurance premiums are high or because physicians are demoralized—though these features certainly are not assets either—but because the system fails to accomplish the very things for which it was built: to deter errors before they occur and to compensate the victims of errors that take place nonetheless. In today's broken system, some patients who are injured by malpractice are not compensated, whereas some of those who do receive payment have not truly suffered medical negligence. Because of this imprecision, verdicts lose their power to rebuke and deter. Compounding this is a third problem: the costs of litigation and the defensive medicine that it promotes exact a high price on an already overtaxed health spending budget.

The American Medical Association counts seventeen states facing malpractice crises, with another two dozen remaining on the brink[1]. Addressing this crisis begins with an analysis of the problems.

Problems

Problem 1: Compensation

Patients deserve compensation when physicians breach their duty and the breach leads to injury. That rule is not applied uniformly. Brennan et al.[2] showed that only a small fraction of patients who have been injured by medical negligence collect compensation. As such, the system is not sensitive. The current medical malpractice system is also not specific: many patients who have not been injured by medical errors nonetheless prevail in malpractice litigation. Patients who experience ordinary complications, or even the natural progression of their disease, may still convince a jury that compensation is due.

Problem 2: Deterrence

A system that is neither sensitive nor specific wastes money, of course; but worse, such a system produces inadequate incentives for improvement. In a rational system, a physician who loses a malpractice case will wonder: "What did I do wrong? How can I prevent that from happening again?" By contrast, after losing a malpractice suit in a noisy system, physicians are less apt to take any criticism to heart—even if in their particular case the jury verdict was appropriate.

Another feature limiting deterrence is that physicians are encouraged, if not required, to purchase malpractice insurance. Malpractice insurance, especially when it is not priced according to case volume, practice patterns, and prior claims history, allows the physician to externalize the cost of medical error. Indeed, the major personal cost of a malpractice suit is the hassle associated with defending it, successfully or otherwise. This promotes the practice of defensive medicine.

Defensive medicine has positive and negative forms[3]. Negative defensive medicine is practiced when a physician declines to perform certain services—providing orthopaedic services to a trauma center, for instance—because of the litigation risk. This leads to a deficit of needed care. Positive defensive medicine, on the other hand, represents an excess of unneeded care: treatment and testing undertaken to prevent lawsuits rather than to attain good medical outcomes. One should not be fooled by the word positive: a patient with a brain hemorrhage caused by an anticoagulant given to preempt a lawsuit for deep venous thrombosis is a victim of positive defensive medicine. Kessler and McClellan[4] estimated that defensive medicine represents 5% to 9% of medical expenditures.

Another problem caused by externalizing the costs of error with insurance is underinvestment in error prevention strategies. In theory, a physician would invest $50,000 in a system that would decrease by 50% the odds of committing an error that would result in a $200,000 malpractice award: it saves an expected $50,000. In practice, however, the investment will not be made as the costs would be borne by the physician, while others reap the benefits.

Problem 3: Inefficiencies and Indirect Costs

A large fraction of the money that is paid into the malpractice system in the

Disclosure: In support of their research for or preparation of this work, one or more of the authors received, in any one year, outside funding or grants of $10,000 from the Manhattan Institute. Neither they nor a member of their immediate families received payments or other benefits or a commitment or agreement to provide such benefits from a commercial entity. No commercial entity paid or directed, or agreed to pay or direct, any benefits to any research fund, foundation, division, center, clinical practice, or other charitable or nonprofit organization with which the authors, or a member of their immediate families, are affiliated or associated.

form of insurance premiums does not end up in the pockets of victims of medical negligence[5]. It is consumed, rather, by payments to attorneys, expert fees, and other administrative costs—not to mention payments to plaintiffs who should not have been paid.

Litigation is not only expensive, it is time-consuming. Long gaps between the legal result and the event that triggered it—often on the order of years[6]—deprive even winning litigants of psychological closure. The lapse in time also further reduces the impact of any behavioral feedback to the physician.

The adversarial nature of litigation also goads physicians to remain silent in the face of medical complications: it makes no sense to arm your adversaries with the information with which they will assault you. The tendency for silence produces two negative effects. First, as noted by Gallagher and Levinson[7], silence limits "patients' satisfaction and their trust in physicians' integrity," and, second, it tends to make errors recur unnecessarily. Only through a frank discussion regarding the circumstances of a medical misadventure can we minimize the chances that the mistake will happen again. Silence impedes that analysis.

Also falling within the realm of inefficiency is the free ride given to those who have the greatest power to improve care and minimize error: third-party payers[8]. Because health maintenance organizations and the like are rarely implicated in malpractice suits, these third-party payers can shirk their implicit obligation to minimize medical malpractice. There is little doubt that were third-party payers explicitly obliged to minimize the risk of error, they would take steps to do so.

Solutions

Various methods of ameliorating the malpractice crisis have been proposed (see Appendix). Because the definition of the problem is itself highly variable, the proposed solutions range widely. Broadly speaking, methods of reform comprise changing the legal and financial mechanics of malpractice lawsuits and changing the way medical error is addressed. In the ensuing discussion, some of the proposals under discussion are presented and analyzed.

Caps on Noneconomic (Pain and Suffering) Damages

Ordinarily, people who are injured as a result of negligence can attempt to collect the full value of the damages inflicted. Under a system in which noneconomic damages are capped[9], the injured party can still seek full compensation for monetary damages (such as the cost of medical care, lost wages, and the like), but there would be a statutory limit on the amount that can be collected for the so-called pain and suffering associated with the injury.

The primary argument against a cap on noneconomic damages is that victims of medical error would not be given "full" compensation. Also, some say that caps are regressive, pinching poor people more than rich people. With such limits, a triumphant litigant who sustains a large wage loss will still collect a fairly large sum; one with low wages—i.e., a poor person—would not.

A system in which noneconomic damages are capped will be appealing to potential defendants, yet the appeal goes beyond paying less in a specific case. Capping noneconomic damages is apt to limit the total number of lawsuits. With caps in place, some cases with scant economic damages—for example, the wrongful death of a retiree, a case with neither future medical expenses nor wage loss—might not offer enough potential windfall to justify the risks and expense of litigation. These cases will not be brought, even if true negligence occurred.

A limit on the amount of money that can be collected for noneconomic damages appeals to the self-interests of defendants, but the imposition of such limits can also be made on the basis of an appeal to fairness. According to this line of reasoning, pain and suffering cannot be assuaged with money—anguish simply lies in another realm. For example, if an infant wrongfully dies because of botched medical care and the parents collect $10 million, are they made happy? Any payment for such a loss is an arbitrary token. That is not to say that pain and suffering should go without compensation altogether. It is simply to assert that it would be fairer (and, owing to the decreased volatility of claims, cheaper) to avoid potential jury caprice by imposing limits on awards for noneconomic damages.

Perhaps the strongest argument for the imposition of caps is that such a limitation reflects implicit popular preference. The preference for caps is revealed by the behavior of consumers in states such as California that have already imposed these caps. In the states with caps, there has not been a proliferation of secondary insurance sold to patients to make up the difference between what a jury might award and what the caps allow. By contrast, uninsured motorist policies (which also offer "gap coverage") are very popular. We can infer, consequently, that people do not value limitless awards for pain and suffering—at least not at the price the market says such coverage truly costs. With that in mind, the opposition to caps on noneconomic damages might be dismissed as support for limitless potential awards—as long as somebody else is paying.

No-Fault System

Under a no-fault model[10], patients who experience adverse effects from poor medical care would be compensated without having to prove negligence. This, it has been argued, will reduce litigation costs, expedite the process of compensation, and extract a smaller emotional price from both sides. Beyond these worthwhile goals, proponents of a no-fault approach tout two other benefits. First, a no-fault system will pay some claimants who are currently denied compensation. This increases the sensitivity of the system. In addition, a no-fault system, as the name implies, does not attempt to ascribe blame. As such, it should foster a climate more condu-

cive to the discussion and reduction of error.

There is reason to doubt the merits of a no-fault system. For one thing, a no-fault system deprives the provider of meaningful feedback on perhaps faulty practices. Moreover, a true no-fault system is apt to decrease the specificity of awards, probably markedly so. Physicians, no longer at risk for blame, will have scant interest in resisting claims, however weak these claims may be. That can lead to a torrent of dubious claims.

The more fundamental problem is that medical "accidents," unlike car accidents, are rarely obvious events. In particular, a suboptimal medical outcome could result from bad medical care, of course; but the more typical cause is progression of the underlying disease or simply bad luck. Alluding to the successful application of a no-fault standard for motor vehicle accidents is therefore a specious analogy.

Even for cases in which the outcome was clearly an "avoidable consequence of treatment" (the catchphrase used by advocates of this approach), it may not be fair to compensate the patient if the intent is only to remedy error. Consider a patient with a closed fibular fracture that heals with an angular deformity. Should this patient receive compensation? Under the current system, the patient would collect only if the physician were negligent, perhaps by failing to recognize an obvious fracture or by failing to immobilize it. But what if the physician did recognize the fracture, and placed the patient in a cast, as the standard of care might allow? Here the patient could still argue that the deformity was an "avoidable consequence of treatment"; avoidable, that is, if surgery to align the bone were chosen. Conversely, if surgery were chosen in this exact same circumstance and a wound dehiscence occurred, the patient could claim, with equal sincerity, that this complication too was an "avoidable consequence of treatment"—avoidable if cast immobilization and not surgery were chosen.

The only way to avoid paying every patient with a complication is to have a tribunal to differentiate compensable consequences of treatment from those unworthy of compensation. And it seems that the obvious standard will be whether the physician made a mistake—that is, was "at fault." This gets us nowhere.

Despite these limitations, the no-fault model may be effectively applied in some restricted cases. For instance, the National Vaccine Injury Compensation Program has successfully implemented a no-fault approach to compensate people found to be injured by certain vaccines. This spares plaintiffs the costs of extensive litigation, and it spares manufacturers the risk of ruinous jury verdicts. A similar approach may be applicable to certain rare complications in orthopaedic surgery as well. For example, it may make sense medically and economically to withhold preoperative antibiotics for routine knee arthroscopy: the drugs are not free, of course, and their wanton use may promote drug resistance. Thus, a fund that compensates patients who sustain an infection after arthroscopy and takes these cases out of the realm of litigation may likewise remove the incentive to overprescribe antibiotics in the name of defensive medicine.

Health Courts

Beginning in the early part of the twentieth century, it was recognized that injured workers were not protected properly by personal injury litigation. From this realization was born the Workers' Compensation system, in which the claims of workers were removed from the courts and were placed in an alternative dispute resolution process. Compared with an ordinary civil case, the typical Workers' Compensation proceeding is simpler, cheaper, and faster. A similar argument can be made for the use of this approach in resolving medical malpractice claims.

Alternative dispute resolution processes for malpractice already exist, in the form of pretrial mediation and arbitration. The novelty would be to mandate this currently optional approach for all cases. In its fully developed form, there would be distinct health courts[11] with their own rules of procedure and discovery, presided over by judges with medical sophistication.

A streamlined proceeding before a wise arbitrator is apt to save time and money, but more to the point, it is likely to reach a more just result. As such, the system's accuracy of compensation and deterrent effects will increase—exactly what is needed. Nonetheless, the establishment of health courts may be the most difficult reform to effect. That is because the Seventh Amendment to the U.S. Constitution states that in "Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved . . ." At the minimum, mandating health-care courts will need Supreme Court sanction and perhaps even a Constitutional amendment.

Also, it must be recalled that Workers' Compensation courts may have lower litigation costs because these courts are freed by statute from considering issues of noneconomic damages or negligence. If these issues are considered—and it is likely that health courts will have to consider them—the litigation costs may still be high. Neither consideration represents an insurmountable problem, but each serves as a reminder that health courts, as good as they might be, are not a panacea.

Enterprise Medical Liability

Consuming nearly 20% of the U.S. gross national product, health care has become a vast enterprise. It is no surprise, therefore, that some scholars of the medical malpractice system suggest shifting attention (and blame) away from individuals to focus more on the health-care system overall. This approach is termed, quite aptly, enterprise liability[12].

Under enterprise liability, it is the health-care system at large, not the individual practitioners, that bears primary responsibility for medical errors. This scheme's justification rests on the assertion that many medical errors may

in fact be systems failures, and that it is the enterprise (more so than the individual) that can best prevent error. By placing responsibility on the enterprise, strong incentives to prevent the damages in the first place are created as well.

A form of enterprise liability exists in the Department of Veterans Affairs. If a patient at a Veterans Affairs hospital alleges malpractice, the defendant in that claim is, by law, not the individual practitioner, but the federal government. Needless to say, however, most health care in the United States is not delivered with the same integration that is seen in the Veterans Affairs hospitals. Consequently, an application of enterprise liability to the medical community at large may founder. In the Veterans Affairs system, the identity of the enterprise is clear; this is not the case in the civilian world. (It would be unfair to say, for instance, that an ambulatory surgical center is the "enterprise" treating a knee injury just because the outpatient arthroscopy was performed there.)

Another barrier to applying enterprise liability for malpractice suits is physician opposition. Enterprise liability is apt to be popular initially, yet on scrutiny physicians may balk. They may find that with the onus of liability comes the privilege of control. That is, physicians invited to unload the responsibility for paying for medical errors will be asked to cede medical decision-making power as well. Under enterprise liability, organizations are simply not going to pay for errors passively; they will actively institute programs to prevent errors, such that they will pay less. These error reduction programs, however, may seem redolent of "cookbook medicine" to some physicians and be resented accordingly.

Fostering Best Practices

In medicine, at times the right answer—the right diagnosis, the right treatment—is not known. Yet even when the right answer is known, it may not be applied uniformly. For example, beta blockers have been shown to be "underused" after myocardial infarction, "leading to measurable adverse outcomes."[13] It is reasonable to label the omission of beta blockers after myocardial infarction as an unreasonable error. Reducing unreasonable errors should be a primary goal of the malpractice system.

Adherence to best practices can be encouraged if the rules of malpractice litigation were to stipulate that a physician's compliance with a published best practice is to be considered evidence of compliance with the standard of care. The current rule allows experts on both sides to describe their view of the standard of care, and the jury decides which standard to apply. Although the definition of the standard of care represents only a fraction of the issues typically contested, and in many cases best practices remain a "moving target," changing the rules in this regard could substantially increase the use of best practices in ordinary settings.

Calibrating Awards

There is a broad category of reform proposals concerned with the correct calibration of jury awards, including the elimination of collateral source recovery, the adjustment of awards for their net present value, and the consideration of actuarial risks.

Collateral source recovery occurs, for example, when a plaintiff claims a twenty-year wage loss but does not point out that this wage loss will be covered by a disability pension. Were the jury to award the asserted wage loss, the victim seemingly collects twice for the same loss.

Adjusting awards to their net present value is achieved when a loss spanning a period of time is discounted to reflect the net present value of the loss. For instance, a plaintiff may assert that he will lose $50,000 a year of wages for twenty years, for a total of $1 million. Were he to be given that full $1 million all at once, he would be overpaid: at 5% interest, that $1 million would generate $50,000 a year in perpetuity—not only for twenty years. In fact, less than $655,000 invested at 5% can generate $50,000 per year for twenty years.

Actuarial adjustment considers the possibility that the plaintiff would not have worked for the full twenty years claimed (an obvious reason: dying of other causes). As such, a fair compensation for the claimed wage loss of $50,000 over twenty years is not $1 million; it is not even $1 million discounted to present value; it is the price of an annuity that pays $50,000 a year as long as the person remains alive.

Implementing these changes seems intuitively fair, yet there are principled objections. Rather than detail the arguments, we will simply note that in the realm of malpractice, the gains to be realized from perfect calibration are relatively small. Moreover, these reforms produce no improvement in the sensitivity of the system or its ability to deter error. It therefore is a peripheral issue in the malpractice debate and is best left to others to resolve.

Improving Expert Testimony

Except in rare cases in which the error is so grievous that it is said to speak for itself (the literal translation of what is called in law *res ipsa loquitur*), a successful malpractice claim requires testimony of an expert stating that duty was breached and an injury resulted accordingly. Hence, the rules affecting expert testimony strongly influence the process of malpractice litigation. Recognizing this, it has been proposed that the accuracy of the malpractice system can be improved if only "valid" experts are allowed to testify. It has been further suggested that a letter of certification from a valid expert should be obtained by a plaintiff's attorney prior to initiating a lawsuit. (Such certification will not be perfect, but at least it can be expected to weed out cases such as the one in which a heart surgeon in California was sued after the radiologist reported that a foreign body was left in the patient's chest[14]—the foreign body being a heart valve prosthesis.)

It should also be noted that the problems surrounding expert testimony are not just limited to the excess of bad testimony; there may be a shortage of good testimony too. That is, the victim

of medical error may have difficulty finding an expert willing to criticize a colleague. Programs to improve the quality of expert testimony must therefore include assurances that all plaintiffs have access to certifying experts, even if the tort was committed by a prominent practitioner. This position is endorsed by the American Academy of Orthopaedic Surgeons Standards of Professionalism on orthopaedic expert witness testimony, which states that an orthopaedic expert witness may not "condone" performance that falls outside generally accepted practice standards—let alone endorse it.

Government Subsidy of Malpractice Premiums

In some states, the cost of malpractice insurance is subsidized by the government. Pennsylvania, for example, has allocated approximately $1 billion over the last five years to subsidize malpractice premiums. The government subsidy of malpractice premiums certainly does solve a problem: the adverse effect that high insurance premiums (initially) have on physicians' incomes. This problem is solved by a wealth transfer: shunting money from taxpayers to physicians in the form of subsidized insurance premiums. That is not to say this transfer is a bad deal for the taxpayers. It may be a necessary step to preserve access to care. After all, if a physician finds it too expensive to provide certain services in a given location, he or she may decide to cease providing the services or simply pull up stakes and move to a new location. It should be clear, however, that this subsidy does nothing to solve the fundamental problems with the malpractice system: inaccurate compensation and suboptimal deterrence. Arguably, by purchasing the silence of physicians and their acquiescence to the status quo, subsidizing premiums actually perpetuates these problems.

Overview

The American system for addressing malpractice is broken, but it has been broken for a long time. The problems are arguably inherent: tort law can be applied to medical practice only crudely, with pernicious side effects to be expected. Still, there is ample reason to be cautiously optimistic on the prospects for improvement.

Beginning only recently, yet with great effect, the problems of malpractice have been framed correctly as issues concerning patient safety and improving patient care. The credit for this change lies with the Institute of Medicine Report[15] on medical error, which brought the issue to the attention of the public, and with groups, such as the Institute for Healthcare Improvement, which have kept the issue in focus. By framing the debate over malpractice as one concerned with making patients safer, a coalition favoring reform can be broadened beyond the usual cabal.

The debate over malpractice is also being framed as one that is concerned with access to care. Even if physicians are able in the long run to pass the costs of high malpractice insurance on to their patients in the form of higher fees, it is still the case that high premiums in one location and lower ones elsewhere creates a gradient favoring the migration of physicians from high-cost to lower-cost areas. Likewise, if a specialist can earn almost as much money and yet pay far less for malpractice insurance by omitting certain specialty procedures, insurance costs will decrease the supply of these high-risk or high-cost services. Reform may progress as people become aware of this phenomenon.

There is still one other area calling out for increased public awareness, which is that all money funding the malpractice system comes from patients' pockets. It may be easy to oppose caps on noneconomic damages (to pick one example) if the money is believed to flow from insurance companies or even from the doctors themselves. When it is shown, however, that the money actually comes out of the fees paid for health care (which of course it does), self-interest may help to alter opinions.

Last, people must be shown that changes in the system need not be a zero-sum game; that is, just because one group gains, it does not mean that other groups necessarily lose. As noted, inefficiencies impose costs on some that are not reaped as gains by others. In a 1986 editorial[16], Dr. Charles Epps noted, "Medical liability is indeed a momentous problem that involves many sectors of society. The solutions will require input from all of society. Because physicians have a major interest in the outcome, we must assume a leadership role in obtaining solutions to the problem. . . . If we succeed, the practice of medicine and all of society will benefit." This, of course, remains true today. If we act wisely, taking advantage of the unique opportunities before us, the current crisis can be our final crisis.

Appendix

eA A table listing current state medical liability reform initiatives is available with the electronic versions of this article, on our web site at jbjs.org (go to the article citation and click on "Supplementary Material") and on our quarterly CD-ROM (call our subscription department, at 781-449-9780, to order the CD-ROM).

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