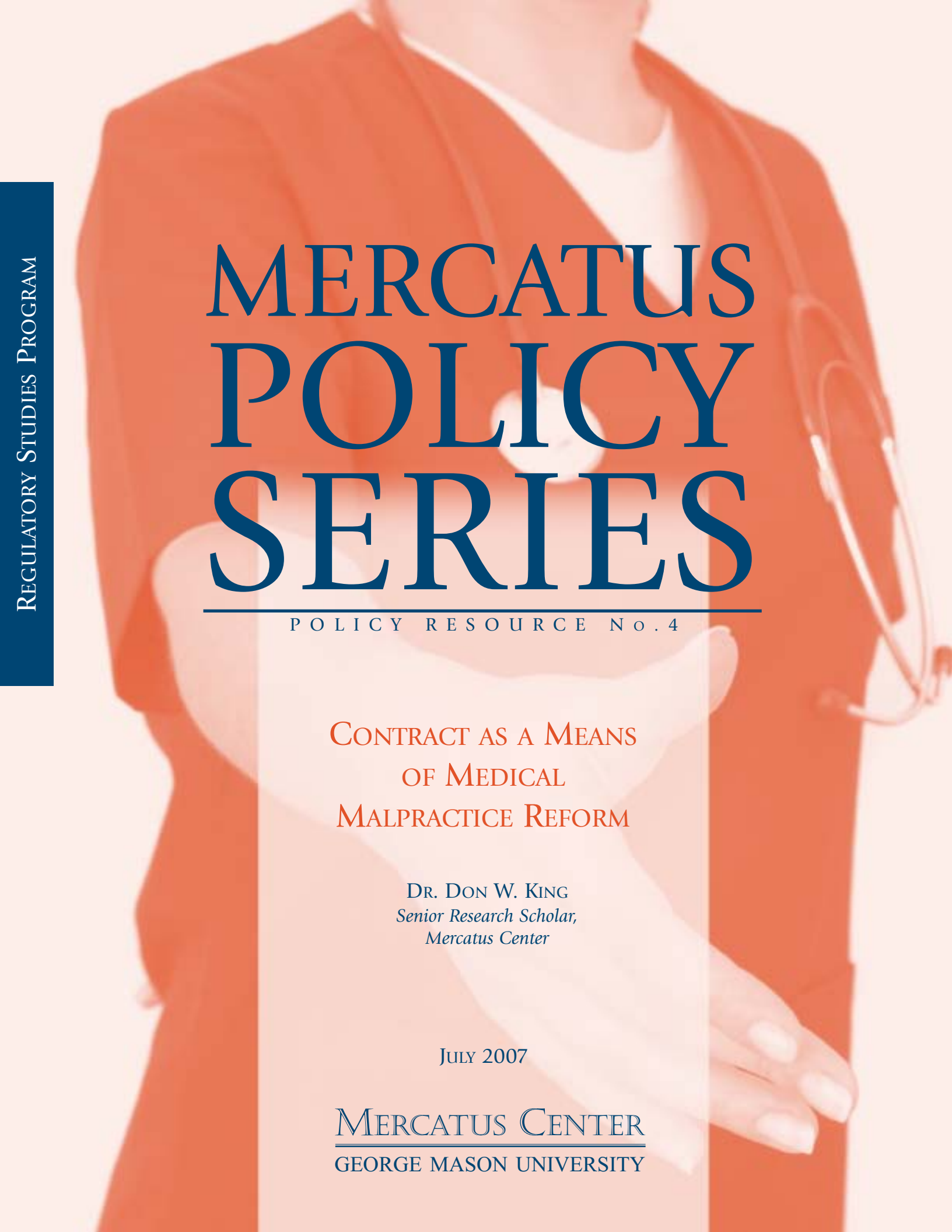

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Contract as a Means of Medical Malpractice Reform

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George Mason University

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Contract as a Means of Medical Malpractice Reform

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PREFACE

During the latter half of the twentieth century, the United States experienced a marked increase in the number and value of medical malpractice lawsuits. A rise in malpractice insurance premiums prompted vigorous debates in state legislatures throughout the country. During the 1990s, a number of studies suggested another reason for considering malpractice reform: malpractice law may not be a very effective means for protecting patients from medical injuries or providing justice for those harmed.

While most states have made changes to their malpractice laws, these changes have been relatively minor and have dealt primarily with controlling costs. A few scholars have recommended more fundamental reform, suggesting that courts allow patients and physicians to allocate the risk of unexpected injury by contract, in advance of care. This approach may offer patients better protection against medical injuries, while simultaneously decreasing costs.

The Mercatus Center at George Mason University researches and analyzes federal and state policies from a public-interest perspective. This policy resource provides an introduction to medical malpractice law and the possible advantages of allowing patients and physicians to alter medical liability rules in advance of care. It offers a basic overview of this topic for health-care professionals, legislative officials, policy analysts, and interested lay readers. The author hopes that this resource will facilitate additional studies that yield more effective ways of decreasing medical injuries and providing justice for injured patients.

This resource emphasizes contracts between patients and physicians. However, the basic principles of tort law and contract law also apply to contracts between patients and other health-care providers. Thus, this resource incorporates cases and studies relevant to all those who provide care for America's patients.

The policy resource is composed of two sections. Part One, "Tort Law and Medical Injuries," describes the economic foundations and present application of tort law in resolving medical malpractice disputes. Chapter 1 surveys the growth of medical malpractice law in the twentieth century and various proposals for reform. Chapter 2 reviews economic theory related to malpractice law. Chapter 3 examines empirical studies of U.S. malpractice law. Chapter 4 describes features of malpractice law that may limit its effectiveness in resolving disputes and decreasing injuries.

Part Two, "Contracts and Medical Injuries," reviews the rationale for and potential use of contracts as a means to reform malpractice law. Chapter 5 reviews the economic theory related to contract law and the potential advantages and disadvantages of using contracts to alter liability rules in advance of care. Chapter 6 surveys several different types of contracts that patients and physicians might adopt if they were certain courts would enforce them. Chapter 7 reviews the potential value that liability-altering contracts may have in deterring injuries, compensating injured patients, and providing justice. Chapter 8 describes impediments to implementing contract-based solutions, as well as a number of approaches for overcoming these impediments.

The medical malpractice debate has generated numerous empirical studies, a large body of literature, and widely varying approaches. The author has attempted to highlight those studies and scholarly articles that shed light on the effectiveness of present malpractice law and the feasibility of contracts in advance of care as an effective means of reform. Undoubtedly, this policy resource contains both errors of omission and errors of fact and interpretation. Both the Mercatus Center and the author would appreciate feedback regarding errors that come to light.

PART ONE:
Tort Law and Medical Injuries

Chapter 1: Introduction to Medical Malpractice Law and its Reform

During the second half of the twentieth century, medical malpractice suits increased, as did the dollar value of settlements and awards.[1] Tillinghast has estimated that U.S. malpractice costs increased in nominal dollars from $1.6 billion in 1975 to $28.75 billion in 2004.[2] As a percentage of gross domestic product (GDP), these costs increased from 0.07 percent of GDP in 1975 to 0.24 percent of GDP in 2004.[3]

Because of the high cost of providing malpractice insurance, many insurers discontinued coverage, physician premiums increased, and most states changed their laws governing medical malpractice.[4] During the 1990s, a number of studies suggested another reason for reforming malpractice law: it may not be a very effective means for decreasing medical injuries or providing justice for those harmed.[5]

Most reforms have resulted in relatively minor changes to malpractice law. However, a number of scholars have recommended a more fundamental reform, suggesting that courts enforce con-

[1] Paul C. Weiler, *Medical Malpractice on Trial* (Cambridge, MA: Harvard University Press, 1991). Based on data derived from surveys of physicians and from claims against physicians insured by a major malpractice carrier, Weiler estimated that the frequency of tort claims rose from about 1 per 100 physicians per year in 1960 to about 17 per 100 physicians per year in the mid-1980s. It then decreased to about 13 per 100 physicians per year by the end of the 1980s. Based on General Accounting Office and National Association of Insurance Commissioners reports, and on additional scholarly publications, Weiler estimated that average U.S. malpractice settlements increased in nominal dollars from less than $12,000 in 1970 to over $100,000 by 1986. Weiler also reviewed data from a RAND study showing that average jury awards in Chicago and San Francisco increased in nominal dollars from $50,000 and $125,000 respectively in the early 1960s to $1.2 million in each city by the early 1980s. John J. Fraser, Jr. et al., "Technical Report: Alternative Dispute Resolution in Medical Malpractice," *Pediatrics* 107 (2001): 602; David M. Studdert et al., "Medical Malpractice," *New England Journal of Medicine* 350 (2004): 283.

[2] Tillinghast–Towers Perrin, *U.S. Tort Costs and Cross-Border Perspectives: 2005 Update*, http://www.towersperrin.com/tp/getwebcachedoc?webc=TILL/USA/2006/200603/2005_Tort.pdf.

[3] Ibid.

[4] Studdert et al. *New England Journal of Medicine* 350:283; Fraser, et al., *Pediatrics* 107:602.

[5] A. R. Localio et al. "Relation between Malpractice Claims and Adverse Events Due to Negligence: Results of the Harvard Medical Practice Study III," *New England Journal of Medicine* 325 (1991): 245; David M. Studdert et al."Negligent Care and Malpractice Claiming Behavior in Utah and Colorado," *Medical Care* 38 (March 2000): 250; Troyen A. Brennan et al. "Relation Between Negligent Adverse Events and the Outcomes of Medical-Malpractice Litigation," *New England Journal of Medicine* 335 (1996): 1963; David M. Studdert et al. "Claims, Errors, and Compensation Payments," *New England Journal of Medicine* 354 (2006): 2024. These and other studies are discussed in chapter 3 of this resource.

tracts between patients and physicians that alter medical liability rules in advance of care. This reform offers the possibility of better protection against medical injuries, lower health-care costs, and increased access to health care.

This chapter provides a brief overview of the medical malpractice debate, a summary of changes in common law that have increased liability for physicians and other health professionals, a brief summary of the most commonly proposed types of malpractice reforms, and an introduction to scholarly proposals for reforming malpractice law by contract.[6]

A. The Medical Malpractice Debate

Scholars agree that since the mid-twentieth century, medical malpractice suits have increased, as have the costs associated with malpractice. However, there is marked disagreement concerning whether these changes actually benefit patients.

Supporters of malpractice law maintain that physicians make many mistakes and the threat of malpractice lawsuits deters physicians from making more mistakes.[7] They argue that those who have suffered injuries resulting from negligent care should be compensated for their harm and that justice requires physicians who have harmed patients to pay for the harm they have caused.

Opponents maintain that medical malpractice law is ineffective in preventing errors and in compensating injured patients.[8] They also maintain that the threat of lawsuits and the high cost of malpractice law increases health-care prices and decreases the availability of services. In addition, they maintain that malpractice law may not select negligent injuries accurately. Thus, malpractice law may often be unjust.

B. Changes in the Law

There are many reasons for the increase in the number and value of malpractice claims since the

[6] Richard A. Epstein, "Medical Malpractice: The Case for Contract," *American Bar Foundation Research Journal* 1 (1976): 87; Patricia M. Danzon, *Medical Malpractice: Theory, Evidence, and Public Policy* (Cambridge, MA: Harvard University Press, 1985) chapter twelve; Jeffrey O'Connell, "Neo-No-Fault Remedies for Medical Injuries: Coordinated Statutory and Contractual Alternatives," *Law and Contemporary Problems* 49 (Spring 1986): 125; Clark C. Havighurst, "Private Reform of Tort-Law Dogma: Market Opportunities and Legal Obstacles," *Law and Contemporary Problems* 49 (Spring 1986): 143; Richard A. Epstein, "Medical Malpractice, Imperfect Information, and the Contractual Foundation for Medical Services," *Law and Contemporary Problems* 49 (Spring 1986): 201; Paul H. Rubin, *Tort Reform by Contract* (Washington, DC: AEI Press, 1993) chapter two; Michael J. Krauss, "Restoring the Boundary: Tort Law and the Right to Contract," *Policy Analysis* 347 (June 3, 1999); Michelle M. Mello and Troyen A. Brennan, "Deterrence of Medical Errors: Theory and Evidence for Malpractice Reform," *Texas Law Review* 80 (2002): 1595.

[7] Chapter 3 describes a number of empirical studies related to these arguments.

[8] Ibid.

mid-twentieth century. These include: (1) advances in technology; (2) increases in the intensity of medical services; (3) rising expectations concerning the benefits of medical care; and, recently, (4) greater awareness of the existence of medical errors.[9] However, changes to both tort and contract law were also important factors in the increase of malpractice claims.[10]

B1. Changes in Tort Law

Several changes to tort law have increased defendant liability, among them: (1) expansion of legal doctrines that result in an increased likelihood of liability,[11] (2) restrictions on defendant affirmative defenses,[12] and (3) increased damage awards,[13] including increased awards for plaintiff pain and suffering.

Changes specifically in malpractice law include an increase in the standard of care expected of physicians, e.g., requiring a national rather than a local standard of care,[14] and occasionally requiring an "any possible benefit" rather than a "customary practice" standard of care.[15] While courts vary as to the acceptance of these changes, the trend has been toward expanded liability for tort defendants, including malpractice defendants.[16] The following case illustrates this trend.

In *Helling v. Carey*, a young woman first consulted

[9] Michelle M. Mello et al. "The New Medical Malpractice Crisis," *New England Journal of Medicine* 348 (2003): 2281; James C. Mohr, "American Medical Malpractice Litigation in Historical Perspective," *Journal of the American Medical Association* 283 (2000): 1731. These authors discuss factors that have affected the frequency of malpractice suits since the mid-nineteenth century.

[10] Epstein, *American Bar Foundation Research Journal* 1:87.

[11] One legal doctrine that increases the likelihood of liability is *res ipsa loquitur*. In most tort cases, the plaintiff must prove by a preponderance of the evidence that the defendant's behavior was negligent, i.e., that it demonstrated a failure to meet the standard of care. *Res ipsa loquitur* is a doctrine under which the plaintiff asserts that, in the particular case at hand, the action that caused the harm does not ordinarily occur in the absence of negligence.

[12] Epstein, *American Bar Foundation Research Journal* 1:87. An affirmative defense is an assertion that even if the plaintiff's allegations are true, the defendant should not be found liable. Examples include: (1) assumption of the risk, a defense in which the defendant asserts that the plaintiff knew in advance that the activity entailed a risk of injury and willingly assumed the risk; and (2) contributory negligence, a defense in which the defendant asserts that the plaintiff's own negligence contributed to the accident or injury.

[13] Weiler, *Malpractice on Trial*.

[14] Jon Walz, "The Rise and Gradual Fall of the Locality Rule in Medical Malpractice Litigation," *DePaul Law Review* 18 (1969): 408.

[15] Philip G. Peters, Jr., "The Quiet Demise of Defense to Custom: Malpractice Law at the Millenium," *Washington & Lee Law Review* 57 (2000): 163. Medical malpractice law requires that a defendant physician meet a "customary practice" standard, i.e., the customary practice of other physicians in similar situations, or a "reasonable physician standard." See *Helling v. Carey* 83 Wn. 2d 514 (1974); 519 P.2d 981 (1974). In this case the court required a non-customary standard because the higher standard would have benefited the patient.

[16] Epstein, *American Bar Foundation Research Journal* 1:87.

an ophthalmologist for near-sightedness when she was in her early twenties.[17] The physician prescribed contact lenses, and the patient returned intermittently for follow-up visits. Nine years later, at the age of 32, she complained of impaired vision. Approximately one month later, the ophthalmologist determined that she had a visual field defect, measured her intraocular pressure, and discovered that she had open angle glaucoma. She was treated for glaucoma, but the visual field defect did not improve.

The woman sued for medical malpractice, alleging that the ophthalmologist should have checked the intraocular pressure during the follow-up visits over the nine-year period. Expert testimony revealed that the risk of glaucoma in a person of the plaintiff's age was approximately one in 25,000. It further revealed that the customary standard of care for ophthalmologists did not include checking intraocular pressure on persons under 40 years of age. As a result, both the trial and appeals courts found for the defendant ophthalmologist.

However, the Washington Supreme Court overturned the decision as a matter of law. It reasoned that if routine measurement of intraocular pressure would have yielded an appropriate diagnosis and prevented loss of vision, it should be the standard of care, regardless of the probability of benefit in younger patients or the customary practice of physicians.

B2. Changes in Contract Law

Two important changes to contract law have increased defendant liability in tort; both fall under the rubric of consumer protection. First, legislators have enacted statutes requiring increased disclosure in commercial settings, and courts have increasingly found tort liability when considering defendant disclosure to be inadequate.[18]

Second, and more importantly, based on the concept of "contract of adhesion," courts have become reluctant to enforce contracts that limit the liability of physicians and other health-care professionals. A contract of adhesion is a standard form contract, prepared by a party to the contract who has superior knowledge of the risk of loss and may have greater bargaining power. Contracts of adhesion may be enforceable under certain circumstances. However, they are not enforceable if they violate public policy, are "unconscionable" (e.g., oppressive to the weaker party) or limit the liability of the stronger party.[19]

In *Tunkl v. the Regents of the University of California*, a patient sued the Regents, alleging negligence on the part of two physicians employed by the UCLA

[17] *Helling v. Carey*.
[18] Epstein, *American Bar Foundation Research Journal* 1:87.
[19] See *Buraczynski v. Eyring*, 919 S.W.2d 314 (Tn. 1996).

Medical Center.[20] At the time of his admission, the patient had signed a "Conditions of Admission" form, in which he released the Regents and the hospital from "any and all liability for the negligent or wrongful acts or omissions of its employees, if the hospital has used due care in selecting its employees."[21] Because the medical center had used due care in selecting its employees, the jury decided for the medical center.

The patient appealed, and the Supreme Court of California reversed the lower court's decision, basing its decision on a California statute that considered a contract exculpatory clause invalid if the defendant's action was a "violation of law, whether willful or negligent."[22] The court reasoned that since the UCLA Medical Center and its physicians were performing a public service, negligent acts while performing that service were a violation of law. Thus, it was against public policy for a medical center performing a public service to require a patient to waive the right to sue as a condition of admission.

C. Malpractice Reform

Studdert et al. recently reviewed the issues surrounding the medical malpractice debate and briefly discussed the major types of reform.[23] They divided reforms into two major categories: tort reforms and system reforms. Tort reforms include those that result in minor alterations to malpractice law but leave basic tort law in place. States have enacted many tort reforms, with varying degrees of success. In contrast, system reforms are fundamental changes that result in entirely new methods of resolving medical malpractice disputes.

C1. Tort Reforms

Tort reforms include: (1) limiting access to courts, e.g., requiring screening panels prior to trial, shortening statutes of limitation, and enacting statutes of repose;[24] (2) modifying tort rules, e.g., eliminating joint-and-several liability or eliminating *res ipsa loquitur*;[25] and (3) decreasing the size of awards, e.g., placing caps on awards or eliminating the collateral source rule.[26]

[20] *Tunkl v. Regents of the University of California*, 60 Cal. 2d 92 (1963); 383 P.2d 441(1963).
[21] Ibid.
[22] Ibid. An exculpatory clause is a contract clause in which one party waives the right to sue, thus completely absolving the other party from liability for negligence.
[23] Studdert et al., *New England Journal of Medicine* 350:283.
[24] See chapter 6 for a discussion of screening panels. A statute of limitation requires the plaintiff to bring a suit within a fixed period of time after the accident or after discovery of the injury; a statute of repose is a statute that prevents a suit against a defendant after a fixed period of time, even if the plaintiff suffers an injury after the fixed period.
[25] See supra note 11 for a definition of *res ipsa loquitur*. Joint-and-several liability is that which may be apportioned entirely to one defendant or group of defendants even if the defendant or group was responsible for only a portion of the injury.
[26] The collateral source rule is a common-law rule in which a court does not deduct from a damage award the reimbursement made to a plaintiff by an independent source, e.g., reimbursement from an insurer.

C2. *System Reforms*

System reforms include: (1) substituting alternative dispute resolution (ADR) for the present civil court system, e.g., requiring mediation, arbitration, administrative law hearings, or medical courts;[27] (2) replacing the negligence standard with a no-fault, administrative system similar to the worker's compensation system in each state;[28] and (3) substitution of enterprise-wide liability for individual liability, i.e., requiring hospitals and managed care companies to assume liability for claims against physicians practicing in their hospitals or networks.

D. Contract as a Means of Reform

Since the 1970s, a number of scholars have suggested a different approach, recommending that courts allow patients and physicians to alter the rules governing medical liability by means of a contract, prior to the delivery of care. In a sense, this would allow patients and physicians to choose from the various reforms just listed, to choose other reforms, or to choose present medical malpractice law by default. Only one change in existing law would be necessary: courts would have to enforce contracts between patients and health-care professionals that specify a means for determining liability and damages that differs from the state's tort law.

Epstein was one of the first to propose allowing patients and physicians to form contracts that altered traditional tort rules.[29] He envisioned physicians and insurance companies unbundling medical care charges from those for malpractice protection, allowing patients to choose the amount of malpractice protection they desired.[30]

In 1985, Danzon recommended allowing patients to obtain more cost-effective care by modifying traditional tort liability standards through their health plans.[31] She believed combining contractual alteration of liability with arbitration for contract disputes would best meet patient needs.

In 1986, O'Connell proposed a statutorily mandated contract.[32] Under his proposal, a state statute would require a physician, prior to a patient encounter such as surgery, to purchase an insurance policy to cover a patient's "net economic losses," should an injury occur.[33] Should

[27] See chapter 6 for a discussion of mediation and arbitration.
[28] See chapter 6 for a discussion of a no-fault, administrative system.
[29] Epstein, *American Bar Foundation Research Journal* 1:87.
[30] Ibid.
[31] Danzon, *Malpractice: Theory, Evidence, Public Policy*.
[32] O'Connell, *Law and Contemporary Problems* 49:125.
[33] In O'Connell's article, "net economic losses" refer to monetary or pecuniary losses that result from an injury. The two primary components of pecuniary losses are the cost of medical care made necessary by the injury and the cost of lost wages resulting from the injury.

an injury occur, the physician would be required to offer compensation for these losses. The patient would have the option of accepting the compensation or rejecting the offer and filing a claim. O'Connell believed this proposal would increase the number of injured parties receiving compensation and decrease the costs associated with litigation.

Also in 1986, Havighurst considered several types of liability-altering contracts that could offer advantages to patients.[34] He envisioned patients contracting through their health insurance plans to alter tort's procedural rules, limit the amount of damages, or alter the standard of care required of physicians or other providers. Epstein expressed his belief that patients would not want to alter the standard of care or choose a strict liability rule.[35] He believed it more likely that patients would choose to limit damages or to substitute arbitration for court-determined liability. In 1991, Weiler suggested there may be a role for two types of liability-altering contracts—those requiring binding arbitration and those limiting damages.[36]

In 1993, Rubin proposed that individuals be allowed to form contracts with physicians or other professionals limiting liability to pecuniary damages in return for lower prices or other consideration.[37] Although he also proposed this type of solution for other products and services, he believed that courts would be more likely to accept such contracts in medical liability cases.

Similarly, in 1999, Krauss proposed allowing patients to waive in advance of care either: (1) substantive tort rules, e.g., alter the standard of care expected of physicians, or (2) procedural tort rules, e.g., substitute binding arbitration for court-determined liability.[38]

And most recently, in 2002, Mello and Brennan proposed that patients and institutional providers be permitted to establish contractual agreements that would incorporate a no-fault liability standard, enterprise-wide liability, and experience-rated insurance for the enterprise.[39] They believed such a system would enable more injured patients to receive compensation and simultaneously decrease medical injuries.

[34] Havighurst, *Law and Contemporary Problems* 49:143.
[35] Epstein, *Law and Contemporary Problems* 49:201. See also chapter 6 for a discussion of a no-fault, strict liability standard.
[36] Weiler, *Medical Malpractice on Trial*.
[37] Rubin, *Tort Reform by Contract*.
[38] Krauss, *Policy Analysis* 347 (June 3, 1999). Krauss' proposal for substituting contracts for tort law was not limited to medical malpractice law but included other situations in which parties are in a contractual relationship prior to an injury.
[39] Mello and Brennan, *Texas Law Review* 80:1595.

E. Summary

During the latter half of the twentieth century, there was a marked increase in medical malpractice lawsuits and in the size of malpractice settlements and damage awards. This increase resulted from many factors, including changes in both tort and contract law.

Because of the increase in malpractice insurance premiums, a number of states reformed their malpractice laws. While most of these reforms were relatively minor changes to tort law, e.g., limiting damage awards, scholars have proposed more fundamental reforms, such as various forms of alternative dispute resolution, a no-fault administrative system for medical injuries, and enterprise-wide liability.

A few scholars have recommended allowing patients and physicians to allocate the risk of injury by contracting in advance of care. This policy resource reviews the economic principles and present application of malpractice law, plus the rationale of and suggestions for allowing patients and physicians to alter the rules governing medical liability in advance of care.

Additional Reading

P. M. Danzon. *Medical Malpractice: Theory, Evidence, and Public Policy*. Cambridge, MA: Harvard University Press, 1985.

Richard A. Epstein. "Medical Malpractice: The Case for Contract." *American Bar Foundation Research Journal* 1 (1976): 87.

Paul H. Rubin. *Tort Reform by Contract*. Washington, DC: AEI Press, 1993.

William M. Sage and Rogan Kersh, eds. *Medical Malpractice and the U.S. Health Care System*. New York: Cambridge University Press, 2006.

David M. Studdert, Michelle M. Mello, and Troyen A Brennan. "Medical Malpractice." *The New England Journal of Medicine* 350 (January 2004): 283.

Paul C. Weiler. *Medical Malpractice on Trial*. Cambridge, MA: Harvard University Press, 1991.

Chapter 2: Economic Theory, Tort Law, and Medical Injuries

Tort is the branch of law in which society imposes the obligation on citizens to take reasonable precautions for preventing harm to another person. Tort law's primary role is to provide justice. If one person harms another, the law considers it just for the person harmed to have redress against the party who caused the harm. From an economic perspective, tort law has at least one additional function—to deter medical injuries. It is important to the present study to note that state tort law governs medical malpractice.

A. The Medical Malpractice Model

At this time, each state grants a patient a liability right against harm caused by the negligent action or inaction of the patient's physician. If harm occurs during medical treatment and the harm is found to be the result of physician negligence, the physician must pay damages equal to the harm caused. Negligence applies to both actions, e.g., performance of a procedure, and inactions, e.g., failure to diagnose a disease. Action or inaction that may result in malpractice lawsuits includes failure to obtain informed consent, failure to diagnose a condition, incorrect treatment decisions, and/or lack of care during a diagnostic, surgical, or obstetric procedure.

To prove negligence in most tort cases, a plaintiff must show that the defendant did not meet the standard of care expected of a "reasonable person" in similar circumstances. To prove negligence in a medical malpractice case, a patient must demonstrate that the physician did not meet the "customary" standard of care or "reasonable physician" standard of care, as practiced by other physicians facing similar circumstances.[1]

In addition, the plaintiff must prove that the failure to meet the standard caused the harm the patient incurred. Causation incorporates two related concepts: "cause in fact," sometimes referred to as "but for" causation, and "proximate cause." Cause in fact requires the plaintiff to prove that "but for" the action or inaction of the defendant, injury would not have occurred. Proximate causation requires the plaintiff to show that the action or inaction of the defendant was the primary legal cause of the injury.

Contested cases often require an extensive discovery process. Both plaintiff and defendant usu-

[1] Peters, *Washington & Lee Law Review* 57:163. The customary practice standard of care was originally the standard of care in all states. A number of states now use a reasonable physician standard.

ally obtain physician experts to review the medical record, give depositions and, if necessary, testify at trial. In most states, the plaintiff patient must obtain a physician, who qualifies as an expert witness, to testify that the defendant physician did not meet the standard of care for the situation under investigation, and the failure to meet the standard caused the patient's injuries. The patient must show by a preponderance of the evidence that the defendant physician failed to meet the standard and the failure was the cause of the harm sustained. Both plaintiff and defendant have a right to a trial by jury, and juries usually determine both liability and damages.

If a court finds a defendant physician liable, it awards damages to the plaintiff patient. Pecuniary or economic damages include the cost of remedial medical care and forgone wages resulting from the injury.[2] Noneconomic damages include damages awarded because of pain, suffering, and other nonpecuniary items. Courts may award punitive damages if they find a physician's behavior intentional or grossly negligent.

Because bringing a suit and preparing a case is costly, a plaintiff's attorney often pays initial case preparation expenses in hopes of receiving a portion of a large settlement or award. Plaintiff attorneys commonly charge a contingency fee of 33 to 40 percent. Most physicians carry medical malpractice insurance to cover both the expense of defending themselves against a claim and the expense of either a settlement or award. Because litigation is costly and the decisions rendered by courts are unpredictable, a plaintiff and defendant often settle a case prior to or during trial before the case goes to the jury.

B. Economic Theory and Medical Malpractice Law

B1. Ex Ante Administrative Rules vs. Ex Post Legal Rules

"Ex ante" administrative regulations are rules applied before harm occurs, while "ex post" legal rules are applied after harm has occurred. From an economic perspective, the purpose of risk-reducing ex ante regulations and ex post legal rules is to encourage individuals to take the precautions necessary to prevent harm from occurring.[3]

Administrative agencies usually apply ex ante regulations in an effort to discourage people from engaging in behavior that increases the probability of harm. For example, a speed limit is a form of ex ante regulation. Its goal is to decrease the probability of an automobile accident. Ex ante rules require those designing the regulations to be aware of activities that increase the probability of harm and those enforcing the regulation to observe an individual engaging in the proscribed behavior.[4]

[2] A pecuniary loss refers to a loss that can be replaced by money.
[3] David D. Friedman, *Law's Order,* (Princeton, NJ: Princeton University Press, 2000) chapter seven.
[4] Ibid.

Courts apply ex post legal rules after harm has occurred.[5] These rules provide incentives that encourage individuals to take precautions prior to the harm, in order to prevent harm from occurring. Ex post rules do not require courts to have specialized knowledge of how best to prevent the harm or specific knowledge of an individual's behavior. Ex post legal rules take advantage of the individual actor's knowledge of the best way to prevent harm.

Medical malpractice law implements ex post legal rules. When a patient incurs an injury caused by a physician, he or she brings suit against the physician. If the court determines that the physician acted negligently and is liable, the physician pays the injured patient damages that reflect the court's estimate of the patient's loss.

Economic theory suggests that if damages are equal to the loss suffered and courts award damages to all negligently harmed patients, physicians will take precautions that are less costly than the resulting injuries.[6] In most medical situations, physicians are most aware of ways to prevent injury to patients and of the specific details of their own behavior. As a result, economic theory suggests that, for most medical care, ex post legal rules are more likely to deter injuries than ex ante administrative regulations.

B2. Property Rights vs. Liability Rights

Property rights protect an owner for the complete valuation of the property.[7] Courts use property rights when these rights are easily assigned and when transaction costs between parties wishing to exchange these rights are low, i.e., the cost of contracting to exchange the property right is less than the cost of a court determining liability and damages.[8] Courts use criminal law and certain equitable remedies to enforce property rights.

Liability rights do not protect a property owner for the owner's full valuation of the property.[9] Courts use liability rights when it is difficult to determine or assign property rights, when transaction costs between parties wishing to exchange property rights are high, or when the cost for a court to determine liability and damages is less than the cost of contracting to exchange the property.[10] Courts use either tort or contract law to enforce liability rights.

[5] Ibid.
[6] Steven Shavell, *Economic Analysis of Accidents,* (Cambridge, MA: Harvard University Press, 1987) chapter six.
[7] Guido Calabresi and A. Douglas Melamed, "Property Rules, Liability Rules, Inalienability: One View of the Cathedral," *Harvard Law Review* 85 (April 1972): 1089; Krauss, *Policy Analysis* 347 (June 3, 1999).
[8] Friedman, *Law's Order,* chapters four and five.
[9] Calabresi and Melamed, *Harvard Law Review* 85:1089; Krauss, *Policy Analysis* 347 (June 3, 1999).
[10] Friedman, *Law's Order,* chapters four and five.

When one consents to medical care, one temporarily foregoes the property right to one's bodily integrity as long as the physician provides appropriate care. During medical care, a property right, enforced by criminal law, protects a patient against criminal behavior. A liability right, enforced by tort law, protects a patient against negligent behavior.

B3. Tort Law vs. Contract Law

Liability rights may be enforced by either tort or contract law.[11] Tort law allocates liability based on whether the defendant exhibited intentional or negligent behavior. Contract law allocates liability based on rights specified within a contract between the parties. If one person harms another person with whom there is no contract, tort law and criminal law are the only legal mechanisms that can provide justice for the injured party. For example, most automobile accidents occur between two people who could not have foreseen that one party would injure the other. As a result, the transaction costs for strangers to develop ex ante contracts to allocate liability are prohibitively high.

However, if one party to a contract harms another party to the contract, either tort law or contract law may provide justice for the injured party. At this time, courts use tort law to enforce a patient's liability right against a physician. To the extent that physician behavior can prevent harm to a patient, tort law provides an incentive for the physician to take the precautions necessary to prevent an injury from occurring.

However, the patient and the physician are not strangers at the time the physician provides care. Because they already have a contract when the physician provides care, the patient and the physician could use contracts, enforced by contract law, to determine liability and damages. It is possible that such contracts may be an effective way to prevent medical injuries and provide justice for injured patients.

B4. Strict Liability vs. Negligence

Courts may apply a number of different tort rules.[12] Some rules may be more effective than others in minimizing injuries in certain situations, and other rules may be effective in other situations. This section distinguishes between strict liability and negligence.

Strict liability refers to the imposition of liability on an actor for action that harms a victim, regardless of whether the actor exhibited negligent behavior.[13] Courts use strict liability in certain unicausal accidents, especially those accidents that result from very dangerous activities and in which the victim can do little to avoid the harm. For example, if a nearby homeowner is injured as a result of an explosion in an explosives factory,

[11] Friedman, *Law's Order,* chapter five.
[12] Friedman, *Law's Order,* chapter fourteen; Shavell, *Economic Analysis of Accidents*.
[13] Ibid.

the factory is strictly liable. Since liability is imposed if an accident occurs, strict liability provides an incentive for the actor to engage in the activity only when the potential value to the actor is greater than the potential risks to others. It also provides an incentive for the actor to take efficient precautions each time the actor engages in the activity. It does not provide an incentive for the potential victim to avoid the harm.

Negligence refers to the imposition of liability when the potential injurer does not use the appropriate level of care during the activity.[14] For example, courts use a negligence rule if one person injures another in an automobile accident. This rule encourages the actor to use the efficient level of precaution each time the actor engages in the activity, but it does not provide the actor an incentive to undertake the activity only when the potential value to the actor is greater than the potential harm to the victim. The negligence rule provides an incentive for the potential victim to undertake the activity only if the potential benefit is greater that the possible harm and to take efficient precautions during the activity.

At this time, medical malpractice law applies a negligence rule for determining liability. Economic theory suggests that a negligence rule encourages the physician to use the efficient level of precaution each time the physician undertakes an activity. Since the patient is responsible for the cost of an injury if it is not the result of physician negligence, a negligence rule provides the patient with an incentive to undertake the activity only if the potential benefit is greater than the risk and to take an efficient level of precaution.

C. Tort Law as a Regulatory Mechanism

The term "regulate" has two primary meanings: (1) to control, direct, or govern; and (2) to make more accurate or to adjust to a standard.[15] The first suggests active intervention to alter the behavior of the regulated party. The second suggests facilitating activity initiated by the regulated party.

When one refers to government regulation, one is usually referring to regulation by an administrative agency. However, regulation of economic and professional activity occurs in a number of ways, each varying to the extent it involves intervention or facilitation. Excluding criminal law, the three principal types of regulation are: (1) administrative regulation, (2) tort law, and (3) market regulation, i.e., regulation by means of consumer choice and producer or seller competition.

At this time, states use administrative regulation for physician licensing and disciplinary actions,

[14] Ibid.
[15] *Webster's New World Dictionary, Third College Edition,* (New York: Simon & Schuster, 1988).

and courts apply tort law as a means of regulating the quality of medical care. This section surveys administrative regulation as the prototype for a regulatory system and then discusses tort law as a regulatory mechanism. Chapter 5 addresses market regulation.

C1. *Administrative Regulation*

Administrative regulation allows government agencies to regulate producers and sellers by setting rules or standards and by imposing penalties if the regulated entity violates the rules. The goal of administrative regulation is to decrease harm by decreasing activity that increases the probability of harm. Agencies enforce these administrative regulations with fines or other penalties.

The benefits of an injury-reducing administrative regulation are its deterrent effects, i.e., the injuries prevented by the regulation. One can estimate the value of the benefits by multiplying the number of injuries prevented by the cost of the individual injuries.

In addition to benefits, there are direct and indirect costs. Direct costs include the cost of the administrative agency that enforces the regulation and the costs incurred by the regulated entities to comply with the regulation. Indirect costs include the value of the lost economic activity that results from the change in behavior made necessary by the regulation. If the regulation has the unintended consequence of increasing some injuries, the increased injuries are an indirect cost of the regulation.[16]

C2. *Tort Law*

Tort law is a form of regulation similar to administrative regulation. Tort law allows consumers to regulate producers and sellers by bringing lawsuits when an injury occurs.

C3. *Benefits*

Potential benefits of tort law include: (1) deterrence of injuries, (2) the increase in welfare or utility obtained by an injured person who receives compensation,[17] and (3) justice for the injured party. Each type of benefit is difficult to quantify. One can estimate the benefits of deterrence by multiplying an estimated number of injuries deterred by an estimated cost of each injury. However, the last two benefits are even more difficult to quantify.

[16] For example, pharmaceutical companies must obtain approval from the Food and Drug Administration before releasing a new drug to the marketplace. One benefit of disapproving a life-saving, but high-risk, drug is that there will be fewer injuries caused by the drug. One cost is that there may be more disease or even death because the drug is not available to those patients who may benefit from the drug.

[17] The payment from physician to patient by either settlement or damage award may be represented in one of two ways: (1) as a benefit to the plaintiff and an equal loss to the defendant, or (2) as a transfer that is neither a benefit nor a cost. However, because the injured patient has suffered a loss, the patient may gain additional welfare by receiving the payment at a time when it is more needed. See chapter 5 for a discussion of the law of diminishing marginal utility for wealth.

C4. Costs

The costs of tort law include both direct and indirect costs. Direct costs include what taxpayers pay to support the court system that administers tort law, and the administrative and legal costs of the plaintiffs and the defendants involved in lawsuits. These latter costs are equivalent to the compliance costs imposed on regulated entities by administrative regulation. In addition to the plaintiffs' and the defendants' legal and administrative costs, malpractice law's compliance costs include the lost professional or economic activity of both the plaintiffs and the defendants who must prepare for litigation, settlement, or trial.

The indirect costs of malpractice law include the cost of lost professional activity that results from the changes in behavior made necessary by tort law. For example, if the threat of a malpractice suit results in a physician using diagnostic tests or treatment measures not otherwise indicated, the costs of these extra precautions are a cost of malpractice law.[18] Similarly, if physicians provide fewer services because of the threat of liability, the cost of forgone care is a cost of malpractice law.

It is important to consider both the benefits and costs of risk-reducing regulatory systems, especially if the regulatory system is regulating an activity that itself reduces a natural risk, such as disease.[19] Many actions taken by physicians, whether diagnostic or therapeutic, reduce the risk that an illness or injury may become worse. To the extent medical malpractice law decreases the actions physicians take to decrease risk—such as decreasing available obstetric services or decreasing the use of high-risk, potentially life-saving medications—the law may result in the same type of harm it is expected to prevent.

As an illustration, assume that a potentially life-saving surgical procedure is available to a person suffering from an illness that would result in death at some later time. The surgery is successful in 25 percent of cases, and the probability of an adverse event leading to the patient's immediate death is 5 percent. If the threat of a malpractice suit for an adverse event decreases the availability of the surgical procedure, the benefit of malpractice law is that five patients will not die immediately. The cost is the deaths of 25 patients who otherwise might have survived had the procedure been available.

C5. Discussion

In most instances, it is not possible to precisely estimate the benefits and costs of regulatory systems. However, one should consider the benefits and the costs and estimate them as closely as possible. A regulatory system in which the costs

[18] Chapter 3 reviews empirical studies of defensive medicine.

[19] See Peter Huber, "Safety and the Second Best: The Hazards of Public Risk Management in the Courts," *Columbia Law Review* 85 (1985): 277.

significantly outweigh the benefits is not just costly, but harmful. This is because the regulatory system deprives the regulated entities of a more valuable use of resources, one of which may be reducing the same risks the regulatory system was designed to reduce.

D. Tort Law, Costs, and Efficiency

In addition to estimating benefits and costs, one can view an efficient legal system for preventing injuries as one that minimizes all costs associated with injuries and their prevention.[20] Tullock has identified five categories of costs associated with such a system.[21] These are: (1) information costs for plaintiffs and defendants to determine the efficient level of precautions; (2) costs for both plaintiffs and defendants to take the efficient level of precautions; (3) costs of the injuries that occur from the activity; (4) costs of the litigation for both parties when an injury, and possible tort, occurs; and (5) costs of litigation errors that affect the parties' calculations as to the appropriate course of action, e.g., the cost of excess injuries or excess precautions that result because litigation errors resulted in an incorrect level of precautions.

E. Summary

Although laws in the 50 states vary, medical malpractice law consists of a basic tort model in which courts use ex post legal rules, provide a patient with a liability right, and use a negligence tort rule to determine liability. Economic theory suggests that a negligence rule will induce both the physician and patient to use the appropriate level of precautions to prevent injury.

One can consider medical malpractice law as a regulatory mechanism similar to administrative regulation. As such, medical malpractice law has both benefits and costs. The benefits include a decreased number of medical injuries, the compensation of injured patients, and justice for injured patients. Costs include the administrative cost of the court system, legal costs of plaintiffs and defendants, and the cost of lost professional and economic activity stemming from the excessive use of resources and forgone care.

Alternatively, one can view an efficient tort system as one that minimizes all costs resulting from both medical injuries and the measures used to prevent them.

[20] Guido Calabresi, *The Cost of Accidents* (New Haven, CT: Yale University Press, 1970) chapter three.
[21] Gordon Tullock, "Welfare and the Law," *International Review of Law and Economics 2* (1982): 151.

Additional Reading

Guido Calabresi and A. Douglas Melamed. "Property Rules, Liability Rules, and Inalienability: One View of the Cathedral." *Harvard Law Review* 85 (April 1972): 1089.

Richard A. Epstein. "A Clear View of the Cathedral: The Dominance of Property Rules." *Yale Law Journal* 106 (May 1997): 2091.

David D. Friedman. *Law's Order*, chapters four, five, seven, and fourteen. Princeton, NJ: Princeton University Press, 2000.

Stephen Shavell. *Economic Analysis of Accident Law*, chapters two and six. Cambridge, MA: Harvard University Press, 1987.

Chapter 3: Review of Empirical Studies

This chapter reviews a number of empirical studies related to medical malpractice law. These studies are organized under five categories: (1) incidence of medical injuries and medical negligence, (2) relationship of medical negligence to legal claims, (3) relationship of medical negligence to claim outcome, (4) effects of malpractice law on medical care (defensive medicine), and (5) effects of malpractice law on medical injuries (deterrence).

A. Incidence of Medical Injuries and Medical Negligence

Three major population-based studies examine the incidence of adverse events secondary to medical intervention: (1) the California Medical Association Study, (2) the Harvard Medical Practice Study (HMPS), and (3) the Utah and Colorado Adverse Events and Negligent Care Study.[1] This section reviews both the HPMS and Utah-Colorado studies.

A1. Studies

In the HMPS, investigators reviewed randomly selected hospital records of patients admitted to 51 New York hospitals in 1984.[2] Investigators defined adverse events as unintended injuries, at least partially caused by medical management, which resulted in a prolonged hospital stay or measurable disability at discharge.[3] They defined a negligent adverse event as "an injury caused by the failure to meet standards reasonably expected of the average physician or institution."[4] Nursing personnel, using criteria that suggested a high likelihood of an adverse event, screened records from the original sample. Two board-certified physicians reviewed the records of patients who met screening criteria. The physicians determined if there was evidence of an adverse event and, if so, whether it appeared to be a negligent adverse event.

[1] Danzon, *Malpractice: Theory, Evidence, Policy*, chapter two; T.A. Brennan et al., "Incidence of Adverse Events and Negligence in Hospitalized Patients: Results of the Harvard Medical Practice Study," *The New England Journal of Medicine* 324 (1991): 370; Eric J. Thomas et al. "Incidence and Types of Adverse Events and Negligent Care in Utah and Colorado," *Medical Care* 38 (March 2000): 261.

[2] Brennan et al. *New England Journal of Medicine* 324:370.

[3] Howard H. Hiatt et al. "A Study of Medical Injury and Medical Malpractice," *The New England Journal of Medicine* 321(1989): 480. This study uses the term "adverse event" to refer to an injury resulting from the action or inaction of a physician or other health-care professional. Other studies use the term "medical injuries." This policy resource uses the terms interchangeably.

[4] Ibid.

In this study, medical intervention included the activity of physicians and hospital personnel.[5] As does tort law, this study considered medical intervention to include both acts of omission, e.g., failure to diagnose and failure to prevent falls, and acts of commission, e.g., ordering medications and performing surgical procedures. Incidence figures for adverse events included those that occurred prior to and were discovered during hospitalization, as well as those that occurred and were discovered during hospitalization. The investigators did not include adverse events that occurred during hospitalization but were discovered after discharge.

The investigators found that 3.8 percent of 30,121 hospitalization records were associated with an adverse event and 0.9 percent were associated with a negligent adverse event.[6] They estimated the statewide incidence of adverse events to be 3.7 percent and the incidence of negligent adverse events to be 1.0 percent.

In the Utah and Colorado study, investigators used methodology similar to that used in the HMPS.[7] However, only one physician reviewed each record, and the physician reviewers were either board-certified family practitioners or internists. In this study, investigators reviewed records of 4,943 patients hospitalized in Utah in 1992 and 9,757 hospitalized in Colorado in 1992. Adverse events were present in 2.9 ± 0.2 percent of hospitalizations in each state. Negligence was present in 32.6 ± 4 percent of the adverse events in Utah and in 27.4 ± 2.4 percent of the adverse events in Colorado.

A2. Comment

Investigators designed these studies to mimic the present medical malpractice system.[8] As a result, adverse events included harm from both actions, e.g., performing a surgical procedure, and inactions, e.g., failure to diagnose a disease. Also, adverse events included harm resulting from the actions or inactions of nurses and other hospital personnel, as well as physicians, e.g., failure of hospital personnel to prevent a hospitalized patient from falling.

Adverse events are an inherent risk associated with most medical treatments and procedures, and, as the investigators noted, determination of medical error and negligence is not precise.[9] For some physician decisions and procedures, reasonably clear guidelines based on controlled studies have been established. For other decisions and procedures, the standard of care is not clear, even among informed specialists. In addition, hospital

[5] Ibid.
[6] Brennan et al. *New England Journal of Medicine* 324:370.
[7] Thomas et al. *Medical Care* 38: 261.
[8] Hiatt et al. *New England Journal of Medicine* 321:480.
[9] Brennan et al. *New England Journal of Medicine* 324:370; Thomas et al., *Medical Care* 38: 261.

charts may offer only a limited picture of what occurred.[10] Moreover, retrospective analysis often gives an incomplete picture of decision-making under uncertainty.[11] Thus, determination of error and negligence by chart-review is subject to both disagreement and error.

Despite these concerns, these studies suggest there are many adverse events associated with medical care and many of these may be associated with substandard care.

B. Relationship of Medical Negligence to Legal Claims

B1. Studies

The studies reviewed in the previous section, the Harvard Medical Practice Study (HMPS) and the Utah and Colorado Adverse Events and Negligent Care Study, also investigate the relationship of medical negligence to tort claims.[12]

As a part of the HMPS, Localio et al. linked the hospital records of 31,429 patients hospitalized in New York in 1984 with malpractice claims reported to the Office of Professional Medical Conduct (OPMC) at the New York Department of Health.[13] New York requires in-state and out-of-state insurers to report claims against New York physicians and other health-care professionals to the OPMC. Negligence was determined by physician review of medical records. Of the 280 patients who suffered adverse events as a result of medical negligence, only 2.86 percent filed claims. Of the 47 patients who filed claims, only 17 percent had suffered negligent adverse events as determined by physician chart-review.

During the Utah-Colorado study, Studdert et al. matched adverse events from 1992 hospitalization records with claims files from 1992 to 1996 from the states' primary malpractice insurers. Of the 161 patients determined to have negligent adverse events, only 2.5 percent filed claims.[14] Of the 18 patients who filed claims, only 22.2 percent had suffered negligent adverse events.

B2. Comment

Both studies used retrospective chart-review to determine adverse events and negligent adverse events. As noted previously, determination of adverse events and negligent adverse events by retrospective chart-review is subject to error. These studies also suffered from a small number of matched claims, and there was evidence that substandard care may have been present in

[10] Tom Baker, "Reconsidering the Harvard Medical Practice Study Conclusion about the Validity of Medical Malpractice Claims," *Journal of Law, Medicine, and Ethics* 33 (2005): 501.
[11] David M. Eddy, "Variations in Physician Practice: The Role of Uncertainty," *Health Affairs* 3 (1984): 74.
[12] Localio et al. *New England Journal of Medicine* 325:245; Studdert et al., *Medical Care* 38:250.
[13] Localio et al. *New England Journal of Medicine* 325:245.
[14] Studdert et al. *Medical Care* 38:250.

some of the HMPS cases determined to be non-negligent.[15]

The studies themselves suggest that the vast majority of patients who are negligently injured do not pursue litigation, and the majority of patients who do are not negligently injured. Given the limitations of these studies mentioned above, it may be best to confine one's conclusions to the following: the majority of patients who are negligently injured do not pursue litigation, and many patients who sue are not negligently injured. Since a formal discovery process after filing a claim is often necessary to determine if the criteria for negligence are present, one would expect there to be a poor correlation between the initial suit and a final determination of negligence.

C. Relationship of Medical Negligence to Claim Outcome

C1. Studies

In 1989, Cheney et al. reviewed 1,175 files of closed malpractice claims against anesthesiologists maintained by 17 insurers.[16] Board-certified anesthesiologists reviewed these files to determine if substandard care had occurred. The investigators found that 82 percent of physicians who provided substandard care made payments to plaintiff patients and 42 percent of physicians who provided appropriate care made payments to plaintiffs.

In 1991, Farber and White studied 252 closed malpractice claim files maintained by a single hospital.[17] When a lawsuit was filed against the hospital, the hospital obtained expert review, from its own or outside specialists, as to adequacy of care. Based on these reviews, the hospital determined whether the care was good, bad, or ambiguous. These determinations were used by the hospital in its negotiation with plaintiffs. The investigators found that payments were made in 88.8 percent of cases involving bad care, 68.9 percent of cases involving ambiguous care, and 24.2 percent of cases involving good care.

In 1992, Taragin et al. studied data from 8,231 closed-claim files from a single insurer.[18] Prior to negotiations, the insurer's claims representative or one or more physician expert reviewers determined whether the claim was defensible, indefensible, or of unclear defensibility. The investigators found that payments were made in 91 percent of

[15] Baker, *Journal of Law, Medicine, and Ethics* 33:501.

[16] F.W. Cheney et al. "Standard of Care and Anesthesia Liability," *Journal of the American Medical Association* 261 (1989): 1599.

[17] Henry S. Farber and Michelle J. White, "Medical Malpractice: An Empirical Examination of the Litigation Process," *RAND Journal of Economics* 22 (1991): 199.

[18] Mark I. Taragin et al. "The Influence of Standard Care and Severity of Injury on the Resolution of Medical Malpractice Claims," *Annals of Internal Medicine* 117(1992): 780.

the indefensible cases, 59 percent of the unclear cases, and 21 percent of the defensible cases.

In 1996, Brennan et al. matched the medical records data from the HMPS with insurer closed-claim data reported to the Office of Professional Medical Conduct at the New York State Department of Health.[19] Of the 24 claims in which no adverse event and no negligence occurred, 42 percent were settled with a mean payment from physician to patient of $28,760. Of the 13 cases involving adverse events but no negligence, 46 percent were settled with a mean payment from physician to patient of $98,192. Of the nine cases involving adverse events secondary to negligence, 56 percent were settled with a mean payment of $66,944. These investigators concluded that no relationship existed between negligent care and settlements in which physicians made payments to patients.[20]

In 2002, Peeples et al. reviewed 81 insurer closed-claim files of lawsuits filed in North Carolina between 1991 and 1995.[21] Courts had referred each of these cases for mediation prior to trial. In each case, the insurer determined in advance of mediation whether the standard of care had been met. The insurer based its determination on the opinion of outside reviewers obtained by the insurer. The investigators found that the insurer paid the plaintiff in 93.1 percent of the 29 cases in which the standard was not met, 37 percent of the cases in which the case was uncertain, and 14.8 percent of the cases in which the standard was met.

In 2006, Studdert et al. reviewed patient hospital records and closed-claim files from five malpractice insurance companies dispersed throughout the United States.[22] They limited the study to four clinical categories: (1) obstetrics, (2) surgery, (3) missed or delayed diagnosis, and (4) claims related to medication. Physicians made payments to plaintiff patients in 16 percent of 37 claims in which there was no injury, 28 percent of 515 patients who had suffered non-negligent medical injuries, and 73 percent of 889 patients who had suffered negligent injuries.

C2. Comment

Similar to other studies from the HMPS, Brennan et al. used retrospective physician chart-review of randomly selected charts to determine negligence.[23] In this study, investigators found no relationship between negligent care and the occurrence of a settlement in which a defendant

[19] Brennan et al. *New England Journal of Medicine* 355:1963.
[20] As used in these studies, the term "relationship" refers to a statistically significant relationship.
[21] Ralph Peeples et al. "The Process of Managing Medical Malpractice Cases: The Role of Standard of Care," *Wake Forest Law Review* 37 (2002): 877.
[22] Studdert et al. *New England Journal of Medicine* 354:2024.
[23] Brennan et al. *New England Journal of Medicine* 355:1963.

physician compensated a plaintiff patient. These data suggest that pretrial negotiations resulting in settlement are not accurately selecting negligently injured patients. However, as with the Localio study noted in the previous section, evidence of substandard care appeared in some cases to be non-negligent.[24]

In four of these studies, investigators reviewed closed-claim data from insurers,[25] and in one study they used closed-claim data from a single hospital.[26] These reviewers had more complete data than did Brennan et al. for review. However, because the investigators knew there was a claim at the time of review, there may have been a bias toward finding negligence. Also, in the three studies with the highest correlation between negligence and payment from physician to patient, investigators determined this relationship using the same data the defendant had used in negotiating settlements.[27] Under these circumstances, one would expect negligence to correlate highly with payment to plaintiff.

Finally, in the study by Studdert et al., the reviewers were not blinded as to litigation outcome.[28] Prior to determining whether negligence had occurred, chart-reviewers knew if there had been a settlement or if there was a judgment in favor of either plaintiff or defendant. This may partially explain why the apparent accuracy of the outcome in this study is much greater than in the Harvard group's original study.

In summary, the relationship between substandard care, as determined by physician review of records, and payment from physician to plaintiff patient remains unknown. It is likely that a relationship between substandard care and payment from physician to patient exists. However, because of methodological problems inherent in these studies, one can not be certain. In addition, even in those studies that demonstrated a relationship between negligence and payment, there were many cases in which the presence or absence of substandard care did not accurately predict physician payment.

D. Effects of Malpractice Law on Medical Care: Defensive Medicine

"Defensive medicine" refers to the notion that physicians may deviate from sound medical practice to avoid the threat of liability. Defensive medicine may include ordering more diagnostic

[24] Baker, *Journal of Law, Medicine and Ethics* 33:501.
[25] Cheney et al. *Journal of the American Medical Association* 261:1599; Taragin et al. *Annals of Internal Medicine* 117:780; Peeples et al. *Wake Forest Law Review* 37:877; Studdert et al. *New England Journal of Medicine* 354:2024.
[26] Farber and White, *Rand Journal of Economics* 22:199.
[27] Cheney et al. *Journal of the American Medical Association* 261:1599; Taragin et al., *Annals of Internal Medicine* 117:780; Peeples et al. *Wake Forest Law Review* 37:877.
[28] Studdert et al. *New England Journal of Medicine* 354:2024.

or treatment measures than medically necessary or restricting otherwise indicated services out of a fear that providing the services may subject one to a liability risk. The extent of defensive medicine is difficult to determine and remains unknown. Physician surveys suggest that it is common, but few controlled studies are available. This section reviews one recent study of physician perceptions, three studies of caesarean delivery rates, two studies of resource use in ischemic heart disease (IHD) and acute myocardial infarction (AMI), and one study of state variation in physician supply.[29]

D1. Studies

In May 2003, during a time of increasing malpractice premiums, Studdert et al. surveyed Pennsylvania physicians who practice in high-risk specialties.[30] Survey participants included obstetricians and gynecologists, general surgeons, radiologists, emergency physicians, orthopedic surgeons, and neurosurgeons. Fully 93 percent of those surveyed reported that they sometimes or often engaged in some form of defensive medicine, and 42 percent reported that they had restricted their practice to avoid the threat of malpractice litigation. The most common forms of defensive medicine reported were ordering medical tests that were not indicated (59 percent), referring patients to other specialists when not necessary (52 percent), prescribing more medication than necessary (33 percent), and recommending more invasive tests than necessary (33 percent). Restrictions on practice included discontinuing one's practice, discontinuing high-risk procedures, and avoiding patients perceived as likely to pursue legal action.

Localio et al., using data obtained from the Harvard Medical Practice Study, investigated the relationship between factors associated with an increased risk of medical malpractice suits and altered caesarean delivery rates.[31] Controlling for clinical indications for caesarean sections, they found that caesarean delivery rates were higher among physicians who had higher malpractice

[29] David M. Studdert et al. "Defensive Medicine Among High-Risk Specialist Physicians in a Volatile Malpractice Environment," *Journal of the American Medical Association* 293 (2005): 2609; A. Russell Localio et al. "Relationship Between Malpractice Claims and Caesarean Delivery," *Journal of the American Medical Association* 269 (1993): 366; Laura-Mae Baldwin et al. "Defensive Medicine and Obstetrics," *Journal of the American Medical Association* 274 (1995): 1606; Lisa Dubay et al. "The Impact of Malpractice Fears on Cesarean Section Rates," *Journal of Health Economics* 18 (1999): 491; Daniel Kessler and Mark McClellan, "Do Doctors Practice Defensive Medicine?" *Quarterly Journal of Economics* 111 (1996): 353; Daniel Kessler and Mark McClellan, "Malpractice Law and Health Care Reform: Optimal Liability Policy in an Era of Managed Care," *Journal of Public Economics* 84 (2002): 175; Daniel P. Kessler, William M. Sage, and David J. Becker, "Impact of Malpractice Reforms on the Supply of Physician Services," *Journal of the American Medical Association* 293 (2005): 2618.

[30] Studdert et al. *Journal of the American Medical Association* 293:2609.

[31] Localio et al. *Journal of the American Medical Association* 269:366.

premiums and practiced at a hospital in which both physicians and hospital had a higher frequency of claims. Also, caesarean delivery rates were higher among physicians who perceived a higher risk of being sued. Rates were not different between physicians who had been sued and those who had not.

Baldwin et al. reviewed the medical records of low-risk obstetric patients who had initiated care between September 1, 1988 and August 31, 1989.[32] They compared prenatal resource use and caesarean delivery rates among obstetricians and family physicians. They found no difference in prenatal resource use between physicians who had been sued and those who had not. Except for rural obstetricians, there was no difference in caesarean delivery rates. Rural obstetricians who had been sued performed caesarean sections at a higher rate than those who had not. There was no difference in either prenatal resource use or caesarean delivery rates between physicians in high-exposure counties and those in low-exposure counties.

Dubay, Keestner, and Waidman compared caesarean rates among physicians with varying malpractice claims risk.[33] They found that obstetricians subject to higher malpractice premiums performed more caesarean sections than those subject to lower malpractice premiums. The increased caesarean section rate was especially prominent among mothers of low socioeconomic status.

Kessler and McClellan investigated the relationship between state medical malpractice reforms and hospital expenditures for patients with acute myocardial infarction (AMI) and ischemic heart disease (IHD).[34] States that directly reduced expected malpractice awards ("direct" reforms) between 1985 and 1987 had a lower rate of growth in hospital expenditures between 1984 and 1990 for both AMI and IHD than states that had not enacted reforms. Investigators concluded that direct reforms, because they reduced physician liability, resulted in a decrease in defensive medicine.

In a follow-up study, Kessler and McClellan looked at hospital expenditures for AMI and IHD patients between 1984 and 1994. Those states that enacted direct reforms had a lower rate of medical expenditures growth for AMI and IHD, though the slowed growth rate was not as significant as that which investigators found in their first study. In the follow-up study, Kessler and McClellan found that high managed-care enrollment also decreased hospital expenditures for AMI and IHD, and the effect of direct liability reforms was less in states with high managed-care enrollment. They concluded that high managed-care enrollment served as a substitute for direct liability reform.

[32] Baldwin et al. *Journal of the American Medical Association* 274:1606.
[33] Dubay et al. *Journal of Health Economics* 18:491.
[34] Kessler and McClellan, *Quarterly Journal of Economics* 111:353.

Finally, Kessler, Sage, and Becker studied the relationship between nine different types of malpractice reform and a state's physician supply between 1985 and 2001.[35] Controlling for differences in population, political party control of state government, extent of managed care, and other factors, they found that states enacting direct reforms, such as caps on noneconomic damages, increased physician supply by 2.4 percent during the study period. Within three years of the reforms taking effect, the result was greater, increasing physician supply in direct-reform states by 3.3 percent.[36] (The increase appeared to result from new physician entry and delayed retirement rather than from physicians moving from one state to another.)

D2. Comment

As its authors note, the first study was designed primarily to provide information to help investigators focus their efforts during future controlled studies.[37] Although not controlled, the study suggests that physicians believe the malpractice climate affects their clinical decision making, and many physicians report restricting services because of the threat of liability.

Based on the data available, including the studies described here, it is difficult to determine whether defensive medical practices are widespread. The studies of obstetric resource use and caesarean delivery rates were suggestive, but not conclusive. The studies conducted by Kessler and McClellan suggest that malpractice reform may decrease excessive resource use without significantly increasing morbidity or mortality.[38] However, managed care may produce similar results.[39] Further, the Congressional Budget Office, in an investigation using methodology similar to that of Kessler and McClellan, reported no reductions in the growth of hospital expenditures for other medical conditions.[40] The Kessler, Sage, and Becker study suggests that reforms limiting expected damage awards may result in a larger supply of physicians.[41]

[35] Kessler and McClellan, *Journal of Public Economics* 84:175.
[36] Ibid.
[37] Studdert et al. *Journal of the American Medical Association* 293:2609.
[38] Kessler and McClellan, *Quarterly Journal of Economics* 111:353; Kessler and McClellan, *Journal of Public Economics* 84:175.
[39] Kessler and McClellan, *Journal of Public Economics* 84:175.
[40] United States Congressional Budget Office, "Limiting Tort Liability for Medical Malpractice: Economic and Budget Issue Brief," Congressional Budget Office (January 8, 2004). Note that the CBO did not provide any actual data in this report.
[41] Kessler, Sage, and Becker, *Journal of the American Medical Association* 293:2618. See United States Government Accounting Office, "Medical Malpractice: Implications of Rising Premiums on Access to Health Care," GAO Report 03-836 (August 2003). In a previous report, the GAO provided data suggesting that in five states in malpractice "crisis," there was only a minor effect on access to care.

E. Effects of Malpractice Law on Medical Injuries: Deterrence

E1. Studies

As part of the HMPS, investigators conducted a two-part study related to deterrence.[42] In the first, they surveyed physicians' perceptions of malpractice risk and their effect on their behavior. The investigators compared these perceptions with data derived from physician chart-review and from claim data obtained from the New York Office of Medical Conduct.

The survey identified the following physician perceptions: (1) physicians overestimate the risk of a malpractice suit; (2) physicians underestimate the risk that a patient will suffer an injury resulting from medical care; (3) physicians believe the threat of a lawsuit influences their behavior, e.g., increases the likelihood they will order unnecessary tests or restrict their scope of practice; and (4) physicians believe that the threat of a lawsuit has little effect on improving quality of care.[43]

In the second part of the study, these investigators compared the rate of adverse events among physicians who had varying degrees of malpractice risk.[44] Findings suggest that physicians with greater malpractice risk had a lower rate of adverse events, but the effect was not statistically significant.

In one other study of interest, Entman et al. compared obstetric quality of care—as determined by physician chart-review—among obstetricians divided into groups based on their malpractice history.[45] They found no differences among the groups with respect to various objective and subjective measures of quality of care.

E2. Comment

As with empirical studies of defensive medicine, it is difficult to study the effects of tort law on negligent adverse events. Physician chart-review is time consuming and costly, and retrospective chart-review is subject to error. Thus the HMPS was inconclusive.[46] Although there was a trend indicating that physicians carrying greater malpractice risk had a lower rate of adverse events, the results were not statistically significant. Indeed, Entman et al. found no difference in quality of care based on malpractice history.[47]

[42] See Paul C. Weiler et al. *A Measure of Malpractice* (Cambridge, MA: Harvard University Press, 1993) chapter six.
[43] Ibid.
[44] Ibid.
[45] Stephen S. Entman et al., "The Relationship Between Malpractice Claims History and Subsequent Obstetric Care," *Journal of the American Medical Association* 272 (1994): 1588.
[46] Weiler et al.
[47] Entman et al. *Journal of the American Medical Association 272*:1588.

F. Summary

During the past 20 years, a number of researchers have carried out empirical studies of medical injuries and malpractice law. Although the data must be interpreted with caution, they do suggest there are many injuries associated with medical care and a portion of these injuries meet the tort law criteria for negligent injuries.

Many studies examine the relationship between claim outcome and negligent adverse events as determined by physician record-review, and the methodologies and results vary widely. Most show a relationship between negligence and claim outcome, but even in these studies there is a high percentage of cases in which claim outcome did not accurately select negligent adverse events.

Other empirical studies of medical malpractice law suggest: (1) most patients who are negligently injured do not sue, and many patients who sue are not negligently injured; (2) physicians believe they are practicing defensive medicine, but there are too few controlled data to confirm this; and, in one large study of deterrence, (3) a trend toward, but not a significant relationship between, malpractice risk and adverse events.

Additional Reading

T.A. Brennan et al. "Incidence of Adverse Events and Negligence in Hospitalized Patients: Results of the Harvard Medical Practice Study." *The New England Journal of Medicine* 324 (1991): 370.

Howard H. Hiatt et al. "A Study of Medical Injury and Medical Malpractice" *The New England Journal of Medicine* 321 (1989): 480.

Eric J. Thomas et al. "Incidence and Types of Adverse Events and Negligent Care in Utah and Colorado." *Medical Care* 38 (March 2000): 261.

P.C. Weiler, H.H. Hiatt, J.P. Newhouse. *A Measure of Malpractice*, chapter six. Cambridge, MA: Harvard University Press, 1993.

Chapter 4: Evaluation of Tort Law for Medical Injuries

This chapter assesses tort law as it relates to medical injuries. The first section examines how the empirical studies described in chapter 3 shed light on tort law's effectiveness in deterring injuries. The second section reviews summary data related to malpractice law's legal and administrative costs, and the third section discusses features of present malpractice law that may prevent it from becoming a very effective means for decreasing medical injuries and improving health.

A. Deterrence of Medical Injuries

At this writing, it is unclear whether malpractice law deters medical injuries. The one comprehensive study of malpractice deterrence indicated that a higher malpractice risk is associated with fewer injuries, but the results were not statistically significant.[1] In addition, anecdotal data suggest that high malpractice premiums were one factor prompting anesthesiologists to undertake system-based error-reduction initiatives.[2] However, as discussed below, the studies of negligence, claims, and claims outcome suggest that malpractice law is unlikely to be a very strong deterrent.

A1. Relationship of Medical Negligence to Legal Claims

The empirical data suggest that patients infrequently initiate malpractice suits when they have been negligently injured.[3] Localio et al. found that only 2.86 percent of negligently injured patients filed claims against their physicians, and Studdert et al. found that the probability of a negligently injured patient filing a claim was only 2.5 percent.[4] Even if additional studies suggest a much higher rate, it is likely that a majority of patients injured by substandard care do not bring suit against their physician.

[1] Weiler et al. *A Measure of Malpractice*, chapter six.

[2] David M. Hyman and Charles Silver, "The Poor State of Health Care Quality in the U.S.: Is Malpractice Liability Part of the Problem or Part of the Solution?" *Cornell Law Review* 90 (2005): 893. Hyman and Silver point out that malpractice lawsuits and high malpractice premiums were partially responsible for inducing the American Society of Anesthesiology to initiate a safety program that resulted in a decrease in anesthesia-related injuries.

[3] In the studies of negligence and claiming behavior, investigators used independent physician chart-review by board certified physicians as the standard for determining negligence. The underlying assumption of these studies is that physician chart-review by board-certified physicians is more accurate in determining negligence than the filing of claims by plaintiffs. Chapter 3 discusses some of the difficulties in determining negligence by chart-review.

[4] Localio et al. *New England Journal of Medicine* 325:245; Studdert et al. *Medical Care* 38:250. Chapter 3 contains the actual data from these studies.

These same studies suggest that many patients who initiate malpractice suits have not been negligently injured.[5] Since it is often difficult for patients to know if substandard care has occurred prior to filing a claim, one would expect these latter findings.

Economic theory suggests that, if only a small percentage of negligently injured patients bring suit, medical personnel may take a low level of precautions and thus many injuries will not be deterred. Similarly, if patients who have not been negligently injured bring suit, medical personnel may take excess precautions, resulting in either excessive testing or forgone care.

A2. Relationship of Medical Negligence to Claim Outcome

There are conflicting data concerning whether litigation is accurately selecting patients who have been negligently injured. In the HMPS, Brennan et al. found no relationship between negligence as determined by physician chart-review and payment from physician to patient.[6] However, these investigators studied a small number of closed claims, and they based determination of negligence on physician chart-review alone.

Most other studies have shown a relationship between negligence and claim outcome, but these studies suffered from a bias toward finding a relationship between negligence and payment from physician to patient.[7] In addition, even these studies reported a large number of cases in which the presence or absence of negligence did not predict outcome.[8]

As with the relationship between medical negligence and claims, economic theory suggests that if liability is rarely imposed when substandard care is given, there may be ineffective deterrence. Similarly, if non-negligent physicians are held liable, either excessive testing or forgone care may result.

A3. Discussion

To illustrate the possibility that medical malpractice law may not effectively deter negligence, Weiler compared medical malpractice to a legal regime in which many individuals who drive through a green light receive tickets, and an even larger percentage who drive through a red light do not.[9] To the extent that either settlement or judgment does not accurately select negligently injured patients, medical malpractice law sends inappropriate signals to physicians, limiting its effectiveness as a deterrent. Instead of serving as a deterrent, malpractice law may discourage

[5] Ibid.
[6] Brennan et al. *New England Journal of Medicine* 355:1963. Chapter 3 includes the actual data from this study.
[7] See chapter 3.
[8] Ibid.
[9] Weiler et al. *A Measure of Malpractice*, p. 75.

physicians from undertaking activities that give rise to litigation, potentially limiting services to patients who need them.

B. Cost of Litigation

Litigation costs refer to those financial costs that plaintiffs and defendants incur in order to settle or win cases. These costs are essential if litigation is to achieve an accurate outcome and deter injuries. However, because these costs deprive patients and physicians of resources that could be used for other purposes, they must be minimized in order to achieve the most efficient outcome.

The cost of litigating medical malpractice cases is unknown. In its 2005 update of U.S. tort costs, Tillinghast–Towers Perrin estimated U.S. malpractice costs at $28.75 billion in 2004.[10] Two years earlier, this group estimated the major components of insured tort costs.[11] In the earlier study, Tillinghast estimated that 46 percent of insured tort costs compensate injured patients—22 percent for economic losses and 24 percent for noneconomic losses. The remaining 54 percent of insured tort costs include 19 percent for plaintiff attorney fees, 14 percent for defendant legal and claims handling costs, and 21 percent for insurance administrative costs.

At this time, Tillinghast has no comparable estimates of the components of medical malpractice costs.[12] However, if one assumes Tillinghast's estimate of 2004 malpractice costs are correct and the components of malpractice costs are similar to those of insured tort costs, malpractice law's legal and administrative costs totaled $15.55 billion in 2004.[13]

Recent estimates of malpractice payments suggest

[10] See Tillinghast–Towers Perrin, *U.S. Tort Costs and Cross-Border Perspectives: 2005 Update*, http://www.towersperrin.com/tp/getwebcachedoc?webc=TILL/USA/2006/200603/2005_Tort.pdf.

[11] See Tillinghast–Towers Perrin *U.S. Tort Costs: 2003 Update*, http://www.towersperrin.com/tp/getwebcachedoc?webc=TILL/USA/2003/200312/tort_exec_sum.pdf. This study also explained Tillinghast's methods for determining tort costs. Tillinghast divided total U.S. tort costs into insured tort costs, self-insured tort costs, and medical malpractice costs. It based its estimates of insured tort costs on insurance industry data compiled by A.M. Best. However, because it was difficult to classify physician-created insurers into either insured or self-insured entities, Tillinghast separated out medical malpractice costs and used its own internal database of state-by-state medical malpractice costs to estimate malpractice costs.

[12] Patricia M. Danzon, "Liability for Medical Malpractice," *Journal of Economic Perspectives* 5 (1991): 51. Based on two previous studies, Danzon estimated legal and administrative costs in medical malpractice cases to be approximately 20 percent greater than net compensation to injured patients. Using this estimate, legal and administrative costs would be 54.5 percent of total direct costs, a figure very similar to Tillinghast's estimates of the components of insured tort costs.

[13] This figure was derived by multiplying the 2004 medical malpractice costs of $28.75 billion by the 54 percent of insured tort costs that were legal and administrative.

lower, but still significant litigation costs. Using 2004 data from the National Practitioner Data Bank (NPDB), Mello and Studdert estimated that annual outlays for compensation from physicians to injured patients were $5.8 billion.[14] If one combines this estimate with the same component percentages described above, malpractice legal and administrative costs totaled $6.8 billion in 2004.[15] As with insured tort costs, if the legal and administrative costs of malpractice law are greater than the compensation of injured patients, malpractice law itself becomes a source of inefficiency, increasing the costs associated with medical injuries and their prevention.

High litigation costs may harm patients in many ways. They may discourage patients from using the only avenue available to obtain compensation for injury. They may deprive both patients and physicians from using resources in more desirable ways, and they may result in higher prices for health care, decreasing services for those least able to afford them.

In addition, high malpractice insurance premiums may prevent physicians and other providers from offering services. For example, in order to decrease their malpractice premiums, full-time physicians may restrict high-risk services such as obstetric services; and retired physicians, who desire to work either part-time or on a voluntary basis, may not be able to provide care because of high malpractice premiums.

C. Features of Malpractice Law That May Influence Its Effectiveness

C1. Adversarial Nature of Tort Law

Tort law begins with a dispute and uses an adversarial process. Under tort law, courts determine whether a defendant is liable for the harm that occurred, and if so, how much the defendant must pay. Thus, litigation outcomes significantly affect both parties. If the case goes to trial, one party is a winner and one is a loser.

The adversarial nature of tort law may affect a patient's decision to bring suit. Often, patients are friends and colleagues of their physician, and many communities frown upon lawsuits. In other situations, patients may have a long-standing relationship with their physician and may prefer

[14] See Michelle M. Mello and David Studdert, "The Medical Malpractice System: Structure and Performance," in *Medical Malpractice and the U.S. Health Care System*, William M. Sage and Rogan Kersh, eds. (New York: Cambridge University Press, 2006). Their methodology for estimating these costs is described in a technical appendix to the following article: David M. Studdert et al. "Disclosure of Medical Injury to Patients: An Improbable Risk Management Strategy," *Health Affairs* 26 (2007): 215 (http://content.healthaffairs.org/cgi/content/full/26/1/215/F2).

[15] This latter figure was derived by dividing the estimate of $5.8 billion by 46 percent (Tillinghast's estimate of the percentage of costs representing payments from physicians to patients) and then multiplying by 54 percent (Tillinghast's estimate of the percentage of costs representing legal and administrative costs).

not to sever this relationship. Tort suits are costly with respect to time and financial resources. For minor injuries with relatively small potential damage awards, the expected return is much less than the cost to bring suit. Because of these and other factors, it is likely that a large percentage of injured patients will not bring suit against their physician. Economic theory suggests that if only a small percentage of negligently injured patients bring suit, there may be ineffective deterrence of negligence.[16]

In addition, the adversarial nature of tort law may affect a physician's willingness to disclose errors.[17] According to Leape, medical errors are usually a combination of both human error and system, or "latent," error.[18] Human errors include slips, primarily resulting from inattention; rules-based mistakes, resulting from either misperception of a situation or misapplication of a rule; and knowledge-based mistakes, resulting from lack of knowledge or misinterpretation of a problem.[19] Latent errors include defects in system design, faulty system maintenance, and poor management decisions.[20]

Based on his review of error prevention in other settings, Leape recommends a systems approach to medical error prevention.[21] As is true in other settings, full disclosure of errors is essential to understanding the cause of the errors and to designing and maintaining error-prevention programs. Because most errors rarely occur in a single institution, sharing data among institutions may be especially important in developing a better understanding of medical errors and preventing future errors.[22]

At this time, it is not clear whether the threat of malpractice suits is inhibiting error-reduction ini-

[16] Because a single malpractice lawsuit may have a major effect on a physician's reputation, the threat of a single suit may have a greater deterrent effect than would be expected from the small probability that a lawsuit will be filed. Similarly, the threat of a lawsuit may be more likely to result in defensive medicine than one would expect from the small probability that a suit will be filed.

[17] Lucian L. Leape, "Error in Medicine," *Journal of the American Medical Association* 272 (1994): 1851; David M. Studdert and Troyen A. Brennan, "No-Fault Compensation for Medical Injuries: The Prospect for Error Prevention," *Journal of the American Medical Association* 286 (2001): 217; Linda T. Kohn, Janet M. Corrigan, and Melba S. Donaldson, *To Err is Human: Building a Safer Health System*, (Washington, DC: National Academy Press, 1999).

[18] Leape, *Journal of the American Medical Association* 272:1851.

[19] Ibid.

[20] Ibid.

[21] Ibid.

[22] See David J. Becker and David P. Kessler, "The Effects of the U.S. Malpractice System on the Cost and Quality of Care," in *Medical Malpractice and the U.S. Health Care System*, William M. Sage and Rogan Kersh, eds. (New York: Cambridge University Press, 2006).

tiatives.[23] However, given the nature and methods of tort law, the threat of malpractice may indeed hinder such initiatives. If so, malpractice law may result in the same type of harm it would be expected to deter.

C2. *Determination of Liability under the Negligence Rule*

As noted previously, determining negligence by either physician chart-review or by litigation is difficult, subject to error, and costly. A brief discussion of these difficulties follows.

Standard of care. For most tort cases, courts require the defendant to use the care of a reasonable person in similar circumstances. For malpractice cases, courts usually compare the action or inaction of the physician against a "customary" standard or a "reasonable physician" standard for other physicians facing similar circumstances.[24] In either case, a fact-specific investigation is necessary to determine the standard for that particular situation and to determine whether the physician failed to meet the standard.

As noted previously, the standard of care requires action when appropriate and inaction when appropriate. Also, for many clinical situations, the standard requires a physician to decrease the risk of harm from disease while simultaneously increasing the risk of harm from a diagnostic or treatment measure. For example, prescribing a medication or performing a surgical procedure often decreases the risk of harm from disease while simultaneously increasing the risk of harm inherent in the medication or surgery.

For some medical situations there is a well-accepted standard of care, e.g., there is a customary practice, or there are written "practice guidelines," well-controlled studies that dictate a standard of care, or standardized procedures to follow during a diagnostic or surgical procedure. However, for many situations, especially those that require clinical decision-making, there are not controlled studies, and there is no easily determined standard. Eddy has described the role of uncertainty in medical decision-making and the wide array of options that physicians face in making clinical decisions.[25] Because medical science and technology change rapidly, the standard of care changes rapidly as well.

Because most clinical decisions require judgment, based on the available studies and an individual patient's particular situation, there is frequently disagreement, even among experts, as to the appropriate standard of care. Disagreement is

[23] Kohn, Corrigan, and Donaldson, *To Err is Human*, chapter six; Hyman and Silver, *Cornell Law Review* 90:893. Many observers have suggested that the threat of malpractice suits may be hindering physician error disclosure; Hyman and Silver point out there are no data to support this suggestion.
[24] Peters, *Washington & Lee Law Review* 57:163.
[25] Eddy, *Health Affairs* 3:74.

reflected in the conflicting opinion of expert witnesses, and it at least partially explains the widely varying practices of physicians.[26] For these reasons, it is common for parties and courts to have difficulty determining the appropriate standard for the situation in question.

It also may be difficult to determine whether a physician failed to provide the standard of care. It is not uncommon for a surgeon to believe that a procedure went well, only to find when the patient awakens that a complication has occurred, such as a stroke after a neurosurgical procedure. Strokes during surgery may be caused by a failure to provide the standard of care or by phenomena that were not the result of error.

Because of these difficulties, it is likely that determining what the standard is and whether it was met will continue to be subject to error and will remain costly in many medical situations. If incorrect determination results in an inaccurate outcome, there may be ineffective deterrence or defensive medicine, depending on the direction of error. If determination is costly, there may be higher prices that decrease the availability of needed services.

Causation. To hold a defendant liable, courts require a plaintiff to demonstrate that substandard care caused the injury suffered by the patient. Unlike the case with most tort actions, plaintiffs in medical malpractice cases may suffer from conditions that mimic the harm caused by medical intervention, and a medical condition may become worse despite the action of a physician.

A worsening clinical condition may result from either progression of an illness or medical intervention. Often, many factors may play a role. The physician's action or inaction may be a small factor, a large factor, or unrelated to a patient's worsening clinical picture. As with standard of care, it is likely that determining causation will continue to be costly and subject to error.

C3. *Valuation of Damages*

In medical malpractice cases, courts may award pecuniary and nonpecuniary damages. Pecuniary damages include the cost of remedial medical care and the cost of lost wages resulting from inability to work during the time of injury-related disability. Nonpecuniary or noneconomic damages are those related to pain, suffering, and other losses that are very difficult to quantify. In circumstances in which the physician is grossly negligent or intentionally caused the injury, courts may award punitive damages.

Courts value the morbidity and mortality that result from substandard care very differently from the way the market for physician services values services that decrease morbidity and mortality. To illustrate, assume a highly competent physician

[26] Ibid.

provides primary care for an equally competent and successful investment banker. On a routine follow-up visit, the physician notes subtle findings that lead to early intervention and life-saving treatment. "But for" the physician's action, the patient may have died. The physician's bill for the follow-up clinic visit may be between $100 and $200. Had the physician not made the appropriate assessment, allowed the patient to leave the office, and later been found liable for the patient's subsequent illness and death, damages may have been in the millions of dollars.

Competitive markets value services based on the supply and demand for services, regardless of the type of service being performed.[27] Markets allow physicians and other professionals to provide life-saving services to many people at affordable prices.

Court valuation of damages. To determine damages, courts make estimates of a plaintiff's losses. Justice requires courts, to the extent possible, to make the plaintiff "whole."[28] Similarly, economic theory suggests that deterrence is best when courts award damages that cover a plaintiff's full losses.[29]

As with determining liability, courts may have difficulty determining a plaintiff's full losses. Courts estimate pecuniary losses based on multiple assumptions such as future medical requirements, future life expectancy, and future earning capacity. Nonpecuniary losses, such as those resulting from pain and suffering, are especially difficult to quantify. Economic theory suggests that inadequate damage awards may result in ineffective deterrence.[30]

More importantly, while full compensation for losses may be necessary for justice and maximum deterrence, full compensation for losses may significantly increase the cost of providing health care.

[27] At this time, physician and hospital services are only partially determined by market forces. Chapter 8 discusses this topic more fully.

[28] Heidi Li Feldman, "Harm and Money: Against the Insurance Theory of Tort Compensation," *Texas Law Review* 75 (1996-1997): 1567. Common law often asserted that justice required courts to award damages that make the plaintiff "whole." Feldman maintains, as do most legal scholars, that making the plaintiff whole requires courts to construct damages that, as much as possible, restore the patient's capacity for flourishing, not to limit damages to one's preferences for insurance.

[29] Shavell, *Economic Analysis of Accident Law*, chapter six. Defendants should take optimal precautions when 100 percent of negligent injurers pay damages, no non-negligent injurers pay damages, and each negligent injurer's damage payments cover 100 percent of plaintiff losses.

[30] Shavell, *Economic Analysis of Accident Law*. Deterrence of medical injuries also may be limited by the fact that almost all physicians carry malpractice insurance to cover litigation expenses and awards, and liability insurance for physicians is not experience-rated.

Several features of medical torts make damage awards for malpractice losses especially large. Medical care involves people, and the cost of human injury is often greater than the cost of property injury. Many actions taken by physicians have a risk of injury even if care is appropriate, and in some cases the loss associated with these injuries is great, such as permanent brain injury following a neurosurgical procedure.

In addition, the standard of care often requires action to prevent disease from progressing, e.g., an early diagnosis of cancer. If liability results from failure to make the diagnosis, the cost of the underlying disease becomes a component of malpractice losses. As noted above, malpractice losses in these situations include not just the cost to treat the disease, but also the cost of lost wages, pain, suffering, and other losses resulting from the disease.

The potential for large malpractice losses increases the cost of providing care. In a competitive market, higher costs result in higher prices, and higher prices may lead to fewer available services. Since medical care itself reduces harm, full compensation for losses may result in more morbidity and mortality from disease than that which is deterred by full compensation for losses.

Secondary effects of high damage awards. In addition, the potential for high damage awards increases the cost of litigation itself. In many malpractice suits, the stakes for the parties are very high. The difference between winning and losing may be millions of dollars. In bilateral monopoly bargaining situations, bargaining costs increase when bargaining positions and potential outcomes are widely separated.[31] When positions are widely separated, both plaintiff and defendant invest thousands of dollars to obtain information, secure expert testimony, review records, and develop cases. Smaller stakes would likely result in a smaller investment of resources by both sides and, thus, lower litigation costs.

D. Summary

A review of the empirical data suggests that medical malpractice law is unlikely to be a strong deterrent of medical injuries. Most negligently injured patients do not bring suit, and this may result in ineffective deterrence. Many non-negligently injured patients do bring suit, and this may result in excess precaution. Similarly, inaccuracy of outcome may result in ineffective deterrence or excess precaution, depending on the direction of error. In addition, malpractice litigation is costly, and the high cost of litigation represents another source of inefficiency.

Several features of malpractice law seem to indicate that it may never become a very effective method for deterring injuries, and it may result in

[31] Friedman, *Law's Order*, chapter eight.

less care for some patients. These features include the adversarial nature of tort law, the difficulty in determining liability under the negligence rule, and the tradeoff between damages for maximal deterrence and higher costs for medical care that may result from large damage awards.

Additional Reading

David A. Hyman and Charles Silver. "The Poor State of Health Care Quality in the U.S.: Is Malpractice Liability Part of the Problem or Part of the Solution?" *Cornell Law Review* 90, (2005): 893.

Lucian L. Leape. "Error in Medicine." *Journal of the American Medical Association* 272, (1994): 1851.

Michelle M. Mello and David Studdert. "The Medical Malpractice System: Structure and Performance," in *Medical Malpractice and the U.S. Health Care System*, edited by William M. Sage and Rogan Kersh. New York: Cambridge University Press, 2006.

Paul C. Weiler. *Medical Malpractice on Trial*, chapter six. Cambridge, MA: Harvard University Press, 1991.

PART TWO:
Contracts and Medical Injuries

Chapter 5: Economic Theory, Contract Law, and Medical Injuries

A contract is a voluntary agreement that creates rights and obligations between two or more parties. Contract law is the branch of law that interprets and enforces these voluntary agreements. Most contracts involve mutual obligations, e.g., a promise to perform or refrain from performing an action, in return for either performance of another action or a return promise. Each person gives up something of value in exchange for receiving something of value.

In addition to commercial exchanges, individuals use contracts to settle legal disputes. For example, it is common for parties to a legal dispute to come to a settlement in advance of or during trial. Settlement usually involves one party giving up the right to continue the lawsuit in exchange for receiving compensation or other consideration from the opposing party. Courts enforce contracts that waive legal rights after harm has occurred. However, courts have been reluctant to enforce contracts that waive or alter legal rights in advance of harm.[1]

When a patient seeks medical care, the patient and physician form either an express or implied contract.[2] In effect, the physician agrees to provide medical care, usually in exchange for compensation. The physician promises to provide competent, careful, and confidential care, while the patient gives up privacy rights to certain health information and the right to one's bodily integrity so the physician can provide care.

Unlike strangers who are involved in accidents, patients and physicians could determine in advance how to allocate the risk of loss should an injury occur. It is possible that contracts, enforced by contract law, could be more effective than tort law for decreasing medical injuries and providing justice for those harmed.

A. Economic Theory and Contract Law

A1. Enforcement of Contracts

In order for voluntary agreements to facilitate exchange, there must be reasonable certainty that courts will enforce the agreement. As an illustra-

[1] Chapter 8 provides an introduction to case law governing the enforcement of liability-altering contracts between patients and physicians.

[2] An express contract is a contract formed when the parties explicitly agree to the terms; an implied contract is a legally determined contract formed by the actions or relationship of the parties.

tion, assume that a group of physicians contracts with a patient to provide all medical services the patient requires for a fixed fee per month. Further assume that a patient makes fixed monthly payments to the group for years, initially requiring very little care. When the patient later becomes ill and needs care, the physicians must provide the required care, or the patient will suffer a loss. If the physicians refuse to do so, the court must force them either to provide care or to pay damages that allow the patient to obtain care elsewhere.

Unenforced contracts result in a misallocation of resources and may lead to continuous renegotiation in which each party tries to gain as much as possible from the other party.[3] A court that refuses to enforce a contract sends a signal to other parties that it will not enforce that particular type of contract. If this occurs, parties will no longer enter into them.

At this time, courts are reluctant to enforce contracts between patients and physicians that alter liability rules in advance of care.[4] As a result, patients and physicians rarely attempt this type of contract.

A2. Property Rules, Liability Rules, and Inalienability Rules

Courts may enforce or reject contracts using property rules, liability rules, or inalienability rules.[5] Property rules include specific performance and failure to enforce.[6] Specific performance requires the party attempting to breach the contract to perform the promise made within the contract. Failure to enforce allows the breaching party to withdraw from the contract without penalty. Both rules protect the full property right of one party, but provide no protection for the opposing party.

Contract breach is a liability rule.[7] If a party breaches a contract, the court requires the breaching party to pay damages to the non-breaching party. Contract breach does not allow the non-breaching party to obtain its full valuation of the right, performance by the breaching party, but it does allow damages that may approximate the full value to the party. It also may allow a party to avoid the inefficiencies that may be associated with either specific performance or failure to enforce.

Alienation refers to the transfer of a right or

[3] Friedman, *Law's Order,* chapter twelve.
[4] See chapter 8 for a discussion of this topic.
[5] Calabresi and Melamed, *Harvard Law Review* 85:1089; Richard A. Epstein, "A Clear View of the Cathedral: The Dominance of Property Rules," *Yale Law Journal* 106 (May 1997): 2091; Krauss, *Policy Analysis* 347:(June 3, 1999); Friedman, *Law's Order*.
[6] Friedman, *Law's Order*.
[7] Epstein, *Yale Law Journal* 106:209.

entitlement by sale or gift from one person to another. An inalienability rule prevents the owner of a right from transferring it to another person.[8] For example, an inalienability rule governs an individual's right to his body. He cannot sell or give his heart to another person, and he cannot sell himself into slavery. Inalienability rules reflect a society's belief that it is immoral or against public policy to alienate certain rights.[9] When courts allow the transfer of rights, they are applying property rules. When courts prohibit the transfer of rights, they are applying inalienability rules.

At this time, courts are reluctant to enforce contracts in which a patient waives the right to sue in advance of harm.[10] When courts enforce contracts in which a patient waives the right to sue in advance of care, they are applying property rules. When courts do not enforce contracts in which a patient waives the right to sue, they are applying inalienability rules. When courts apply tort rules after rejecting a contractual waiver of tort rights, they are applying liability rules.

A3. Ex Ante Contracts vs. Ex Post Tort Law

As noted in chapter 2, if an injury occurs during the provision of medical care, courts use tort law to determine liability and damages. The cost of the injury falls to the patient unless the patient brings suit against the physician. If the patient brings suit, and the court determines the physician is liable, the cost of the injury shifts to the physician. Under tort law, allocation of risk occurs after an injury has occurred. The court determines liability based on whether the physician intentionally caused the injury or caused the injury as a result of care below the customary standard.

Because a patient and physician already have a contract prior to care, they could allocate the risk of loss by contract, prior to an injury occurring. For example, they could decide in advance that the physician will be responsible for the cost of an injury resulting from a surgical procedure or that a patient will be responsible in case of a drug reaction. In this way, the patient and physician could decide in advance what is in each of their best interests. In addition, they could save the expens-

[8] Calabresi and Melamed, *Harvard Law Review* 85:1089; Krauss, *Policy Analysis* 347:(June 3, 1999).

[9] Ibid. During the twentieth century, legislatures and courts increasingly applied inalienability rules to economic rights. Minimum wage laws and laws restricting the number of hours a person may work are examples of legislatures enacting inalienability rules. For example, a worker can not choose to work for less than a certain wage or choose to work more than a certain number of hours.

[10] *Tunkl v. Regents of University of Caifornia*, 60 Cal. 2d 92 (1963); 383 P.2d 441(1963).

es required for the court to determine liability based on negligence.

B. Insurance Contracts as a Means to Allocate Risk

An insurance contract allocates risk in advance of harm.[11] Similar to tort law, insurance contracts use predetermined rules to determine liability and damages. Unlike tort law, insurance contracts allocate liability and determine damages based on a contract agreed to prior to an injury occurring.

Individuals purchase insurance because their preferences follow the law of diminishing marginal utility for wealth. As one obtains more wealth, the additional incremental wealth is not as valuable to the person as the initial wealth.[12] Other things being equal, individuals would prefer to give up a small amount of wealth at a time when they have more of it to receive a larger amount of wealth when they have lost it. Insurance companies are able to provide the wealth when it is most needed because they are able to pool the risk of many individuals. These principles underlie automobile, homeowner's, health, and medical malpractice insurance.

At this time, physicians have protection against loss from malpractice awards through liability insurance. Patients may have protection for the health consequences of a medical injury through health insurance, and they may have protection against lost wages through disability insurance.

If a patient were to enter into a contract that waives or alters liability rules in advance of medical care, the patient may choose to insure against losses that may result from medical injuries. For example, a patient may waive tort rights and at the same time maintain or purchase insurance to cover medical expenses and lost wages. In a sense, a patient would substitute an insurance contract for tort rules. This would allow patients to choose the level of protection they desired.

C. Competitive Markets as a Regulatory Mechanism

As discussed in chapter 2, administrative regulation uses the threat of agency-imposed penalties to induce regulated parties to avoid activities that increase the risk of harm. Tort law uses the threat of court-determined liability to deter one from activities that may harm others. Competitive markets, or "market regulation," use the threat of lost business and lost income to deter one from engaging in activities that result in harm to customers.[13]

[11] Friedman, *Law's Order,* chapter six.
[12] Ibid.; Rubin, *Tort Reform by Contract,* chapter four.
[13] See John Blundell and Colin Robinson, *Regulation Without the State . . . The Debate Continues,* (London: The Institute of Economic Affairs, 2000).

In a marketplace, the consumer is the regulator, purchasing goods or services that are safe, effective, and reasonably priced while avoiding goods or services that are unsafe, of poor quality, or over-priced.[14] Sellers compete for customers based on the quality and price of their products. Safety is one characteristic of quality, and producers often build their reputation by focusing on safety.[15] Because markets use the particular knowledge of millions of buyers and sellers, market regulation is the most effective means of regulating most goods and services.

At present, there is some degree of market regulation in health care. For example, physicians may compete for patients, and hospitals may compete for patients who require inpatient care. Most physicians attempt to meet very high ethical standards, which include providing high-quality care. For most medical situations, high ethical standards and the maintenance of one's reputation are very effective methods for minimizing medical injuries.

Also, patients have some choice in their medical care. For example, individuals often choose their primary and specialist physicians based on the physicians' reputations. Primary care physicians refer patients to specialists who have a reputation for excellence and avoid those with a reputation for substandard care. Patients who require complex surgery may choose well respected surgeons at "centers of excellence."

For a number of reasons, however, market regulation in health care is not as effective as it could be. Patients usually have limited information concerning health-care quality, and, often, limited choices based either on inability to pay or on the limitations of their health plans.[16] It is possible that liability-altering contracts may increase patient access to information concerning quality, thus increasing the effectiveness of market regulation.[17]

D. Potential Advantages of Ex Ante Contracts for Medical Injuries

Patients may want to alter the rules governing medical injuries in advance of care for many reasons.[18] Patients may desire a more pleasant and less costly means of claim and dispute resolution,

[14] Ibid.
[15] Volvo Car Corporation is an example of a company building a reputation on safety. http://www.id.volvocars.com/footer/about/Safety/default.htm.
[16] Federal Trade Commission and Department of Justice, *Improving Health Care: A Dose of Competition*, (July 23, 2004), http://www.ftc.gov/reports/healthcare/040723healthcarerpt.pdf.
[17] See chapters 6 and 7 for brief discussions of this topic.
[18] Clark C. Havighurst, *Health Care Choices: Private Contracts as Instruments of Reform*, (Washington, DC: AEI Press, 1995) chapter seven.

more timely and certain compensation for injuries, or lower prices for medical care. Also, it is possible that contractual arrangements may improve the quality of services provided and result in fewer medical errors.

Physicians may want to alter the rules governing medical injuries in advance of care for many reasons too. They may desire a more pleasant and less costly means of claim and dispute resolution; more timely and certain compensation for patients; more timely and certain outcome following injuries; lower prices for medical malpractice insurance; and an improved climate for providing new and innovative services.

The following section describes four possible advantages that liability-altering contracts may offer to both patients and physicians: (1) voluntary nature, (2) flexibility, (3) certainty of risk, and (4) lower transaction costs.

D1. Voluntary Nature

One advantage of substituting contract-based liability for tort liability is that a contract is a voluntary agreement. Unlike tort law, which imposes court-determined rules, contracts allow the parties to choose the rules they desire. The parties determine the agreement, and the agreement facilitates individual choices and voluntarily agreed-on solutions.

D2. Flexibility

A second advantage of contract-based liability is flexibility. In contrast to tort law, in which standard rules apply, contracts would allow patients and physicians to choose from a variety of solutions and to tailor the agreement to a particular situation. A court's primary function in contract cases is to enforce the agreement made by the parties, as long as the agreement conforms to otherwise allowable behavior.

The negligence tort rule does provide flexibility in one important sense. By requiring physicians to meet a customary or reasonable standard of care, courts may apply tort law to essentially all medical situations. As noted in chapter 4, however, in many circumstances, there may not be a clear standard. In other situations discovering the standard may be difficult and costly. In addition, there may be situations in which a different standard of care or a different liability rule is more appropriate.[19] For these situations, ex ante contracts would provide more flexibility than medical malpractice law.

D3. Certainty of Outcome

Another advantage of ex ante contracts is the certainty that they may provide. As described in chapter 3, court-determined solutions may be inaccurate, and the outcome is often difficult to predict. There are winners and losers, and often

[19] See chapter 6 for a discussion of the types of contracts patients and physicians may choose.

the monetary difference between winning and losing is great.

Ex ante contracts would allow patients to know in advance that future medical bills and lost wages would be provided if an unexpected injury occurs. Similarly, contracts would allow physicians to know in advance the extent of their liability and permit them to plan accordingly.

Uncertainty of litigation outcome is likely a major reason that negligently injured patients do not pursue litigation and non-negligent physicians pursue settlement. Certainty of outcome could provide an environment for more accurate and less costly case resolution and encourage physicians to make services more available than they do at present.

D4. Lower Transaction Costs

A producer of goods or services for sale has two primary types of costs: (1) production costs and (2) transaction costs. Production costs include the cost of the resources necessary to produce the product or service—the cost of raw materials, labor, management, and capital—as well as the cost of information necessary to determine how best to produce the product.

Transaction costs refer to the cost of the resources necessary to establish, maintain, and transfer property rights. Examples include bargaining expenses, legal expenses, locks, and safe deposit boxes. Administrative regulation and tort law also are transaction costs. Thus, the transaction costs of a regulated market exchange include the costs essential to the exchange and protection of the property right plus the costs resulting from the regulations that govern the exchange.

If patients and physicians form contracts that alter liability rules, it is likely that transaction costs for both patient and physician would be lower. While contracts that alter liability rules also would have transaction costs, e.g., information, negotiation, and monitoring costs, contract transaction costs are much less than those of tort law, and ex ante contracts could eliminate the need for the larger costs associated with tort law.

E. Potential Disadvantages of Ex Ante Contracts

There are also potential disadvantages in using ex ante contracts for medical injuries. These include: (1) ex ante uncertainty of rights, (2) asymmetry of information concerning risks, and (3) decreased deterrence.

E1. Ex Ante Uncertainty of Rights

As noted above, courts usually enforce contracts that waive rights after harm has occurred, but not contracts that waive rights before harm has occurred. Since one has not suffered an injury at the time an ex ante contract is agreed to, one does not know what injury may occur. Since a patient does not know in advance what rights they may have after suffering an injury, it may be difficult for patients to value their rights in advance of care.

E2. Asymmetric Information Concerning Risks

According to the public interest theory of regulation, administrative regulations result because of "market failure." For one or more reasons, market regulation is unable to produce an efficient outcome.[20] One type of market failure often used to justify administrative regulation is asymmetry of information between buyer and seller.

In most medical situations, a physician has greater information concerning the risk of injury than does a patient. There is, then, a public-interest argument for regulation, and economic theory suggests tort regulation may be more effective than administrative regulation for medical injuries. Thus, based on the public-interest theory of regulation, it may be best to maintain tort regulation when the patient has less information concerning risk than does the physician.

E3. Decreased Deterrence

As noted above, it is not clear whether tort law provides deterrence against medical injuries, but economic theory suggests that it may.[21] To the extent to which tort law provides deterrence, ex ante contracts in which a patient waives certain tort rights may decrease deterrence and result in increased medical injuries.

F. Summary

Contracts are voluntary agreements that allow parties to depend on each other's promises. In order for contracts to facilitate the exchange of property and the provision of services, parties must be able to depend on courts to enforce the mutual agreement. Because a patient and physician have a contract at the time of care, they could also use a contract to allocate the risk of loss differently from tort law.

Similar to administrative regulation and tort law, competitive markets serve as a regulatory mechanism, inducing producers and sellers to provide safe and effective products from which customers may choose. Though some market regulation is present in health care, it is not as effective as it could be, because patients have limited information and limited choices.

Potential advantages of contracts that alter liability rules include greater freedom of choice, greater flexibility, more certainty concerning one's liability should an injury occur, and less cost. Potential disadvantages include ex ante uncertainty of rights, asymmetric information concerning risks, and the possibility of decreased deterrence.

[20] See W. Kip Viscusi, John M. Vernon, and Joseph E. Harrington, *Economics of Regulation and Antitrust*, 3rd ed., (Cambridge, MA: MIT Press, 2000), chapter ten.
[21] Shavell, *Economic Analysis of Accident Law*, chapter two.

Additional Reading

John Blundell and Colin Robinson. *Regulation without the State . . . The Debate Continues*. London: The Institute of Economic Affairs, 2000.

Guido Calabresi and A. Douglas Melamed. "Property Rules, Liability Rules, and Inalienability: One View of the Cathedral." *Harvard Law Review* 85 (April 1972): 1089.

Richard A. Epstein. "A Clear View of the Cathedral: The Dominance of Property Rules." *Yale Law Journal* 106 (May 1997): 2091.

David D. Friedman. *Law's Order,* chapters six and twelve. Princeton, NJ: Princeton University Press, 2000.

Clark C. Havighurst. *Health Care Choices: Private Contracts as Instruments of Reform*, chapter seven. Washington, DC: AEI Press, 1995.

Chapter 6: Potential Use of Contracts for Medical Injuries

As noted in chapter 5, one potential advantage of liability-altering contracts is that contracts are flexible documents that could allow patients and physicians to customize the agreement to the particular situation, choosing from many possible variations. It is difficult to predict what types of contracts patients and physicians might create if they were certain that courts would enforce them. In this chapter, we review a number of possibilities scholars have suggested.[1]

This chapter organizes potential contractual changes to tort law into three major categories: (1) changes to substantive law governing liability, (2) changes to substantive law governing damages, and (3) changes to procedural law. Since some possibilities may be advantageous in some situations but disadvantageous in others, patients and physicians may wish to apply particular rules in some situations, and standard tort law in others.

The chapter concludes with a brief discussion concerning the settings in which liability-altering contracts may be formed and whether, in such settings, patients would have the information necessary to make effective decisions.

A. Contractual Changes to Substantive Law Governing Liability

If patients and physicians were assured that courts would enforce contracts that alter malpractice rules in advance of care, they may choose to alter substantive liability rules. Possibilities include: (1) a cost-effective standard of care, (2) a no-fault, strict liability tort rule, or (3) patient assumption of risk.

A1. Cost-Effective Standard of Care

In most jurisdictions, courts determine liability based on whether a physician meets a customary standard of care or a reasonable physician standard of care.[2] Havighurst points out that 50 years of third-party payment for most services has altered the customary standard of care for many clinical situations.[3] In addition, courts have required local physicians to meet national

[1] For a thorough discussion of contract possibilities, see Havighurst, *Law and Contemporary Problems* 49:143; and Havighurst, *Health Care Choices*, chapter seven.

[2] Peters, *Washington & Lee Law Review* 57:163.

[3] For example, third-party payment for most diagnostic services may have resulted in an increased use of diagnostic services of uncertain benefit; see Havighurst, *Health Care Choices*.

standards,[4] and in rare instances, courts have required non-customary practices that offer only a small possibility of benefit.[5]

In return for lower prices, patients may want to choose a more cost-effective standard of care, either individually or through their health plan.[6] For example, patients may want to substitute a standard of care that requires diagnostic testing only if the test is less costly than the harm that may result if it is not performed. A standard of care that requires a physician to use all potenially beneficial measures increases the cost of care, often with very little benefit for patients.

As an illustration, assume that a 22-year-old woman sees a family practitioner regarding a brief episode in which she lost consciousness. Based on her medical history, a normal exam, and initial testing, the physician is almost certain the episode was a common "faint" and was not caused by serious underlying disease. There is a remote possibility that additional testing would reveal either a cardiac or neurologic cause.

In some locations, it may be customary practice among insured patients for a physician to order additional testing, e.g., an MRI scan, even though the possibility of finding an abnormality that would change management is remote. For an uninsured patient who must pay for diagnostic testing, or a patient with a high-deductible health plan, it may be advantageous to require a cost-effective standard of care rather than the more costly customary standard of care.

A2. No-Fault, Strict Liability Tort Rule

In order to increase the promptness and consistency of compensation, especially compensation for severely injured patients, a number of scholars have recommended a no-fault system for medical injuries.[7] Under most no-fault proposals, an administrative system would compensate all injured patients who meet certain criteria, regardless of whether the injury was the result of physician fault.

As noted in chapter 2, strict liability refers to defendant liability regardless of fault. Since an administrative system may compensate the patient, a no-fault system may not be strict liability directly for a physician. However, in effect, a

[4] Walz, *DePaul Law Review* 18:408.

[5] *Helling v. Carey*.

[6] Havighurst, *Health Care Choices*.

[7] See Clark C. Havighurst and Laurence R. Tancredi, "Medical Adversity Insurance; A No-Fault Approach to Medical Malpractice and Quality Assurance," *Milbank Memorial Fund Quarterly-Health and Society* 51 (1973): 125; Paul C. Weiler, "The Case for No-Fault Medical Liability," *Maryland Law Review* 52 (1993): 908; Mello and Brennan, *Texas Law Review* 80:1595.

physician, a hospital, or an administrative system funded by a physician or hospital would be strictly liable.[8]

A no-fault, strict liability rule offers the possibility of maintaining deterrence against injury, while compensating patients who are not presently being compensated.[9] Under this rule, the plaintiff would not need to establish, nor the court determine, a standard of care or whether a deviation from the standard occurred. Courts or administrative structures would still need to determine if the injury was caused by physician action or if the event was eligible for compensation because of a predetermined rule. However, these determinations should be less costly than determining fault.

It is possible that patients and physicians would desire a no-fault rule for certain situations. For example, assume a patient without a neurological deficit requires a neurosurgical procedure that carries a two percent risk of serious, disabling complication, even in very experienced hands. In this situation, a patient and physician may agree to a no-fault, strict liability rule in exchange for limiting compensation to pecuniary losses. The patient may desire this arrangement to assure compensation and to maintain deterrence against negligent injury. A physician also may desire this arrangement, both to assure coverage of the patient's medical expenses and to avoid the unpleasantness and expense of fault-based tort litigation.

A3. Patient Assumption of Risk

Under traditional common law, assumption of risk is a defense by which the defendant asserts that the plaintiff was aware of the risk of injury prior to the activity, and by participating in the activity, the plaintiff assumed responsibility for the injuries that occurred. When a person forms a contract that absolves another from liability, one is assuming the risk of injuries that may occur.[10]

[8] No-fault systems require a predetermined set of injuries eligible for compensation or predetermined rules for determining which injuries are eligible for compensation. They also require an administrative body to determine if the criteria for compensation are met. Mello and Brennan proposed a voluntary system in which "avoidable injuries" were eligible for compensation, and a hospital's liability insurer would determine eligibility for compensation. The insurer also would provide experience-rated insurance for the hospital.

[9] Mello and Brennan, *Texas Law Review* 80:1595. Under a no-fault strict-liability rule, all negligent and non-negligent injuries that meet certain criteria result in liability for the defendant. Economic theory suggests that under strict liability, a defendant will take the necessary precautions to limit the injuries to the lowest possible number. A no-fault, strict liability compensation system does substitute more expensive third-party insurance for less expensive first party insurance. However, third-party insurance maintains a deterrent effect while first-party insurance does not. Patients may want to use a strict-liability rule in situations in which liability is especially likely to have a deterrent effect. See chapter 7.

[10] See Krauss, *Policy Analysis* 347:(June 3, 1999).

In a sense, this is the equivalent of a no-liability rule for the defendant.

While patient assumption of risk may seem one-sided, it may be, in some circumstances, to the patient's advantage to assume the risk. For example, to encourage an internist to use a high-risk drug for a life-threatening or disabling illness, it may be to a patient's benefit to assume the risk of injury. This is especially true if a patient is aware of the prognosis, is aware of the risks of the medication, and has comprehensive health insurance that would cover medical care, regardless of physician fault.

As noted in chapter 3, the available data suggest that most patients injured by substandard care do not bring suit. For the reasons outlined in chapter 4, it is likely that many patients would never seriously consider suing their physician regardless of the circumstances. For these patients, it may be especially advantageous to agree to assume the risk of injury in exchange for services not otherwise available, additional safety procedures, or lower prices. If prices for health care appropriately reflect tort law's costs, purchasing first party insurance to cover medical expenses or lost wages would be less expensive than paying for similar protection by means of malpractice law.

B. Contractual Changes to Substantive Law Governing Damages

Probably the most common type of legislatively attempted tort reform is a statutory limitation on damages.[11] Statutes may place a cap on noneconomic damages, place a cap on total damages, restrict joint and several liability, or limit damages to those injuries for which there is no other means of compensation. Similarly, patients may want to contractually limit damages in return for more assured compensation or lower prices.

Rubin uses insurance-buying habits to offer insight into how individuals value certain types of losses.[12] For example, individuals frequently purchase health insurance to cover medical expenses and disability insurance to cover lost wages. Medical expenses and lost wages are the primary types of pecuniary or economic losses. However, individuals do not purchase insurance to cover the loss associated with pain and suffering, the loss of consortium from loss of a spouse, or other losses for which nonpecuniary damages may be paid.

Rubin's analysis suggests that, if allowed, some patients may choose to limit damages to pecuniary losses in return for assured compensation,

[11] See Rogan Kersh, "Medical Malpractice and the New Politics of Health Care," in *Medical Malpractice and the U.S. Health Care System*, William M. Sage and Rogan Kersh, eds., (New York: Cambridge University Press, 2006). Kersh noted that between 2002 and 2004, legislators in 44 states introduced bills to cap noneconomic damages. Also Studdert et al. *New England Journal of Medicine* 350:283.

[12] Rubin, *Tort Reform by Contract*.

lower prices, or both.[13] Similarly, patients whose health insurance covers medical expenses regardless of physician fault may wish to limit damages to lost wages in exchange for certain safety procedures, guaranteed compensation, or a lower price.[14]

C. Contractual Changes to Procedural Law

In addition to altering substantive rules, patients and physicians may wish to alter the procedural rules governing tort law. These may vary from minor procedural changes, such as limitations on discovery, to major changes, such as alternative methods of dispute resolution. This section describes three alternative dispute resolution (ADR) mechanisms that patients and physicians might consider.

C1. Pretrial Screening Panels

During the initial wave of malpractice reform in the late 1960s and early 1970s, a number of states legislatively initiated pretrial screening panels. [15] By 2001, approximately 50 percent of the states had statutes establishing these panels. Pretrial screening panels have two main functions: (1) to discourage plaintiffs with non-meritorious claims from going to court and (2) to encourage defendants with weak cases to settle. The composition of pretrial screening panels varies from state to state. Panels may consist of only physicians, only attorneys, only lay people or a combination of thereof. The panel reviews the case and renders an opinion as to whether the case has merit. The opinion is nonbinding, and the losing party is free to proceed to court. States vary as to whether evidence presented at the hearing is admissible in court and whether the panel's decision can be revealed in court.

In 1997, Kridelbaugh and Palmisano reported data from 20 years of experience with a pretrial screening panel in New Mexico.[16] In the 2,141 cases heard, the panel decided for the plaintiff 424 times and for the defendant 1,717 times. Plaintiffs and defendants settled 81.1 percent of the 424 cases decided for the plaintiff. Of the 80 remaining cases that went to trial, the court decided only 12.5 percent for the plaintiff. Of the 1,717 cases decided by the panel for the defendant, plaintiffs dropped 48.3 percent of cases, and plaintiffs and defendants settled 22.7 percent of cases. Of the 497 remaining cases that went to trial, the court decided only 4.0 percent for the plaintiff.

Although this was not a controlled study, these data suggest that pretrial screening panels may

[13] Ibid.

[14] Patients also may want to set damages at a predetermined amount similar to first-party life insurance, e.g., $100,000, if a particular complication occurs.

[15] See John J. Fraser, Jr. et al. *Pediatrics* 107:602.

[16] See William W. Kridelbaugh and Donald J. Palmisano, "A 20-year Experience with Malpractice Screening Panels," *Bulletin of the American College of Surgeons* 82 (May 1997): 21.

achieve their two primary goals: encouraging plaintiffs with non-meritorious cases to drop them and encouraging defendants with weak cases to settle. Because screening panels are less costly than proceeding to trial, patients and physicians may prefer to specify in advance that they will use a nonbinding or binding screening panel if a dispute arises.

These data also suggest that patients whose cases appeared meritorious at a pretrial hearing are often unsuccessful in court. The fact that plaintiffs were more often successful among a panel of physicians and attorneys than before a jury suggests that physician and attorney reviewers may be more efficient at sorting through complex medical malpractice cases than lay juries and that physicians may have higher expectations of other physicians than does a jury of lay people. As a result, a patient may prefer to contractually require a binding panel instead of depending on the uncertainty of standard litigation.

C2. *Mediation*

Mediation is a process in which two parties meet with a neutral mediator in an attempt to settle a dispute. Although the mediator may be an attorney, the mediator does not give legal advice. The mediator's role is to facilitate the process of negotiation, allowing the parties to come to a mutually beneficial agreement. Mediation is useful in commercial settings and in family disputes. Unlike a trial setting, the parties control the process and can fashion a flexible agreement tied to the parties' interests. Mediation may be especially effective when an apology is an important component of problem resolution and when the parties desire a continuing relationship, both of which may be important in medical malpractice cases.

In 1995, Rush-Presbyterian–St. Luke's Medical Center in Chicago began a mediation program for selected medical malpractice cases.[17] The primary goals of the program were to avoid the unpredictability of trials and to decrease litigation costs. As a part of the program, Rush offered mediation to selected plaintiffs after the patient had filed a lawsuit. The plaintiff and plaintiff's counsel participated in mediation for the plaintiff's side. Rush's vice president and chief counsel, one risk manager, and Rush's defense counsel participated for Rush. Physicians and other medical personnel did not attend. All sessions were confidential.

Between 1995 and 1998, Rush mediated 33 cases.[18] Financial payouts ranged from $21,700 to $4.7 million. The dollar value of the mediated settlements was similar to settlement values Rush had experienced prior to the mediation program. Defense costs were less than half those incurred in cases in which litigation ended in settlement and operational costs of the mediation program

[17] See Max Douglas Brown, "Rush Hospital's Medical Malpractice Mediation Program: An ADR Success Story," *Illinois Bar Journal* 86 (1998): 432.
[18] Brown, *Illinois Bar Journal* 86:440.

were minor. There was no increase in the number of suits as a result of the program.

Although this was not a controlled study, Rush's experience suggests mediation may be useful in some medical malpractice cases. Because of the flexibility and low cost of mediation, patients and either physicians or hospitals may wish to require mediation as a first alternative to traditional litigation, should a malpractice dispute arise.

C3. *Arbitration*

Arbitration is a process in which opposing parties to a legal dispute present their cases before an arbitrator or panel of arbitrators. The arbitrator decides if the defendant is liable, using the same substantive rules as those used in court. Unlike mediation, arbitration does not allow the parties to create agreements. However, arbitration offers a number of advantages over trial. The plaintiff and defendant are able to choose the arbitrator, and in medical malpractice cases, the parties may choose an arbitrator with medical expertise. Arbitration allows the parties to determine the procedural rules of the arbitration, including the rules of evidence, and the parties may choose proceedings that are less formal and less costly than trial.

Although arbitration has not gained wide acceptance in medical malpractice cases, Metzloff argues that arbitration should be considered for medical malpractice.[19] Based on his experience using arbitration in a private dispute resolution center at Duke University, Metzloff believes arbitration can resolve medical malpractice disputes fairly, while simultaneously decreasing the cost of litigation.

It is not clear whether individual patients and physicians would often substitute arbitration for lawsuits; however, arbitration offers the possibility of a quicker and less expensive means of dispute resolution.[20]

D. Additional Considerations

D1. *Settings*

Just as it is difficult to predict whether patients and physicians would choose to alter liability rules in advance of care, it is difficult to predict the settings in which patients and physicians may form these contracts. This section addresses three possible settings, each of which may be applicable in certain situations. Havighurst has suggested that it may be to a patient's advantage to agree to altered liability rules through a health plan, and it is likely that contracts through health plans would initially be most acceptable to patients and courts.[21] However, it is possible that similar

[19] See Thomas B. Metzloff, "The Unrealized Potential of Malpractice Arbitration," *Wake Forest Law Review* 31 (1996): 203.

[20] Ibid. In the article, Metzloff provides possible explanations for the fact that patients and physicians have not chosen arbitration more frequently. Chapter 8 details these explanations.

[21] Havighurst, *Health Care Choices*.

contracts could ultimately be formed in physician offices and hospitals.

Health plans. When patients enroll in a health plan, they sign a contract that specifies the types of coverage, the methods used for determining if a service is covered, the price for the coverage, and other features of the plan. It would be possible to include one or more liability-altering options within the enrollment contract. The choices the health plan offered would be based on agreements that the plan makes with physicians and hospitals participating in the plan.

Physician offices. When a patient first visits a new physician, the patient often completes a medical history form, signs a statement acknowledging receipt of a physician's privacy policies, and reviews and signs a consent form allowing the physician to provide care. It would be possible for a physician to provide a form that included either an agreement related to liability for injury or options for compensation from which a patient may choose.

Hospitals. When a patient enters a hospital on a non-emergent basis, the patient often signs a consent form giving the hospital and staff permission to provide care, an acknowledgement of receipt of the hospital's privacy practices, and—in teaching hospitals—a form giving permission to use certain information for teaching purposes. Similar to a physician's office, a hospital could provide and patients could choose among one or more contracts that altered liability rules. It is unlikely patients would desire, or courts would allow, liability-altering contracts in emergency situations.

D2. Availability of Information

One may question whether patients would have the necessary information to make informed choices concerning liability for medical injuries. Because most individuals are not aware of liability rules, most patients could not be expected to make such decisions at this time. However, when individuals face an important decision affecting their health or well-being, most are capable of gathering the information necessary to make effective decisions.

For medical, legal, financial, and other complex decisions, individuals often rely on professionals with special expertise to assist them. Also, public information concerning complex issues is more widely available than ever. Since, in the medical setting, patients are often well-informed concerning the medical issues that affect them, it is likely that they could become well-informed concerning the legal issues involved in liability-altering contracts as well.

Further, individuals make choices and sign complex agreements in many areas of their lives. For example, when one obtains a home loan, many alternative options are available. Decisions include choice of lender, type of loan, interest rate, loan duration, and possible prepayment penalty; for each decision, the individual must sign a contract incorporating these decisions. While medical liability differs greatly from finan-

cial services, the process of gathering the appropriate information, making choices, and signing complex agreements is similar.

Finally, markets may generate the information individuals need to make informed decisions. In other settings, producers that offer advantages of quality or price publicize these advantages so that individuals will choose their product. This provides information for consumers and spurs competitors to improve their quality and price. If patients and physicians were allowed to form liability-altering contracts, competition may result in a wide range of liability-altering solutions and the information patients need to make informed choices.

E. Summary

If patients and physicians were reasonably certain that courts would enforce contracts altering medical liability rules, they might develop contracts that change the substantive law governing liability. For example, patients may enter into agreements that permit them to choose a more cost-effective standard of care; specify a no-fault, strict liability rule; or assume the risk of an unexpected injury.

Patients and physicians might develop contracts that limit damages in return for certain safety features, assured compensation, or lower prices. Also, they might develop contracts that alter the procedural law governing tort, e.g., specify the use of screening panels, mediation, or arbitration in lieu of traditional tort procedures.

One cannot predict which, if any, of these contracts patients and physicians would choose. However, there may be advantages to using these contracts over traditional tort law, and it is possible that patients and physicians would find one or more of them beneficial.

Additional Reading

Clark C. Havighurst. *Health Care Choices: Private Contracts as Instruments of Reform*, chapter eight. Washington, DC: AEI Press, 1995.

Clark C. Havighurst. "Private Reform of Tort-Law Dogma: Market Opportunities and Legal Obstacles." *Law and Contemporary Problems* 49 (Spring 1986): 143.

Michelle M. Mello and Troyen A Brennan. "Deterrence of Medical Errors: Theory and Evidence for Malpractice Reform." *Texas Law Review* 80 (2002): 1595.

Paul H. Rubin. *Tort Reform by Contract*, chapter one. Washington, DC: AEI Press, 1993.

Paul C. Weiler. "The Case for No-Fault Medical Liability." *Maryland Law Review* 52 (1993): 908.

Chapter 7: Potential Value of Contracts for Medical Injuries

Chapters 5 and 6 suggest that patients and physicians may desire to form liability-altering contracts in certain situations and that it may be possible for them to do so. This chapter reviews a number of ways that ex ante contracts may be of value for both patients and physicians. It considers three specific topics: (1) deterrence of medical injuries, (2) compensation of injured patients, and (3) justice. It concludes with a comparison of tort law and ex ante contracts in which a patient completely waives the right to sue.

A. Deterrence of Medical Injuries

As noted in chapter 4, it is not clear whether malpractice law provides deterrence against medical injuries. The one comprehensive study of malpractice deterrence indicates that higher malpractice risk is associated with fewer injuries, but the results are not statistically significant.[1] In addition, anecdotal data indicate that malpractice liability was a factor in the development of safer techniques in at least one medical specialty.[2]

On the other hand, data suggest that, in its present form, malpractice law is unlikely to be a strong deterrent.[3] For example, most patients who have been negligently injured do not sue,[4] and many patients who do sue have not been negligently injured,[5] and in some cases claim outcome does not accurately reflect the presence or absence of substandard care.[6] Also, because of the adversarial nature of tort law and inherent difficulties in determining liability, it is possible that tort law will never become a very effective deterrent.

Despite tort law's weaknesses, most observers are skeptical that liability-altering contracts would have even a small deterrent effect. However, use of ex ante contracts may, potentially, result in fewer injuries and improved health.

[1] Weiler et al. *A Measure of Malpractice*, chapter six.
[2] Hyman and Silver, *Cornell Law Review* 90 (2005): 893. As noted in chapter 4, Hyman and Silver point out that malpractice lawsuits and high malpractice premiums were partially responsible for inducing the American Society of Anesthesiology to initiate a safety program that ultimately decreased anesthesia-related injuries.
[3] See chapter 4.
[4] Localio et al. *New England Journal of Medicine* 325:245; Studdert et al. *Medical Care* 38:250.
[5] *Ibid*.
[6] Brennan et al. *New England Journal of Medicine* 355:1963; Studdert et al. *New England Journal of Medicine* 354:2024.

As noted in chapter 5, market regulation can be a very effective means for deterring injuries and improving quality of care, and liability-altering contracts may enhance market regulation.[7] For example, liability-altering contracts may result in more competition among physicians and hospitals with respect to patient safety. Those providers with especially safe practices may publicize their results, and both of these factors may result in safer health care. Also, patients who consider liability-altering contracts may become more conscious of safety information and more able to obtain this information than they are at present.

In addition to enhancing market regulation, liability-altering contracts may increase the deterrent effect of tort law. Contracts are flexible documents that offer the opportunity to impose liability in situations in which it is likely to be effective, but withhold liability when it may be counterproductive. With the exception of complete assumption of risk, each type of contract discussed in chapter 6 retains some degree of liability for negligent care, and many increase the number of cases in which a defendant is subject to liability. To the extent liability deters injuries, these contracts may indeed enhance deterrence.

Finally, liability-altering contracts may have their greatest effect on health by increasing the availability of needed services. In most medical situations, the primary purpose of medical care is to treat disease, prevent death, or restore function. To the extent a regulatory system, including tort law, decreases medical services, and to the extent those services would have decreased disease or death, the regulatory system may result in the same type of harm it is designed to prevent. By increasing the availability of services, liability-altering contracts may result in less morbidity and mortality from disease than presently results from the deterrent effect of tort law on medical injuries.

This section explores how liability-altering contracts may result in fewer injuries by increasing liability in some cases, how these contracts may result in greater patient safety, and how contracts may result in improved health.

A1. No-Fault, Strict Liability Rule

Data suggest that few patients who suffer medical injuries bring suit for their injuries.[8] The paucity of suits stems from reluctance to sue one's physician, uncertainty as to whether negligence occurred, or the small likelihood of prevailing.

Contracts specifying a no-fault, strict liability rule in advance of care may alleviate each of these concerns and significantly increase the probability that a physician or an administrative system funded by the physician would pay

[7] See chapter 5.

[8] Localio et al. *New England Journal of Medicine* 325:245; Studdert et al. *Medical Care* 38:250.

compensation.[9] Patients may desire this rule for certain situations, e.g., those in which causation is easily determined and a systems-based approach to error-reduction may be expected to decrease injuries.[10] As noted in chapter 6, physicians also may desire this rule to assure medical care for their patients and to avoid the unpleasantness of fault-based litigation.

To the extent a no-fault system increases the number of situations in which a physician or an administrative system funded by the physician is held liable, and to the extent liability deters injuries, this may produce greater deterrence.

A2. Alternative Dispute Resolution

Similarly, patients and physicians may wish to specify in advance an alternative dispute resolution (ADR) mechanism for resolving potential disputes. Because ADR is likely to yield results at least as accurate as standard litigation, timelier dispute resolution, and lower costs, both patients and physicians may prefer ADR to standard litigation. Also, patients who are reluctant to sue their physician using traditional tort law may agree to ADR in advance of care. To the extent ADR increases the number of negligent physicians made liable and improves accuracy of outcome, and to the extent liability results in deterrence, ADR may ensure greater deterrence of malpractice.

A3. Error Prevention

Liability-altering contracts may result in greater patient safety in at least one other way. Tort law and "quality improvement" or error-reduction initiatives, have similar goals, but very different methods for achieving these goals. As noted in chapter 4, the adversarial nature of tort law may discourage physicians from disclosing information concerning errors. It is possible that liability-altering contracts may improve error disclosure and result in more effective error-reduction initiatives. If so, fewer injuries may occur. In addition, if liability-altering contracts result in cost savings, and if physicians and hospitals use these savings to institute error-reduction programs, additional deterrence may result.

A4. Availability of Services

The primary purpose of medical care is to treat disease, prevent death, or restore function. To the extent a regulatory system, including tort law, decreases the availability of medical services, and to the extent those services would have decreased disease or death, the regulatory system may be responsible for increasing the harm it is designed to prevent. Liability-altering contracts may

[9] Chapter 6 discusses no-fault administrative systems in more detail.

[10] Mello and Brennan, *Texas Law Review* 80:1595. Mello and Brennan have pointed out that a systems-based approach, using advanced technology, was partially responsible for decreasing injuries related to anesthesia and may have a similar effect on serious medication errors. Also, one is usually able to easily determine causation following anesthesia-related injuries, i.e., to differentiate between anesthesia-related injury and progression of underlying disease.

increase the availability of services and improve patient health in at least three ways.

First, liability-altering contracts may encourage physicians to offer services they are presently unwilling to offer because of the threat of liability. As noted in chapter 3, physicians report that the threat of liability often causes them to restrict their practices,[11] especially high-risk services, and data suggest that if a state directly limits damage awards, the state may increase its supply of physicians.[12] In addition, high malpractice premiums may prevent retired physicians from providing voluntary or part-time services. If liability-altering contracts increase physician and other health-care services, patient health may improve.

Second, liability-altering contracts may encourage physicians to eliminate unnecessary diagnostic tests and other procedures. It is unclear the extent to which physicians and other health-care professionals order unnecessary tests, procedures, or consultations to avoid the threat of liability.[13] To the extent they do, health care is more costly than it otherwise would be. If lower costs resulted in lower prices, services may become available to more patients, which might improve patient health.

Third, implementation and, if necessary, adjudication of each of the liability-altering contracts discussed in chapter 6 should be administratively less costly than tort litigation. The resources used to implement tort law represent lost opportunity to use these resources in more productive ways. To the extent these savings decrease the cost of health care, more people may have access to health care, and the risk-reducing effects of health care may improve patient health.

B. Compensation of Injured Patients

At this time, tort law is relatively ineffective at compensating patients who suffer medical injuries. Data suggest that few individuals who suffer injuries from substandard care sue, and fewer still receive compensation.[14] Liability-altering contracts would likely decrease the number of patients who receive full compensation for injuries.[15] However, these contracts might increase the number of patients who receive at least some compensation.

Several authors have recommended no-fault compensation for medical injuries.[16] To the extent

[11] David M. Studdert et al. *Journal of the American Medical Association* 293:2609.
[12] Daniel P. Kessler, William M. Sage, and David J. Becker, *Journal of the American Medical Association* 293:2618.
[13] See chapter 3.
[14] Localio et al. *New England Journal of Medicine* 325: 245; Studdert et al., *Medical Care* 38:250; Brennan et al., *New England Journal of Medicine* 335:1963; Studdert et al. *New England Journal of Medicine* 354:2024.
[15] Feldman, *Texas Law Review* 75:1567, for a discussion of full compensation for tort losses. See also chapter 4.
[16] Havighurst and Tancredi, *Milbank Memorial Fund Quarterly-Health and Society* 51:125; Paul C. Weiler, "The Case for No-Fault Medical Liability," *Maryland Law Review* 52 (1993): 908; Mello and Brennan, *Texas Law Review* 80: 1595.

patients and physicians form contracts that establish no-fault compensation, more patients would receive compensation. Contracts mandating the use of alternative dispute resolution may also result in additional injured patients receiving compensation.

As noted in chapter 5, patients who waive liability rights may choose to maintain or purchase first-party insurance for medical expenses or lost wages. To the extent liability-altering contracts increase the number of patients who carry first-party insurance for these losses, more injured patients would receive compensation.

Finally, after an adverse event, whether negligent or not, it is common for physicians and hospitals to desire to compensate a patient, at least to the extent of remaining medical and hospital bills. Because of concern that such an offer may constitute an admission of fault and thus increase the risk of liability, physicians and hospitals may not make such an offer. Were the threat of liability limited, physicians and hospitals might be more likely to make these offers, and this also may result in more injured patients receiving compensation.

C. Justice

Medical malpractice law developed not to provide deterrence or compensation, but to provide justice, i.e., to provide the most just means for settling disputes between parties in which one party has allegedly harmed another. This section discusses two aspects of justice related to contracts that alter medical liability rules: (1) liberty and autonomy and (2) corrective justice.

C1. Liberty and Autonomy

Justice includes the concepts of liberty and autonomy. The term "liberty" is best understood as the freedom to act and pursue one's ends, limited by the constraints of law.[17] Autonomy refers to "each person's claim to both own and govern his own body or self and the labor either generates."[18] Liberty is one attribute of a just society, and the notion that a person has a right to liberty is enshrined in our nation's founding documents.[19]

Contracts are voluntary agreements that facilitate individual choices. Patients and physicians may choose to form liability-altering contracts for a variety of reasons, and these contracts may offer

[17] Friedrich A. Hayek, *Law, Legislation, and Liberty* (Chicago: The University of Chicago Press, Vol. 1, 1973, Vol. 2, 1976), chapters five and eight; Randy E. Barnett, *The Structure of Liberty* (Oxford: Oxford University Press, 1998), chapter one.

[18] See Richard A. Epstein, *Principles for a Free Society* (Reading: Perseus Books, 1998).

[19] See Preamble to the Declaration of Independence; see preamble to The Constitution of the United States of America.

significant advantages to both patients and physicians. When courts reject contracts that allocate liability differently from tort law, they may be preventing individuals from choosing in their best interest.

As noted previously, courts usually enforce an individual's right to forgo litigation after an injury occurs. In addition, courts usually enforce an individual's right to choose or refuse medical treatment, even the right to refuse life-sustaining treatment.[20] In these situations, courts recognize the justice of enforcing an individual's right to make legal and health-related decisions. Similarly, from the standpoint of liberty and autonomy, it would seem just for courts to recognize a patient's right to make decisions concerning medical liability in advance of care.

C2. *Corrective Justice*

Corrective justice refers to the notion that if one person wrongfully injures another, the injured person has a right to redress from the person causing the harm.[21] Corrective justice applies only when the action or inaction of the injuring party is wrongful, i.e., intentional or negligent.

Medical malpractice law does provide full redress for harm for a few patients, and it provides the opportunity for full redress for all patients. However, based on the presently available data, it now provides corrective justice for a very small percentage of injured patients. It is not known whether freedom to contract would result in more frequent redress for injured patients, but it is possible that it would do so.

In addition, corrective justice requires that persons who have not negligently injured others not be made to suffer a loss. The data suggest that, under current medical malpractice law, many defendants are practioners who did not negligently injure the plaintiffs, and some of these defendants even end up paying compensation despite the fact that they were not in fact negligent. All claims, even those later dropped, result in some harm to a defendant. Thus, if enforcing contracts that alter liability rules decreases harm to defendants who did not negligently injure a plaintiff, greater corrective justice may result.

D. Tort Law vs. No Tort Law

This chapter proposes that liability-altering contracts may offer significant advantages for many patients, and suggests that patients may be able to enhance their welfare by using one or more of these contracts. In his 1991 monograph, Weiler

[20] See *In re Quinlan*, 70 NJ 10, 355 A.2d 647 (1976); *Cruzan v. Director, Missouri Dept. of Health*, 497 U.S. 261 (1990).

[21] See Richard A. Posner, "The Concept of Corrective Justice in Recent Theories of Tort Law," *Journal of Legal Studies* 10 (January 1981): 187. This article contains a more complete treatment of corrective justice.

suggested that, if courts enforced contracts limiting physician liability, most patients might completely waive their right to tort law.[22] He compared patient-physician relationships to employee-employer relationships, pointing out that unregulated markets led to "at will" employment contracts,[23] and, prior to state workers compensation systems, unregulated markets led to no employer liability for workplace injuries.[24]

If all patients completely waived their tort rights in advance of care, the result would be a situation in which there is no liability for non-criminal negligence. Under these circumstances, if the aggregate benefits of present malpractice law are clearly greater than the costs, liability-altering contracts may result in a decrease in patient welfare. However, if reliable estimates of present malpractice law's costs are clearly greater than the benefits, patients may enhance their welfare by completely waiving their tort rights in advance of care.

This author believes there may be significant advantages to many of the liability-altering contracts discussed and that freedom of contract would not result in all or most patients completely waiving the right to legal redress. However, given that possibility, it may be useful to briefly review the aggregate benefits and costs of present malpractice law.

D1. Benefits of Malpractice Law

As noted in chapter 2, medical malpractice law contains three primary benefits: decreased medical injuries, compensation to injured patients at a time when the value of the wealth to the patient may be greater than prior to the injury, and justice for injured patients.

Based on the data available, relatively few negligently injured patients receive compensation, and few negligently injured patients receive redress through the legal system. Although it is possible that tort law exerts an important deterrent effect on medical injuries, no statistically significant data support this. Also, because liability is rarely imposed and because there are at least occasional inaccurate results, the deterrent effect is unlikely to be large.

D2. Costs of Malpractice Law

Malpractice law's costs include: (1) taxpayer costs to maintain the portion of the court system devoted to malpractice, (2) compliance costs for patients, physicians, and other professionals, and (3) the indirect costs of lost professional and other economic activity resulting from the incentives set up by malpractice law.

As noted in chapter 4, one can estimate a portion of compliance costs using Tillinghast's estimates

[22] Weiler, *Medical Malpractice on Trial*, chapter five.
[23] An "at will" employment contract is a contract in which either the employee or employer may terminate the employment relationship without cause, i.e., for any reason.
[24] Weiler, *Malpractice on Trial*, chapter five.

of the components of insured tort costs,[25] and either Tillinghast's annual estimates of medical malpractice costs[26] or Mello and Studdert's estimates of 2004 payments from defendant physicians to plaintiff patients.[27]

Tillinghast's estimates of the components of insured tort costs include plaintiff legal costs when a defendant makes a payment to a plaintiff and defendant legal and administrative costs for all cases.[28] However, Tillinghast's estimates do not include the legal costs incurred by plaintiffs who initiate a suit and later withdraw it, and they do not include the lost professional activity of both plaintiff and defendant resulting from time spent bringing and defending against a suit.[29] One must include these costs to accurately calculate compliance costs. The latter costs may be quite high for both defendant and plaintiff.

As with administrative regulation, the indirect costs of malpractice law are the costs of lost professional and other economic activity that occur because the law provides incentives that alter personal behavior. In malpractice law, these costs include (1) the cost of unnecessary tests, procedures, or consultations that may not be ordered if malpractice law were not in place and, more importantly, (2) the cost of forgone care resulting both from the threat of liability and from increased medical care prices. Since medical care is a risk-reducing activity, the cost of forgone care is the increased morbidity and mortality that may result from lack of care.

D3. Discussion

At present, there are inadequate data to determine either the aggregate benefits or the aggregate costs of malpractice law. If one considers the cost of defensive medicine to be small, the cost of tort law represents a relatively small percentage of total health-care spending,[30] and benefits may exceed costs. If one estimates the cost of defensive medicine to be large, the percentage of health-care spending represented by tort law's costs would be larger, and the aggregate costs of malpractice law may be greater than the benefits.[31] A more definitive determination of

[25] Tillinghast–Towers Perrin, *U.S. Tort Costs: 2003 Update*.
[26] Tillinghast–Towers Perrin, *U.S. Tort Costs and Cross-Border Perspectives: 2005 Update*.
[27] Michelle M. Mello and David Studdert, in *Medical Malpractice and the U.S. Health Care System*, William M. Sage and Rogan Kersh, eds.; Studdert et al. *Health Affairs* 26:215.
[28] Tillinghast–Towers Perrin, *U.S. Tort Costs: 2003*.
[29] *Ibid*.
[30] See Mello and Studdert, *Malpractice and U.S. Health Care*. Mello and Studdert note that the annual cost of medical malpractice law may be no higher than 1.5 percent of total U.S. health-care expenditures.
[31] See Christopher J. Conover, "Health Care Regulation: A $169 Billion Hidden Tax," *Policy Analysis* Volume 527, (October 4, 2004). Conover estimated the expected benefits of medical malpractice law, including the benefits of both deterrence and compensation, to be approximately $33 billion per year. He estimated the expected costs to be be approximately $113.7 billion per year, of which approximately $70 billion was the result of defensive medicine.

malpractice law's benefits and costs requires additional studies of the effects of malpractice law on medical injuries, on physician use of resources, and on the provision of health-care services.

E. Summary

Contracts that alter liability rules may result in increased deterrence if patients and physicians employ a strict liability rule or require alternative dispute resolution. These contracts may result in fewer injuries because they increase disclosure of medical errors and improve patient-safety initiatives. Finally, liability-altering contracts may improve health by encouraging physicians to make additional health-care services available.

Contracts that alter liability rules may increase the number of injured patients who receive compensation for their injuries. With respect to ensuring both liberty and corrective justice, allowing patients and physicians to determine liability and damages in advance of care may prove quite effective.

Liability-altering contracts may offer advantages for many patients, and patients may be able to enhance their welfare by choosing one or more of these contracts. At this time, there are inadequate data to determine if the aggregate benefits of malpractice law are greater than its aggregate costs. Additional research will be required to answer this question.

Additional Reading

Richard A. Epstein. *Principles for a Free Society*, chapter one. Reading: Perseus Books, 1998.

Michelle M. Mello and Troyen A. Brennan. "Deterrence of Medical Errors: Theory and Evidence for Malpractice Reform." *Texas Law Review* 80 (2002): 1595.

Richard A. Posner. "The Concept of Corrective Justice in Recent Theories of Tort Law." *Journal of Legal Studies* 10 (January 1981): 187.

Paul H. Rubin. *Tort Reform by Contract*, chapters one and four. Washington, DC: AEI Press, 1993.

Paul C. Weiler. *A Measure of Malpractice*, chapter four. Cambridge, MA: Harvard University Press, 1993.

Chapter 8: Getting There: Malpractice Reform by Contract

This policy resource describes the present legal process for resolving medical liability disputes and reviews the potential advantages of permitting patients and physicians to alter the rules governing liability in advance of care. Chapters 6 and 7 suggest that ex ante contracts between patients and physicians may prove both desirable and effective for allocating the risks and burdens of medical injury in some situations.

Despite these potential advantages, and the fact that scholars have been recommending contracts as a means of reform since the 1970s, there has been little progress toward contract-determined liability and payment. To an extent, this is because courts have refused to enforce certain contracts that alter liability rules and, as a result, parties have been reluctant to attempt them.

However, courts have upheld some contracts altering liability rules, but, even with these positive indications, parties have rarely adopted liability-altering contracts. Thus, in addition to judicial impediments, other factors may be preventing patients and physicians from considering these contracts.

The first section of this chapter introduces medical liability law as it relates to exculpatory clauses and arbitration clauses. A discussion of impediments to implementing liability-altering contracts follows. The final section addresses possible ways to overcome these impediments.[1]

A. Case Review

A1. Exculpatory Clauses

An exculpatory clause is a contract clause that completely absolves one party from liability. Courts have historically rejected these clauses in contracts made prior to an injury. In *Tunkl v. Regents of Univ. of Cal.*, the Supreme Court of California held that requiring a patient to sign a release as one of the "Conditions of Admission" was against public policy.[2] Similarly, in *Emory University et al. v. Porubiansky*, the Supreme Court of Georgia invalidated an "Information-Consent" form that would absolve the university of liability, regardless of fault.[3]

In both instances, the courts based their decisions on state statutes. The California court based its decision on a statute specifically rejecting con-

[1] Havighurst, *Health Care Choices*, chapter eight; Rubin, *Tort Reform by Contract*, chapter seven. These selections offer more complete discussions of judicial enforcement of liability-altering contracts.
[2] *Tunkl v. Regents of University of California.*
[3] *Emory University v. Porubiansky*, 248 Ga. 391; 282 S.E.2d 903 (1981).

tracts that absolved one party of responsibility, if the party violated a law or was "willful or negligent."[4] The Georgia court based its decision on a statute establishing a minimum standard of care for the medical profession, stating that the physician "must bring to the exercise of his profession a reasonable degree of care and skill. Any injury resulting from a want of such care and skill shall be a tort for which a recovery may be had."[5]

In both cases, the courts emphasized the state's responsibility to regulate businesses and professions that served a public function.[6] The California court suggested that private contracts between individuals not performing public functions may include a clause in which one party released the other from liability.[7] However, since all health professionals, including private practitioners, serve a public function, contracts absolving health professionals from liability would not be upheld.

In *Colton v. New York Hospital*, a man donating a kidney for his brother's transplant sued for injuries resulting from the surgical removal.[8] The donor had signed an agreement that stated, ". . . we, the intended Recipient of the operation, the intended Donor and the spouse . . . covenant not to sue the said doctors who perform the said attempted transplant or render any care in connection therewith." The contract further stated, "We intend to, and by this instrument do, release and forever discharge all persons. . . ."

The Supreme Court of New York held that the agreement was a covenant not to sue.[9] It further ruled that, to be a valid defense against a claim of negligence, the covenant must explicitly state that it applied when the defendant had been negligent. If not specifically stated, a covenant not to sue would apply only to non-negligent actions. Even though the opinion leaves open the possibility the court would enforce a covenant that included alleged negligence, the case demonstrates that courts are reluctant to enforce such contracts if a defendant may have been negligent.

A2. Compulsory Arbitration Clauses

In *Madden v. Kaiser Foundation*, the Supreme Court of California upheld a contract containing a compulsory arbitration agreement between the Board of Administration of the State Employees Retirement System and the Kaiser Foundation Hospitals.[10] The court reasoned that since the

[4] *Tunkl v. Regents*.
[5] *Emory v. Porubiansky*.
[6] *Tunkl v. Regents*; *Emory v. Porubiansky*.
[7] *Tunkl v. Regents*.
[8] *Colton v. New York Hospital*, 98 Misc. 2d. 957; 414 N.Y.S.2d 866 (1979).
[9] Ibid.
[10] *Madden v. Kaiser Foundation Hospitals*, 17 Cal. 3d 699; 552 P. 2d 1178 (1976).

Board of Administration had served as a purchasing agent for the plaintiff patient, it had bargained for and received consideration for the compulsory arbitration clause.

In *Obstetrics and Gynecology v. Pepper,* the Supreme Court of Nevada rejected a compulsory arbitration agreement between a plaintiff patient and a defendant medical clinic from which the patient had obtained oral contraceptives.[11] The court found the contract to be one of adhesion, and there was no evidence of a "meeting of the minds," as there was no evidence the patient had knowingly consented to the arbitration clause.

In *Buraczynski v. Eyring*, the Supreme Court of Tennessee upheld compulsory arbitration agreements between two separate patients and an orthopedic surgeon.[12] The court found that the arbitration agreements clearly explained the nature of the agreement; both patients were well-informed and had an opportunity to ask questions; the agreement gave no unfair advantage to the physician; and the agreement did not absolve the physician of liability for negligent care. Instead, the agreement merely altered the forum in which liability would be determined.

A3. Discussion

A few common themes emerge in judicial decisions concerning contracts that alter the rules governing liability. Courts have rejected contracts that completely absolve a defendant from liability for negligent behavior and contracts that require a patient to give up all redress as a condition for being treated. Courts have accepted, however, contracts that mandate arbitration if the arbitration clause was negotiated by a sophisticated intermediary or if the patient was well-informed as to the nature and consequences of the arbitration agreement.

B. Judicial Impediments to Liability-Altering Contracts

B1. Contracts of Adhesion

The primary argument against enforcing contracts that allocate the risk of medical injury in advance of harm is that patients are uninformed about the risk involved and have unequal bargaining power. As a result, courts have been reluctant to enforce liability-altering contracts if they are standard form, if they are prepared by the physician or other provider, if they limit liability, and—especially—if a patient must sign the contract as a condition of treatment.

As pointed out by Rubin, however, standard form contracts that limit seller liability are not necessarily unfair to buyers.[13] A warranty or disclaimer of warranty is merely one term of a contract. In most retail markets, buyers and sellers do not

[11] *Obstetrics and Gynecologists v. Pepper,* 101 Nev. 105; 693 P. 2d 1259 (1985).
[12] *Buraczynski v. Eyring.*
[13] Rubin, *Tort Reform by Contract,* chapter two.

determine by direct negotiation the characteristics of a product, the warranty or lack thereof, nor the price. Instead, consumers determine these features by choosing among competing options.

Producers and sellers compete to provide consumers with the products, services, and warranties they desire. They compete on the type and duration of warranty, just as they do on quality and price. If there are competing options, the buyer may choose the items with the most desirable features. To the extent courts do not allow patients to choose services for which liability is limited, courts may be preventing patients from choosing features they desire and may be maintaining higher prices, often with minimal benefit for most patients.

B1. Exculpatory Clauses

As noted, courts have been reluctant to enforce contracts that completely relieve one party from liability for negligence. In *Colton v. New York Hospital,* the court held that an exculpatory clause may relieve one of liability for non-negligent activity, but not for negligent activity, unless the contract specifically so stated.[14] This reluctance may stem from the belief that liability for negligence is morally just and is an effective means for deterring negligence.

However, as previously discussed, the data suggest that litigation may not be correctly selecting those cases in which substandard care is present and that tort law may not be a very effective means of deterring negligence. In addition, the threat of liability may be limiting needed services. Thus, it is possible that allowing liability-altering contracts, including those with exculpatory clauses, would result in a more just allocation of risk for medical injuries and allow more access to health-care services.

C. Additional Impediments to Liability-Altering Contracts

This section considers three possible explanations why patients and physicians have only rarely attempted liability-altering contracts and then examines possible reasons patients and physicians have not adopted two specific tort reform proposals that include liability-altering contracts. In each case, there are undoubtedly multiple factors that prevent parties from voluntarily adopting such contracts.

C1. Legal Uncertainty

It is likely that physicians and other providers have avoided offering patients liability-altering contracts out of concern that courts would not enforce them. Even though courts have upheld some contracts that limit liability, the common perception that courts will not enforce such contracts prevails. Moreover, developing such contracts and the administrative structure required to

[14] *Colton v. New York Hospital.*

oversee them would entail an investment of resources. Since it is not clear if courts would enforce liability-limiting contracts, those who may find them valuable may be reluctant to invest the resources necessary to develop them.

C2. Third-Party Payment for Minor Services

Because the U.S. tax code allows individuals to exclude employer-purchased insurance—but not individually purchased insurance or out-of-pocket expenses—from adjusted gross income, most working Americans purchase comprehensive health plans that pay for services, even minor services. In addition, the federal government pays for comprehensive services for older Americans, and the federal and state governments pay for comprehensive services for low-income Americans.

Because most Americans do not pay directly for their medical services, they are relatively insulated from the high price of health care. As a result, most individuals may have little interest in the cost savings that may accrue from medical malpractice reform. This may be one reason for the low patient interest in liability-altering contracts. In addition, most patients are probably not aware that liability-altering contracts offer the possibility of greater protection against medical injuries or assured compensation.

Employers and health plans do have an interest in cost savings and have attempted to decrease healthcare costs through managed care.[15] However, patients have rejected the more restrictive forms of managed care.[16] This may be one reason that employers and health plans have not pursued liability-altering contracts more vigorously.

C3. Inflexible Fees

At this time, physicians and hospitals are unable to alter prices for a large percentage of their patients. For patients covered by Medicare and Medicaid, the Centers for Medicare and Medicaid Services (CMS) annually sets the parameters that determine both professional and hospital fees for patients covered by these programs. There is no opportunity for individual physicians, physician groups, or hospitals to negotiate these fees with CMS. Increasingly, private payer fees mimic Medicare fees, e.g., many private payers set their fees at some multiple of the Medicare fee. In theory, physicians or hospitals could negotiate with private payers for altered liability rules. Possibly because they are precluded from doing so with their largest payer, and possibly for reasons outlined above, they rarely do so.

C4. Impediments to Specific Types of Contracts

Arbitration. In 1996, Metzloff attempted to explain why patients and physicians have not

[15] See M. Gregg Bloche, "One Step Ahead of the Law: Market Pressures and the Evaluation of Managed Care," in *The Privatization of Health Care Reform,* ed. M. Gregg Gloche (New York: Oxford University Press, 2003) page 22.
[16] Ibid.

used arbitration more extensively in medical malpractice cases.[17] His reasons included: (1) legal uncertainty, i.e., uncertainty by the parties as to whether arbitration agreements would be upheld by the courts; (2) state statutory restrictions on the use of medical malpractice arbitration; (3) preference of both sides for a flawed, but known, court system over the uncertainty of arbitration; (4) the lack of empirical evidence that arbitration saves money or resolves disputes satisfactorily; (5) the perception of tort critics that arbitration will not fix the problem, i.e., that arbitration does not address the fundamental problems inherent in tort law; (7) concern that arbitration will increase the number of claims; and (8) anti-arbitration sentiment among plaintiff advocate groups.

No-fault, enterprise-wide liability. Similarly, Hyman offered several reasons why patients and hospitals may have little interest in no-fault, enterprise-wide liability systems for medical injuries.[18] These include: (1) hospitals no longer dominate health-care markets; (2) hospitals may not be able to pool liability risk efficiently; (3) liability insurance companies may not be able to market hospital-based, no-fault liability to physicians and patients; (4) patients may not be interested in giving up liability rights for more likely compensation; and (5) hospital-physician integration is unlikely. Finally, an administrative system may not be able to determine which adverse events are eligible for compensation and which are not.

D. Overcoming Impediments to Liability-Altering Contracts

As noted previously, it is not clear which types of contracts patients and physicians may choose if they could be assured that courts would enforce them. Similarly, it is difficult to know how best to begin the process of implementing contract-based solutions for medical liability. Following is a brief discussion of potential methods for introducing contracts as a means of medical malpractice reform.

D1. Overcoming Judicial Impediments without Legislation

For most state courts to enforce liability-altering contracts, contracts would likely need the following characteristics: (1) legal options for patients who believe they have been negligently injured, (2) full disclosure within the contract that the contract limits liability, and (3) competing options from which patients may choose.[19]

Courts are reluctant to enforce contracts that completely absolve a physician from responsibility for negligent actions and, as described earlier, many states have statutes requiring liability when

[17] Metzloff, *Wake Forest Law Review* 31:203.
[18] See David A. Hyman, "Medical Malpractice and the Tort System: What Do We Know and What (If Anything) Should We Do About It?" *Texas Law Review* 80 (2002): 1639.
[19] Havighurst, *Health Care Choices*.

professionals are negligent. As a result, at this time a contract must give patients some legal redress if an injury occurs. Each of the possibilities described in chapter 6, except a patient's complete assumption of the risk, provides some avenue for legal redress. Thus, if such a contract were worded appropriately, there is a reasonable chance that courts would enforce it.[20]

In addition, courts will likely require liability-altering contracts to fully disclose the liability-altering rules and the consideration offered in return. Havighurst has proposed that contract drafters specify within the contract the cost-saving benefits for the patient.[21] Describing the benefits may serve a court-educating function, increasing the likelihood the court would enforce the contract.[22] In addition, courts may require that a health plan or physician offer competing options, e.g., choices between plans with full tort rights and plans with other rights in return for certain safety features, assured compensation, lower prices, or other consideration.

Courts would more likely enforce contracts in which a sophisticated intermediary bargained and received consideration for the liability-limiting term although such a provision must not always be required.[23] Health plan bargaining on behalf of patients decreases the risk that courts would consider the contract oppressive or against public policy. Also, courts have upheld contracts between health plans and patients that limit services in exchange for lower prices.[24]

D2. Overcoming Judicial Impediments with Legislation

To bring about contract-based tort reform, state legislatures may need to enact legislation, including proposals that repeal or amend laws preventing patients and physicians from altering liability rules or instruct courts that a state's public policy approves certain types of liability-altering contracts.[25]

In *Tunkl v. Regents of Univ. of Cal.*, the court upheld a California statute that specifically rejected contracts absolving a person from liability if negligence occurred.[26] In *Emory Univ. et al. v. Porubiansky*, the court upheld the Georgia statute, stating that an injury resulting from a physician's lack of a reasonable degree of care and

[20] Ibid.
[21] Ibid.
[22] Ibid.
[23] Ibid.
[24] Ibid.
[25] Epstein, *American Bar Foundation Research Journal* 1:87; Glen O. Robinson, "Rethinking the Allocation of Medical Malpractice Risks Between Patients and Providers," *Law and Contemporary Problems* 49 (1986): 265.
[26] *Tunkl v. Regents*.

skill is a tort "from which a recovery may be had."[27] In both instances, the court's decision was based on a statute, not common law. Repealing these or similar statutes may be necessary in some states to allow patients and physicians to form liability-altering contracts.

In addition to repealing laws that prevent the formation of contracts, legislatures may want to consider contract-enabling legislation. For example, a legislature could make clear that certain types of liability-altering contracts are consistent with the state's public policy. In *Buraczynski v. Eyring*, the court upheld a compulsory arbitration agreement between a patient and a physician, stating, "The Legislature has, by enacting the Uniform Arbitration Act, embraced a legislative policy favoring enforcement of such agreements."[28] This case suggests courts would be more likely to enforce liability-altering agreements if the legislature enacts a statute favoring such agreements.

Robinson has suggested that legislatures increase the options available to patients and physicians while maintaining tort law as the primary means of determining liability and damages.[29] Legislatures could do this by pre-approving certain types of contracts, including standard form contracts, from which patients and physicians may choose. Pre-approval would instruct courts that the state's public policy includes acceptance of such contracts.

D3. Overcoming Impediments to Patient Choice and Control

As noted previously, third-party payment for even minor medical services dominates U.S. health care. This is primarily because federal tax law encourages working individuals to choose comprehensive, employer-provided plans, and both federal and state programs pay for comprehensive services. Because most patient care is paid by third parties, patients have little incentive or ability to bargain for or choose safer practices or lower prices, and physicians have little incentive to provide low-cost health care. This may be one reason there is little interest in liability-altering contracts.

However, increasing patient choices may increase a patient's interest in cost saving and the ability to affect health-care quality. In 2003, Congress passed the Medicare Prescription Drug Improvement and Modernization Act (MMA).[30] One component of MMA allowed taxpayers who met certain criteria to create tax-free health sav-

[27] *Emory v. Porubiansky*.
[28] *Buraczynski v. Eyring*.
[29] See Robinson, *Law and Contemporary Problems* 49:265.
[30] Medicare Prescription Drug Improvement and Modernization Act, Public law 173, 108th Congress, 1st session (December 8, 2003).

ings accounts (HSAs). HSAs allow taxpayers to contribute before-tax dollars to a savings account, from which the taxpayer then pays for most out-of-pocket medical expenses tax-free.

In contrast to more comprehensive plans, HSAs allow patients more control over their health-care spending. Moreover, patients with HSAs may have more incentive than those with comprehensive coverage to be cost-conscious, and because they have more choices, they may be better able to choose higher quality care. As a result, HSA owners may be especially interested in developing liability-altering contracts.

Congress could expand the scope and usefulness of HSAs in a number of ways.[31] Similarly, Congress and state governments could allow Medicare and Medicaid beneficiaries to have the advantages of HSAs—including more control over spending decisions.[32] Such measures may also increase the demand for liability-altering contracts.

E. Summary

Courts have rejected contracts that completely absolve physicians of liability for negligent activity. Courts have also rejected contracts between patients and physicians that require compulsory arbitration if the patient was unaware of the clause. However, courts have accepted contracts requiring arbitration if a sophisticated intermediary negotiated for the patient or if the patient was well-informed concerning the clause.

Despite court acceptance of some contracts that alter liability rules, patients and physicians have rarely adopted such contracts. This limited interest probably due to many factors, including: (1) concern that courts will not enforce such a contract, (2) limited patient interest in cost control because third parties pay for most health-care services, and (3) fixed health-care prices for a large percentage of American patients.

Implementation of liability-altering contracts will likely require one or more of the following: (1) contracts that provide full disclosure of the liability-altering clause and multiple options from which patients may choose, (2) legislation that repeals statutory prohibitions or encourages approval of liability-altering contracts, or (3) more patient choices in health care and more control over health-care spending.

[31] See Michael F. Cannon and Michael D. Tanner, *Healthy Competition: What's Holding Back Health Care and How to Free It*, (Washington, DC: Cato Institute 2005) chapter five.
[32] See Cannon and Tanner, *Healthy Competition*, chapter six.

Additional Reading

Richard A. Epstein. "Medical Malpractice: The Case for Contract." *American Bar Foundation Research Journal* 1 (1976): 87.

Clark C. Havighurst. *Health Care Choices: Private Contracts as Instruments of Reform*, chapter eight. Washington, DC: AEI Press, 1995.

Glen O. Robinson. "Rethinking the Allocation of Medical Malpractice Risks Between Patients and Providers." *Law and Contemporary Problems* 49 (1986): 265.

Paul H. Rubin. *Tort Reform by Contract*, chapter seven. Washington, DC: AEI Press, 1993.

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