

Toward a Theory of Medical Malpractice

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INTRODUCTION

This Article develops a novel theory that explains the operation of our medical malpractice system and guides its reform. Focusing on the system's institutional infrastructure, the theory uncovers the mechanisms employed by medical malpractice law to impose, restrict, and expand care providers' liability. These mechanisms consist of "entry rules" and "exit rules" that are either treatment related or setup related. Entry rules determine a care provider's entry into liability by instructing courts how to identify malpractice in the treatment of a patient or, alternatively, in the care provider's setup of equipment, facilities, information, and personnel. Exit rules, by contrast, determine the circumstances under which a malpractitioner can be granted a release—or exit—from liability.¹ Critically, each type of rule is determined by a different institution or actor, or a combination thereof. The medical profession has the exclusive power to devise treatment-related entry rules. Courts,² the legislature, and the medical profession collectively formulate entry rules pertaining to setups. Courts function as exit keepers: they are given the exclusive power to determine the circumstances under which malpractitioners will be released from liability.

These mechanisms respond to two important concerns about legal rules: institutional competence and form. As far as institutional competence is concerned, the medical profession is best positioned to devise rules for patients' treatment, while courts are best situated to determine malpractitioners' liability for damages. The adequacy of medical setups depends on the cost-benefit analysis of medical needs and resources. The medical profession is best positioned to identify those needs and resources, while courts and the legislature are best situated to determine the costs that care providers ought to expend on satisfying patients' needs. Entry rules pertaining to setups consequently combine the inputs of both legal and medical institutions.

As for the rules' form, treatment-related entry rules are formulated into a set of detailed requirements that care providers can easily identify and comply with. Exit rules are narrowly tailored as well, but for a different purpose: courts made those rules narrow to undercut malpractitioners' opportunity to avoid liability by causally disassociating their misdeeds from patients' damages. Entry rules pertaining to setups have a different form: originating from a cost-benefit analysis that integrates legal and medical inputs, these rules can only be—and, in fact, are—formulated as broad standards.

1. Grant Gilmore famously applied the "entry/exit" categorization in his classic analysis of contract rules. GRANT GILMORE, *THE DEATH OF CONTRACT* 47-48 (1974).

2. Unless otherwise indicated, my references to "court" and "courts" are meant to include both judges and jurors.

These mechanisms produce three substantive effects. First, they confine care providers' liability for treatment-related malpractice to cases exhibiting failure to comply with a specified medical rule. In parallel, they impose setup-related liability upon care providers whose use of medical resources fails the cost-benefit test. Last but not least, these mechanisms curtail malpractitioners' ability to avoid the obligation to compensate the aggrieved patient.

Table 1 below outlines these mechanisms:

Rules' type Rules devised by	ENTRIES into liability for faulty		EXITS from liability for faulty	
	TREATMENT	SETUP	TREATMENT	SETUP
MEDICAL PROFESSION	narrow	-	-	-
COURTS / LEGISLATURE	-	-	narrow	narrow
BOTH	-	broad	-	-

TABLE 1

The theory I develop in this Article significantly improves the conventional understanding of our medical malpractice system. "Medical malpractice" is generally understood as a care provider's deviation from the patient-treatment standards that have been devised by the provider's peers.³ According to this understanding, courts should rely on medical experts to determine whether a provider's treatment of his patient conformed to those professional standards. If the treatment conformed to those standards, the court should dismiss the malpractice allegations. If the treatment violated the standards, the court should hold the provider negligent and determine whether his malpractice injured the patient or worsened her condition.⁴

This simplistic understanding fails to identify our system's *modus operandi*. Specifically, it overlooks the *dual rulemaking* mechanisms that integrate courts, legislators, and the medical profession in the design and implementation of the system's rules. Failure to account for these mechanisms has created distortions in the conventional understanding of the system. As I demonstrate below, those distortions have prompted a number of law reforms that reduced malpractitioners' liability for no good reason.⁵

As a threshold matter, courts do not rely on broad standards in determining the adequacy of a patient's treatment. Instead, they rely on

3. See *infra* notes 27–31 and accompanying text.

4. See *infra* Subpart I.A.1.

5. See *infra* Subpart III.C.

specific treatment rules that evolved in the practice of medicine.⁶ Medical practice is predominantly rule driven rather than standard based: it involves routine applications of well-articulated methods and protocols. Even when it allows a doctor to choose among different medical alternatives, those alternatives usually present themselves as a menu of specific treatment options from which the doctor must choose one.⁷

The importation of practice-based rules into courts' decisions delegates the rulemaking power to the medical profession. This delegation of power is not all-encompassing; it only authorizes the profession to formulate treatment-related entries into malpractice liability. Courts constrain this authorization by invalidating doctors' practices that are manifestly unsafe or have no medically established justification.⁸ Moreover, as I explain below, courts exercise an even greater power in formulating setup-related entries and exits of both kinds.⁹

In the domain of setup-related entries, courts (and the legislature) share the rulemaking power with the medical profession.¹⁰ Courts defer to the profession's *medical* opinions as to what physical and informational setups are appropriate for the right treatment of patients. Courts, however, also realize that medical opinions are not institutionally superior when it comes to cost-benefit tradeoffs that accord preference to one medical setup over another. Courts consequently do not defer to the profession's cost-benefit tradeoffs and often substitute them with their own economic analyses. Consider a hospital that fails to equip its newborn ward with enough vital-signs monitors; a doctor who treats her patient without informing him about the treatment's risks, benefits, and alternatives; a surgeon who forgets to dictate operative notes to a voice recorder and performs an undocumented surgery; a resident who treats patients while working at the hospital long, sleepless hours; and an MRI operator who does nothing to ensure that the patient safely steps down from the machine. Each of these scenarios features a cost-benefit tradeoff that the care provider made in setting up the conditions for treating patients. This tradeoff may have been suboptimal. Whether it actually was suboptimal is an economic,

6. See DAN B. DOBBS, *THE LAW OF TORTS* § 242, at 633–34 (2000) (“Courts judge the defendant’s medical conduct, not under a general standard like reasonable care or good medical practice, but by asking medical experts whether that particular procedure is medically acceptable in the relevant community.”).

7. See, e.g., David M. Eddy, *Variations in Physician Practice: The Role of Uncertainty*, 3 HEALTH AFF. 74, 79 (1984) (“For example, if a woman presents with a breast mass and her physician wants to know its approximate size and architecture, the physician might contemplate an imaging procedure. The choice could include mammography, ultrasonography, thermography, diaphanography, computed tomography, lymphography, Mammoscans, and nuclear magnetic resonance imaging.”).

8. See *infra* Subpart II.B.

9. See *infra* Subparts I.B–C.

10. See *infra* Subpart I.C.

rather than medical, issue that courts are institutionally competent to resolve.

Exits from malpractice liability—both treatment and setup related—exhibit yet another allocation of the rulemaking power.¹¹ The medical profession plays no part in the formation of exit rules. Courts formulate and apply those rules single-handedly. As part of this rulemaking process, courts have substituted the traditional cause-in-fact requirement with special rules that connect patients' damages to doctors' misdeeds.¹²

There is a good institutional reason for precluding doctors' participation in the formation of exit rules: doctors have a self-serving motivation to reduce malpractice liability. If allowed to participate in the formation of exit rules—as expert witnesses or in another capacity—they might try to disassociate malpractitioners from the aggrieved patients' injuries by exploiting the complexities of medicine and by taking advantage of the patients' preexisting health conditions that make those injuries causally uncertain.¹³ The social cost of this distortion would offset the potential benefit of allowing the medical profession to participate in the formation of exits.

This configuration of rules and rulemaking powers works to society's benefit. Allowing the medical profession to formulate detailed treatment-related entries is the optimal rulemaking method. As an alternative to this delegation of the rulemaking power, referred to herein as the "delegation method," lawmakers could set up a broad standard allowing courts to hold

11. See *infra* Subpart I.B.

12. See *infra* notes 66–88 and accompanying text.

13. The New Jersey Supreme Court's precedential decision in *Evers v. Dollinger*, 471 A.2d 405 (N.J. 1984), provides a vivid illustration of this risk and the ways in which courts handle it. This decision features a doctor who failed to diagnose the plaintiff's breast cancer and subsequently tried to disassociate himself from the plaintiff's massive damage by claiming that her evidence failed to establish that the damage resulted from his malpractice. *Id.* at 417–18. This doctor's claim might have been meritorious in a garden-variety tort dispute, but the court decided to reject it, holding that the plaintiff could satisfy her proof burden by demonstrating that her doctor's malpractice "increased the risk of recurrence or of distant spread of [the] cancer, and that such increased risk was a substantial factor in producing the condition from which [the] plaintiff currently suffers." *Id.* at 415. Prior to reaching this conclusion, the court underscored that "[c]ourts have come to recognize that the difficulties of identifying, defining, and proving injury in certain types of medical malpractice cases justifies the application of a standard of causation that is more flexible than that used in conventional tort claims." *Id.* at 413; see also *Hamil v. Bashline*, 392 A.2d 1280 (Pa. 1978) (setting up a similar precedent for Pennsylvania). For more recent decisions affirming and applying this precedent, see *Reynolds v. Gonzalez*, 798 A.2d 67, 75–76 (N.J. 2002); *Scafidi v. Seiler*, 574 A.2d 398, 403–04 (N.J. 1990) (attesting that "[t]he legal principle adopted by this Court in *Evers* reflects the emerging pattern of decisions on this issue in federal and state courts throughout the country" and providing examples).

doctors liable for any deviation from the “good practice of medicine.”¹⁴ Under this standard, adjudication of medical malpractice disputes would be unaffordably costly. Courts would have to determine—for every individual case and after the event—what the “good practice of medicine” required the defendant to do. These *ex post* determinations would be both unpredictable and prone to error, a consequence that would induce doctors, especially those who are risk averse, to take unnecessary precautions and resort to various defensive-medicine strategies in treating patients.¹⁵

As another alternative to the delegation method, the lawmaker could try to formulate detailed rules for each and every medical treatment. Because lawmakers lack requisite medical knowledge, they would have to engage numerous specialists in formulating those rules. This rulemaking method is inapt. Medicine develops quickly, and its new developments would periodically require lawmakers to revise and update the rules. The updating process would be complicated, expensive, and above all, very slow. As a result, the applicable treatment rules would lag far behind medicine.

The system’s selection of the remaining rules is straightforward. The delegation method has one serious downside: the agency cost. The medical profession may set up treatment-related entries in a self-serving fashion that would allow care providers to escape liability. To minimize this risk, courts adopt as binding only one type of the medical profession’s rules: those that apply medical knowledge to cure patients and prevent illnesses. Other medical rules and protocols are not recognized as mandatory.

To further curb doctors’ self-serving temptations, the system enhances patients’ awareness of available treatments and secures the transparency of medical procedures. It achieves these effects by expanding patients’ right to obtain medical information from doctors and medical institutions.¹⁶ The system’s broad disclosure requirements put doctors and institutions under pressure from both courts and the market. The prospect of being held liable in court due to a pre- or post-treatment withholding of information induces doctors and medical institutions to reveal to patients as much information as possible. The ensuing flow of information expands patients’ options by identifying the upside and the downside of available treatments and care providers. Doctors and medical institutions consequently have to compete against each other to win over patients, both directly and through the patients’ health benefit plans.

To fend off violations, the system narrows malpractitioners’ exits from liability by setting up special anti-exit rules. These rules lower an aggrieved

14. *Cf.* *Bricker v. Scava Speare Mem’l Hosp.*, 281 A.2d 589, 593 (N.H. 1971) (affirming lower court’s ruling that upheld hospital’s decision not to reappoint doctor to its medical staff upon finding his work “detrimental to the good practice of medicine” at the hospital).

15. *See infra* notes 190–97 and accompanying text.

16. *See infra* Subpart I.C.3.

patient's burden of proving causation¹⁷ and require malpractitioners to pay compensation not only for the victim's proven injury but also for her reduced chances to recover from illness.¹⁸

The overall design of our medical malpractice system is therefore both fair and efficient. Contrary to the polarized views of the system's critics, it is not slanted to benefit patients nor is it biased in favor of the medical profession.¹⁹ Liability that the system imposes upon doctors, hospitals, and other providers of medical care is neither too broad nor too narrow. Correspondingly, I am skeptical about the tort reforms that cap patients' compensation awards at low amounts, do away with the "collateral source" rule, and shorten the limitation and repose periods for suits against medical-care providers.²⁰ If our system works according to its design—as I suspect it does—those reforms can only engender defendant-biased distortions.

This Article makes four distinct contributions to the existing literature. The first contribution is best described as the unity of procedure and substance.²¹ To properly evaluate the functioning of our medical malpractice system, it must be understood as a combination of substantive tort rules and the applicable rules of evidence and procedure. This combined understanding provides a better view of the system's liability and causation mechanisms. This Article's conceptualization of the system's substantive, evidentiary, and procedural rules as "entries" and "exits" makes this understanding possible.

The Article's second contribution is the identification of the system's checks and balances. Our medical malpractice system sets up the desired checks and balances by allocating the rulemaking power to the medical profession, courts, and the legislature. The system's criterion for allocating this power is the actor's ability and motivation to design the relevant rule, or category of rules, in a socially desirable way.

The third and fourth contributions of this Article are analytical. To date, medical malpractice literature has not distinguished between treatment and setup rules. Failure to draw this distinction led scholars to misinterpret courts' decisions that refused to follow the medical profession's setup-related norms. This omission also explains scholars' inattentiveness to the profession's exclusive power to devise entry rules for medical treatments and to the way in which the profession uses this power. Specifically, scant

17. See *infra* notes 66–86 and accompanying text.

18. See *infra* Subpart I.B.4.

19. See generally TOM BAKER, THE MEDICAL MALPRACTICE MYTH (2005) (examining debates over medical malpractice liability and rejecting the opinion that doctors pay too much under the current system as empirically unfounded).

20. See *infra* Subpart III.C.

21. This functional unity is the cornerstone of my general theory of evidence law. See ALEX STEIN, FOUNDATIONS OF EVIDENCE LAW 1–31, 118–40 (2005); see also Alex Stein, *The Refoundation of Evidence Law*, 9 CANADIAN J.L. & JURISPRUDENCE 279 (1996).

attention has been paid to the extremely narrow scope of treatment-related liability: under current law, a doctor will be identified as a malpractitioner only if she treats her patient in a grossly negligent way that does not align with any applicable medical norm.²² This Article rectifies these two omissions.

Structurally, the Article proceeds as follows. In Part I, I unfold the new taxonomy of “entry rules,” “exit rules,” “treatment rules,” and “setup rules” and explain how these rules work. In Part II, I expound the system’s institutional infrastructure: the dual rulemaking framework within which all treatment-related entries into malpractice liability are narrow rules determined by the medical profession; all setup-related entries are broad standards collectively formulated by courts, legislators, and doctors; and all exits are court-governed narrow rules. In Part III, I use these insights to reassess our medical malpractice system, to commend its overall design, and to criticize tort reforms that reduce care providers’ liability for malpractice.

I. THE MECHANICS OF MEDICAL MALPRACTICE RULES

This Part of the Article introduces the new taxonomy of “entry rules,” “exit rules,” “treatment rules,” and “setup rules.” I identify the rules affiliated with each of these categories, explain how they function, and specify the consequences they bring about. This discussion uncovers three fundamental characteristics of our medical malpractice system. First, care providers’ entry into liability for treatment-related malpractice is narrow. Second, care providers’ entry into liability for defective medical setups is broad. Third and finally, exits from both types of liability for medical malpractice are extremely narrow: a negligent care provider can rarely escape the obligation to compensate the aggrieved patient.

A. ENTRY RULES

“Entry rules”—or “entries”—are substantive rules and evidentiary requirements that facilitate courts’ determinations of whether the defendant doctor²³ committed malpractice. These determinations are crucial because proof of substandard medical treatment—malpractice—is a legal prerequisite for an aggrieved patient’s entitlement to recover compensation from her doctor. Our system of medical malpractice is fault-based: a patient’s failure to prove that her doctor treated her in a substandard way dooms the suit. The court will then deny the patient legal remedies even when the doctor actually fails to improve, or worsens, her condition.

22. This sorting effect did not escape the perceptive eye of Clarence Morris. Clarence Morris, *Custom and Negligence*, 42 COLUM. L. REV. 1147, 1165 (1942) (explaining that medical malpractice law penalizes predominantly “grossly incompetent” doctors); see also RICHARD A. EPSTEIN, TORTS § 6.2, at 140 (1999) (seconding Morris’s view).

23. In this Article, the term “doctor” refers predominantly to physicians, but it will occasionally include other providers of medical care as well.

However, when the patient proves that the doctor mistreated her, the doctor becomes presumptively liable for the patient's damages. This liability is merely presumptive, rather than conclusive, because the doctor might still be able to escape it by disassociating his malpractice from the patient's damages. Whether this disassociation will succeed depends on the exit rules that I discuss in Subpart I.B. For clarity purposes, my discussion of entries into malpractice liability will initially focus on the rules that control patients' treatment. In Subpart I.C, I explain the functioning of setup-related entry rules.

Entry rules integrate liability benchmarks with the execution mechanism that encompasses the relevant adjudicative rules. Doctors' liability benchmarks separate acceptable medical treatments from malpractice. These rules are generally called "substantive." The execution mechanism combines adjudicative rules that promote the liability benchmarks' application in individual cases. These rules are commonly identified as "evidentiary" and "procedural."²⁴ I discuss the liability benchmarks first.

1. Liability Benchmarks

Under the prevalent doctrine, a doctor commits malpractice when he treats a patient in a way that deviates from the norms established by the medical profession. The applicable norms flow from the accepted, or customary, medical practice: the ways in which similarly situated medical practitioners treat patients. These customary norms include work-related rules and protocols that a doctor's peers collectively formulated and follow. Medical experts bring those norms to courts by testifying as witnesses. Their testimony usually relies on medical publications documenting the relevant practices, protocols, and rules.²⁵ Oftentimes, experts disagree about the

24. The distinction between "substantive" rules of medical malpractice and the accompanying "evidentiary" and "procedural" requirements has more to do with nomenclature than substance. For example, in diversity malpractice suits, evidentiary rules governing the admission of medical-expert testimony in state courts are considered "outcome determinative" and hence "substantive"—a categorization that allows those rules to trump federal law. *See, e.g.,* *Creekmore v. Maryview Hosp.*, No. 10-1183, 2011 WL 6091740, at *3 (4th Cir. Dec. 8, 2011) ("[In] a federal . . . court, the Federal Rules of Evidence would generally control the admissibility of expert witness testimony [but] because the testimony at issue here was required for a medical malpractice claim under Virginia law, the sufficiency of its substance to meet plaintiff's prima facie case is governed by state law." (citations omitted)); *Legg v. Chopra*, 286 F.3d 286, 291 (6th Cir. 2002) (categorizing Tennessee's restriction for medical experts' testimony as a "substantive" rule applicable in diversity cases); *see also* *Hartsell ex rel. Upton v. Fort Sanders Reg'l Med. Ctr.*, 905 S.W.2d 944, 950 (Tenn. Ct. App. 1995) (upholding exclusion of the American Medical Association rules pertaining to disputed medical treatment because under Tennessee law, doctors' standard of care must be proven by local experts).

25. *See, e.g.,* *Stang-Starr v. Byington*, 532 N.W.2d 26, 30-31 (Neb. 1995) (holding medical treatises and journal publications admissible as part of expert testimony).

applicable professional norm, and when that happens, factfinders need to resolve the disagreement.²⁶

Correspondingly, a doctor is identified as a malpractitioner only when she fails to conform to her peers' practices, protocols, and rules. These peers include, first and foremost, the physicians who practice in the same area of medicine. When the doctor is a board-certified specialty practitioner, these physicians will have to be affiliated with the same board: an organization that credentials doctors practicing in the given specialty area.²⁷ For example, a board-certified urologist must follow the practices, protocols, and rules of the specialty doctors affiliated with the American Board of Urology.²⁸ A urologist's failure to align her treatment of patients with these practices, protocols, and rules constitutes medical malpractice.

For general practitioners and for specialty doctors with no board certification, the norm-identification procedure varies from one jurisdiction to another. An increasing number of states have adopted the uniform benchmark, which consists of practices, rules, and protocols that are prevalent nationwide.²⁹ More traditional jurisdictions still apply the locality benchmark that incorporates practices, rules, and protocols that are prevalent in the doctor's locality.³⁰ Other jurisdictions use the in-between benchmark that refers to professional norms set up in the doctor's community and similar localities.³¹

Nowadays, the locality benchmark does not significantly differ from the uniform benchmark. Doctors across the United States have built an effective

26. The burden-of-proof rules make the resolution of such disagreements much easier than it appears at first glance. See *infra* note 270 and accompanying text.

27. See *About ABMS Member Boards*, AM. BD. MED. SPECIALTIES (2012), http://www.abms.org/About_ABMS/member_boards.aspx.

28. See AM. BD. UROLOGY (2011), <http://www.abu.org>.

29. DOBBS, *supra* note 6, §§ 244, at 636–37 (attesting that a national standard is taking over in many states); see, e.g., *Vegara ex rel. Vergara v. Doan*, 593 N.E.2d 185, 187 (Ind. 1992) (substituting Indiana's "modified locality rule" with a national standard); *Hall v. Hilbun*, 466 So. 2d 856, 871–73 (Miss. 1985) (substituting Mississippi's locality rule with a national standard, subject to a limited-resources proviso), *superseded by statute on other grounds*, 1989 Miss. Laws 311, as recognized in *De Priest v. Barber*, 798 So. 2d 456, 458 (Miss. 2001); *Chapel v. Allison*, 785 P.2d 204, 210 (Mont. 1990) (substituting Montana's "same locality" benchmark for general practitioners with that of a "reasonably competent general practitioner acting in the same or similar community in the United States in the same or similar circumstances" (citing *Shilkret v. Annapolis Emergency Hosp.*, 349 A.2d 245 (Md. 1975))); *Sheeley v. Mem'l Hosp.*, 710 A.2d 161, 166–67 (R.I. 1998) (substituting Rhode Island's "same or similar locality rule" with a national standard).

30. See, e.g., IDAHO CODE ANN. § 6-1012 (2010) (establishing a strict locality rule for Idaho); TENN. CODE ANN. §§ 29-26-115(a)–(b) (2010) (establishing a locality rule for Tennessee and "a contiguous bordering state"); *Nestorowich v. Ricotta*, 767 N.E.2d 125, 128 (N.Y. 2002) (reaffirming the strict locality rule for New York).

31. See, e.g., MICH. COMP. LAWS ANN. § 600.2912a(1)(a) (West 2010) (creating a medical-treatment standard for Michigan that refers to "the community in which the defendant practices or in a similar community").

network for producing and disseminating medical knowledge. This network relies on medical schools that impart medical knowledge to students; on licensing, credentialing, and continuing-education requirements—both mandatory and optional—that require doctors to stay abreast of the state-of-the-art; on conferences that foster updating and exchange of medical knowledge among doctors; and on many peer-reviewed journals, books, and Internet-based publications that secure doctors' access to cutting-edge developments in their fields.³² The near-universal availability of medical knowledge drives doctors toward improving and standardizing medical care. Any qualified doctor knows, or ought to know, what medical treatments are available.³³ Treatments not available in a particular locality due to a scarcity of resources or personnel can be obtained in numerous medical centers across the country.³⁴ A patient's timely referral to one of those centers thus virtually always secures the provision of the appropriate treatment to the patient. Indeed, the problem with medical care in our society is not the availability of required treatments, but rather the treatments' cost and affordability.³⁵

32. See, e.g., *Hall*, 466 So. 2d at 870 (“We would have to put our heads in the sand to ignore the ‘nationalization’ of medical education and training. Medical school admission standards are similar across the country. Curricula are substantially the same. Internship and residency programs for those entering medical specialties have substantially common components. Nationally uniform standards are enforced in the case of certification of specialists.”).

33. See *id.* (“Physicians are far more mobile than they once were. They frequently attend medical school in one state, do a residency in another, establish a practice in a third and after a period of time relocate to a fourth. All the while they have ready access to professional and scientific journals and seminars for continuing medical education from across the country.”); see also Amy Jurevic Sokol & Christopher J. Molzen, *The Changing Standard of Care in Medicine: E-Health, Medical Errors, and Technology Add New Obstacles*, 23 J. LEGAL MED. 449, 476 (2002) (“The modern technology tools of the Internet, videoconferencing, and telemedicine are now or will soon be available to every rural and urban physician. The standard of care harnesses the entirety of the nation’s medical knowledge as the framework for evaluating physician care whether the provider practices in New York City or Doolittle, Missouri. This presumption will be tested through the trial process, which will make case-by-case determinations on the admissibility of information technology evidence against an already changing standard of care framework.”).

34. See Sokol & Molzen, *supra* note 33, at 449–50 n.4, 467–69 (describing wide Internet-based patient referral networks); see also *Hall*, 466 So. 2d at 870 (“[T]he medical centers in Memphis, Birmingham, Mobile, New Orleans and other nearby areas in adjoining states are a very real part of the Mississippi-centered universe of hospitalization, medical care and treatment and other health related services.”).

35. See, e.g., Steffie Woolhandler et al., *Costs of Health Care Administration in the United States and Canada*, 349 NEW ENG. J. MED. 768, 768 (2003). The affordability problem is the main concern of Congress’s historic piece of legislation, the Patient Protection and Affordable Care Act, Pub. L. No. 111-148, § 2718, 124 Stat. 119 (2010) (codified as amended in scattered sections of 21, 25, 26, 29, and 42 U.S.C.). This Act introduces no changes into medical malpractice law, but its regulatory incentives might reduce the incidence of medical errors. See Barry R. Furrow, *Regulating Patient Safety: The Patient Protection and Affordable Care Act*, 159 U. PA. L. REV. 1727, 1733 (2011).

The two liability benchmarks still differ from each other in their effects on the law of evidence.³⁶ Under the uniform benchmark, virtually any medical specialist with formal credentials can give expert testimony on whether a doctor committed malpractice. To qualify as an expert, she only needs to possess the requisite knowledge in the subject matter of her testimony. The locality benchmark, however, authorizes only local experts to testify in medical malpractice cases.³⁷ This limitation drains the pool of eligible expert witnesses, which enables doctors to form an implicit—and sometimes explicit—collusive understanding known as the “conspiracy of silence.” This understanding gives doctors mutual assurance that none of them will testify against another doctor in a medical malpractice case.³⁸ This assurance substantially reduces doctors’ likelihood of assuming liability for malpractice and dilutes their incentive to treat patients with adequate care. To mitigate this distortionary effect on doctors’ incentives, many jurisdictions have replaced the locality benchmark with the uniform benchmark or expanded the scope of “locality” to include other regions.³⁹ These reforms have expanded the pool of eligible expert witnesses and reduced the opportunity for a conspiracy of silence.

Another liability benchmark has to do with medical emergencies. This benchmark introduces an important adjustment into the general non-emergency standards of medical care: doctors delivering an emergency treatment are not obligated to follow each and every rule, practice, and protocol of the medical profession. Rather, they are only required to make the best use of those rules, practices, and protocols under the emergency conditions.⁴⁰ Courts also generally avoid second-guessing emergency doctors’ decisions.⁴¹ These rules make it difficult for a patient to establish that his doctor committed malpractice.

Doctors defending against malpractice suits can also rely on the “multiple schools of thought” and “respectable minority” benchmarks.⁴²

36. See EPSTEIN, *supra* note 22, § 6.2, at 142 (“Perhaps the most important consequence of the dominance of national standards is that it transforms the market for expert witnesses. . . . The pool of expert witnesses expands greatly, and the expert so chosen is likely to have far less fear of retaliation from local physician groups.”).

37. See, e.g., *Sheeley v. Mem'l Hosp.*, 710 A.2d 161, 165–66 (R.I. 1998).

38. *Id.* (attesting that a small pool of medical experts breeds a “conspiracy of silence”).

39. See DOBBS, *supra* note 6, § 244, at 635–37.

40. *Id.* § 129, at 304–05.

41. See, e.g., *Bowden v. Cary Fire Prot. Dist.*, 710 N.E.2d 548, 554 (Ill. App. Ct. 1999) (refusing to “second-guess every action taken by [emergency medical technicians] in rendering emergency treatment to the decedent” despite the tragic result). However, when physicians trained to deal with emergencies face foreseeable problems, the emergency rule does not apply and physicians are accountable under the regular malpractice standards. See DOBBS, *supra* note 6, § 129, at 305.

42. See, e.g., *Savoie v. Daoud*, 919 A.2d 1080, 1084–86 (Conn. App. Ct. 2007) (applying the multiple-schools-of-thought doctrine); *Gala v. Hamilton*, 715 A.2d 1108, 1111–15 (Pa. 1998) (articulating and applying the multiple-schools-of-thought doctrine).

These benchmarks are virtually identical: both allow doctors to use treatment methods that depart from the mainstream, so long as the method is recognized as part of the general medical discourse. Any treatment method, however, must receive affirmation from a segment of the medical community—a group of doctors that forms a distinct school by practicing this method and defending its validity in medical journals and books. Although there is no settled rule as to how big this group needs to get in order to be considered a “school of thought,” courts insist on there being a distinct group of similarly minded doctors—even a small one—and refuse to recognize thoughts without a school.⁴³ Once the defendant has proven that a school of thought exists, all she needs to do is show her conformity with its treatment methods. This showing will rebut the patient’s malpractice allegations and defeat the suit.⁴⁴

2. The Execution Mechanism

The execution mechanism that implements these benchmarks has three interlocking elements. The first and most fundamental of these elements is the requirement obligating a plaintiff to substantiate his malpractice allegations against the care provider by a medical expert’s testimony. The plaintiff’s expert must be versed in the medical rules, protocols, and practices that form the applicable liability benchmark. Many jurisdictions also require the expert to demonstrate experience as a medical practitioner who applied those professional norms in her work.⁴⁵ By and large, the plaintiff must file his expert’s affidavit in court before trial.⁴⁶

The expert-testimony requirement is extremely rigid. It has only one narrow exception: a specialized variant of the *res-ipsa-loquitur* presumption,

43. *Jones v. Chidester*, 610 A.2d 964, 969 (Pa. 1992) (requiring that a school’s subscribers be “considerable” in number but refusing “to place a numerical certainty on what constitutes a “considerable number”), *quoted in Gala*, 715 A.2d at 1110–11.

44. *See Gala*, 715 A.2d at 1111 (quoting *Jones*, 610 A.2d at 969).

45. *See DOBBS*, *supra* note 6, § 246, at 640; *see, e.g.*, TENN. CODE ANN. § 29-26-115(b) (Supp. 2011) (holding expert testimony only admissible when the expert “was licensed to practice in the state or a contiguous bordering state a profession or specialty which would make [his or her] expert testimony relevant”); *Springhill Hosps., Inc. v. Critopoulos*, 1090946, 2011 WL 5607816, at *10 (Ala. Nov. 18, 2011) (holding that a nurse experienced in wound-care management and pressure-ulcer prevention in general may not testify about measures that nurses need to take specifically to prevent pressure ulcers for cardiac-recovery patients).

46. *See, e.g.*, GA. CODE ANN. § 9-11-9.1(a)(3) (2011) (requiring expert affidavit to be filed with every complaint alleging medical malpractice); W. VA. CODE § 55-7B-6(b) (2011) (providing that certificate of merit signed by medical expert is a prerequisite for filing suit for medical malpractice); *see also* Thomas J. Hurney, Jr. & Rob J. Aliff, *Medical Professional Liability in West Virginia*, 105 W. VA. L. REV. 369, 384–91 (2003) (explaining and illustrating West Virginia’s pretrial screening of medical malpractice suits as a rigorous procedure that requires plaintiffs to adduce expert testimony before trial).

often identified as “common knowledge.”⁴⁷ This exception allows a plaintiff to establish his medical malpractice allegations against the defendant when those allegations rely upon common sense alone. Under this exception, an assessor with no insider understanding of medicine—a judge or a juror—should be able to apply common knowledge in order to find out whether those allegations are correct. This ability is rarely present: a simple medical treatment is usually sufficiently complex to preclude it because the treatment’s adequacy always depends on the applicable medical norms that the court will have to ascertain. Expert testimony substantially reduces adjudicative errors in the ascertainment of those norms, which makes courts reluctant to forego the expert requirement. For this reason, courts tend to limit the common-knowledge exception to cases in which a doctor leaves a foreign object (a sponge, drain, or surgical instrument) in the patient’s body and cases in which a doctor injures the patient by acting in a blatantly careless way (for example, when a doctor amputates the wrong arm or drops a scalpel on a patient). Even these categories of cases are narrowly construed. For example, expert testimony *is* required when the patient complains about a piece of needle that broke when inserted in her body,⁴⁸ about gauze that a surgeon failed to remove after its installation by another doctor,⁴⁹ and even about a ligation of the wrong artery.⁵⁰ The key factor here is the scope of applicable medical rules, protocols, and practices. When the doctor’s allegedly careless action is regulated by any of these professional norms, courts will require the patient to substantiate her complaint by expert testimony.

The execution mechanism’s second element can be called a checklist. An expert cannot give an impressionistic evaluation of the disputed treatment by testifying that it was adequate or, alternatively, inadequate. Instead, the expert must specify the applicable benchmark requirements: the medical profession’s practices, protocols, and rules that determine how to carry out the treatment in question. The expert needs to juxtapose the care provider’s actions against those rules, practices, and protocols and tell

47. See Joseph H. King, Jr., *In Search of a Standard of Care for the Medical Profession: The “Accepted Practice” Formula*, 28 VAND. L. REV. 1213, 1257–61 (1975) (explaining the common knowledge exception to the expert testimony requirement for medical malpractice suits and its connection to the *res ipsa loquitur* rule). See generally Joseph H. King, *The Common Knowledge Exception to the Expert Testimony Requirement for Establishing the Standard of Care in Medical Malpractice*, 59 ALA. L. REV. 51 (2007) (providing an updated account of the common knowledge exception and recommending sharpening its definition to enhance uniformity).

48. *Locke v. Pachtman*, 521 N.W.2d 786, 789–91 (Mich. 1994) (holding that an expert’s failure to clearly identify the doctor’s negligence in breaking needle into the patient’s body properly led to dismissal of suit).

49. *Ivy v. Carraway*, 32 So. 3d 1247, 1251–56 (Ala. 2009).

50. *Nestorowich v. Ricotta*, 767 N.E.2d 125, 127, 128–30 (N.Y. 2002) (upholding verdict for defendant despite presence of expert testimony describing ligation of wrong artery as malpractice).

the court whether a deviation occurred (and if so, whether it injured the patient or worsened his condition).⁵¹ Failure to do so results in a dismissal of the patient's suit.⁵² These rules once again underscore the nature of medical care as a rule-driven activity. Doctors virtually never exercise broad discretion in treating patients. Instead, they follow well-articulated professional protocols and rules.⁵³

The execution mechanism's third element is an important safety device for eliminating errors that courts might otherwise commit in their application of doctors' liability benchmarks. This element requires that courts instruct jurors not to use hindsight in evaluating the patient's treatment by her doctor.⁵⁴ When a medical treatment does not succeed or, worse yet, when it leaves the patient dead or seriously injured, jurors may be tempted to blame the bad outcome on the doctor who may have been faultless.⁵⁵ The required jury instruction works to forestall this fallacious reasoning.

Moreover, in some cases, it may transpire after the event that the doctor could actually have chosen a better treatment for the patient—a fact suggestive of malpractice. The doctor, however, may have been faultless under this scenario as well, because what we learn after the event is different from the information available to doctors *ex ante*. The court therefore should evaluate the doctor's performance on the basis of information that was available to her when she made her decisions concerning the patient's treatment.⁵⁶ To secure this *ex ante* evaluation, a number of jurisdictions fend off hindsight bias with the help of a special "error in judgment" instruction that warns the jury against "Monday morning quarterbacking."⁵⁷ This instruction explains to jurors that not all medical errors constitute

51. This part of the expert's testimony looks into causation.

52. See, e.g., *Ivy*, 32 So. 3d at 1256 (affirming summary dismissal of medical malpractice suit unsupported by expert testimony); *Toogood v. Rogal*, 824 A.2d 1140, 1145–51 (Pa. 2003) (underscoring the centrality of the expert-testimony requirement for medical malpractice suits, refusing to expand the *res ipsa loquitur* exception, and ordering direct dismissal of a suit following plaintiff's failure to adduce expert testimony).

53. See *supra* Subpart I.A.1.

54. See W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 37, at 236–37 (5th ed. 1984).

55. See, e.g., *Cain v. Rijken*, 717 P.2d 140, 149 (Or. 1986) (en banc); see also Hal R. Arkes & Cindy A. Schipani, *Medical Malpractice v. the Business Judgment Rule: Differences in Hindsight Bias*, 73 OR. L. REV. 587, 590 (1994); John E. Montgomery, *Cognitive Biases and Heuristics in Tort Litigation: A Proposal To Limit Their Effects Without Changing the World*, 85 NEB. L. REV. 15, 43–46 (2006).

56. See, e.g., *Keaton ex rel. Foster v. Greenville Hosp. Sys.*, 514 S.E.2d 570, 574–75 (S.C. 1999); *Roonney v. Med. Ctr. Hosp. of Vt., Inc.*, 649 A.2d 756, 761 (Vt. 1994).

57. See, e.g., *Smith v. Finch*, 681 S.E.2d 147, 149–50 (Ga. 2009) (“[I]t is well recognized that ‘an after-the-fact assessment of facts or evidence cannot be the basis of a negligence claim so long as the initial assessment was made in accordance with the reasonable standards of medical care.’” (quoting *Holbrook v. Fokes*, 393 S.E.2d 718, 719 (Ga. Ct. App. 1990))).

malpractice—only those that the doctor could avoid *ex ante*, when she decided to treat the patient one way as opposed to another.⁵⁸

Both separately and in combination, the applicable entry rules narrow doctors' entry into liability for malpractice by making liability hard to establish. Under these rules, a plaintiff virtually always needs to hire a medical expert to identify the specific medical rule, protocol, or practice with which the defendant doctor failed to comply. Failure to do so will result in the suit's dismissal.⁵⁹ The expert's identification of the applicable medical norm ought to be equally rigorous. Courts deem relevant only those medical rules, protocols, and practices that the defendant's peers—doctors who practice in the same medical specialty and affiliate to the same school of thought—recognized. Furthermore, as I already mentioned, when the defendant treats the plaintiff under conditions of emergency, the court considers the emergency and avoids second-guessing the defendant's calls.

Hence, doctors who go by the book avoid liability for malpractice.⁶⁰ Only a court's error may occasionally misidentify a conformist rule-follower as a malpractitioner, but such errors must be rare.⁶¹ The rigorous—and oftentimes, highly technical—method for identifying care providers' deviations from professional norms minimizes the incidence of such errors.

B. EXIT RULES

“Exit rules”—or “exits”—determine the relationship between factual causation and legal remedies. By making this crucial determination, exit rules define the remedial consequences of the defendant's misdeed. As an extreme example of an overly broad exit, consider a rule providing that a negligent defendant compensate the plaintiff only for those damages that are proven with certainty to have resulted from the defendant's negligence

58. See *Nestorowich v. Ricotta*, 767 N.E.2d 125, 128–29 (N.Y. 2002) (affirming applicability of the error in judgment instruction in New York, and explaining that the instruction only applies to a doctor's choice among two or more treatment options and that it is unavailable when the doctor makes a mechanical mistake); see also *Papke v. Harbert*, 2007 SD 87, 738 N.W.2d 510, 517–27 (surveying applications of the error in judgment instruction under different state laws and adopting an evidence-based error in judgment instruction for South Dakota courts).

59. See *supra* note 52.

60. See *Morris*, *supra* note 22, at 1165 (rationalizing the prevalent malpractice-liability standard as controlling the “quack” and penalizing predominantly “grossly incompetent” doctors).

61. Empirical scholars disagree on this issue. Compare David M. Studdert & Michelle M. Mello, *When Tort Resolutions Are “Wrong”: Predictors of Discordant Outcomes in Medical Malpractice Litigation*, 36 J. LEGAL STUD. S47, S54–64, S74 (2007) (finding substantial rate of false positives in a two-reviewer study of 1,452 randomly selected resolutions of medical malpractice claims), with NEIL VIDMAR, *MEDICAL MALPRACTICE AND THE AMERICAN JURY: CONFRONTING THE MYTHS ABOUT JURY INCOMPETENCE, DEEP POCKETS, AND OUTRAGEOUS DAMAGE AWARDS* (1997) (finding that medical malpractice adjudication is fair and impartial and that doctors win more than two-thirds of the cases).

alone. Under this rule, most, if not all, negligent defendants will take the exit and escape liability. Moving to the opposite extreme, consider a rule prescribing that a negligent defendant pay a fixed amount of compensation to the plaintiff even when the plaintiff suffers no damage from the defendant's negligence. This rule closes the exit from liability for all negligent defendants.

Of course, these extreme examples are imaginary. Exit rules that actually exist in our legal system are situated between these two extremes. Some of these rules allow broad exits from liability in torts, while others set up extremely narrow exits. Exit rules that apply in general tort litigation are predominantly balanced. They are neither too broad nor too narrow. Neither of these rules favors plaintiffs over defendants, or vice versa.⁶²

Exits from medical malpractice liability do not follow this balanced approach. Under current law, doctors identified as malpractitioners have a limited ability to take an exit and escape the duty to compensate the aggrieved patient.⁶³ Our medical malpractice system achieves this effect by substituting the general causation requirements of the law of torts with a series of patient-friendly provisions that expand the scope of the risks that doctors must foresee and forestall. These provisions lower the aggrieved patient's burden of establishing causation, downsize the comparative-negligence defense, and entitle a wronged patient to recover compensation for the doctor's reduction of her chances to achieve a better medical outcome.

1. Burden of Proof

Begin with the burden of proof. Evidence law requires the plaintiff to prove every element of her suit by a preponderance of the evidence.⁶⁴ Under this requirement, an aggrieved patient will not succeed in her suit against the doctor unless she adduces persuasive evidence of causation. This evidence must demonstrate that it is more probable than not that the doctor's malpractice caused the patient's damage. Satisfying this requirement is difficult. As I explained above,⁶⁵ care providers can virtually always blame the patient's damage on her preexisting medical condition and other circumstances for which they are not responsible. These condition and circumstances make causation in a medical malpractice case an extremely complex issue. In the absence of special legal rules, this issue

62. See DOBBS, *supra* note 6, §§ 166–68, at 405–09 (explaining prevalent causation doctrine as a balanced set of rules that make a wrongdoer's liability correlate with the harm he caused).

63. See *infra* Subparts I.B.1–4.

64. See STEIN, *supra* note 21, at 151–53, 219–25 (stating and explaining the preponderance standard for civil suits).

65. See *supra* note 13 and accompanying text.

could present an insurmountable evidentiary obstacle for many wronged patients.

Courts responded to this problem by relaxing the causation requirements for medical malpractice suits. They have developed what might be called the “relaxed causation” doctrine.⁶⁶ Court decisions that expressly recognize the causal-uncertainty problem that arises in medical malpractice disputes best illustrate this doctrine.⁶⁷ Based on this recognition, courts in New York have devised a special rule that helps aggrieved patients establish causation in their suits against malpractitioners. Under this rule, the jury may deem sufficient any expert testimony from which it “may infer that the defendant’s conduct diminished the plaintiff’s chance of a better outcome or increased [the] injury”⁶⁸ even when the “expert is unable to quantify the extent to which the defendant’s act or omission decreased the plaintiff’s chance of a better outcome or increased the injury.”⁶⁹

California’s relaxed causation doctrine is virtually identical to that of New York. This doctrine modifies California’s general causation standard under which “[a] cause of injury, damage, loss or harm is something that is a substantial factor in bringing about an injury, damage, loss or harm.”⁷⁰ A wronged patient will satisfy the causation requirement by adducing evidence

66. See *Scafidi v. Seiler*, 574 A.2d 398, 403–05 (N.J. 1990) (observing that numerous courts, both state and federal, have substantially relaxed plaintiffs’ burden of establishing causation in medical malpractice suits). For a recent example, see *Ind. Dep’t of Ins., Ind. Patients Comp. Fund v. Everhart*, 939 N.E.2d 1106, 1107–08 (Ind. Ct. App. 2010) (Robb, J., dissenting) (discussing *Mayhue v. Sparkman*, 653 N.E.2d 1384, 1387–88 (Ind. 1995), the decision designing Indiana’s relaxed causation doctrine). Some jurisdictions still adhere to the traditional causation rules. See, e.g., MICH. COMP. LAWS ANN. § 600.2912a(2) (West 2010) (“In an action alleging medical malpractice, the plaintiff cannot recover for loss of an opportunity to survive or an opportunity to achieve a better result unless the opportunity was greater than 50%.”); *O’Neal v. St. John Hosp. & Med. Ctr.*, 791 N.W.2d 853, 858 (Mich. 2010) (“It is . . . well-settled that proximate causation in a malpractice claim is treated no differently than in an ordinary negligence claim”); *Kilpatrick v. Bryant*, 868 S.W.2d 594, 603 (Tenn. 1993) (declining invitation to relax the causation requirements for medical malpractice suits in Tennessee).

67. See, e.g., *Reynolds v. Gonzalez*, 798 A.2d 67, 80 (N.J. 2002) (attesting that New Jersey law reduces the burden of proving causation for a patient whose preexisting condition was made worse by a doctor’s negligence; ruling that the patient will only need to show that the doctor’s malpractice was a “relevant and significant”—as opposed to “a remote or an inconsequential”—factor in bringing about her injury; and articulating that the malpractice “need not be the only cause, nor a primary cause, for [it] to be a substantial factor in producing the ultimate result.”); *Goldberg v. Horowitz*, 901 N.Y.S.2d 95, 98 (App. Div. 2010) (“In a medical malpractice action, . . . causation is often a difficult issue” (quoting *Johnson v. Jamaica Hosp. Med. Ctr.*, 800 N.Y.S.2d 609 (App. Div. 2005)) (internal quotation marks omitted)).

68. *Goldberg*, 901 N.Y.S.2d at 98 (quoting *Alicea v. Ligourni*, 864 N.Y.S.2d 462, 465 (App. Div. 2008)) (internal quotation marks omitted).

69. *Id.*

70. *Espinosa v. Little Co. of Mary Hosp.*, 37 Cal. Rptr. 2d 541, 547 (Ct. App. 1995) (quoting BAJI No. 3.76 (8th ed. 1994 bound vol.)) (internal quotation marks omitted).

that allows factfinders to infer “that in the absence of the defendant’s negligence, there was a *reasonable medical probability* [that] the plaintiff would have obtained a better result.”⁷¹ All that the patient needs to show is that the defendant doctor’s malpractice, “to a reasonable medical *probability*, was a cause of [her] damage.”⁷² The requisite “medical probability” can be extracted from any causal indicators that medicine has come to recognize.⁷³ Based on these indicators, an expert witness only needs to attest that, in the absence of malpractice, the patient had a good chance to obtain a better outcome.⁷⁴ This general attestation will suffice, and the expert does not even need to quantify the “good chance” in probabilities or percentages.⁷⁵

Other jurisdictions prefer a slightly different formulation that distinguishes between “probability” and “mere speculation.”⁷⁶ Under this formulation, factfinders are free to infer causation from any medical expert’s testimony that is not speculative. To qualify as an eligible causation

71. *Id.* at 547 (quoting *Alef v. Alta Bates Hosp.*, 6 Cal. Rptr. 2d 900, 907 (Ct. App. 1992)) (internal quotation marks omitted). This rule originates from the California Supreme Court’s precedential decision in an asbestos-related lung-cancer case, *Rutherford v. Owens-Ill., Inc.*, 941 P.2d 1203, 1206–07 (Cal. 1997), in which the court followed the rules that control proof of causation in medical malpractice cases. See *Whiteley v. Philip Morris Inc.*, 11 Cal. Rptr. 3d 807, 859 (Ct. App. 2004) (attesting that *Rutherford* has adopted “a standard of proof of causation which had been derived from medical malpractice cases”).

72. *Espinosa*, 37 Cal. Rptr. 2d at 552.

73. See *id.* at 548–52 (adopting as sufficient testimony of the plaintiff’s medical expert who identified causal contributors to a newborn’s brain damage that included a non-negligent cause alongside the defendants’ malpractice). The *Espinosa* court insisted that the expert’s assessment was not purely statistical, *id.* at 551, but it also reaffirmed (by implication) other courts’ decisions that a statistical chance of 51% or more is good enough to establish causation, *id.* at 552. See also *Marsolino v. Patel*, No. Eo41922, 2009 WL 1299041 *passim* (Cal. Ct. App. May 11, 2009) (determining causation between medical malpractice and damage by relying on statistical survivability rates for cancer); *Richmond Cnty. Hosp. Auth. Operating Univ. Hosp. v. Dickerson*, 356 S.E.2d 548, 550 (Ga. Ct. App. 1987) (“Proximate cause is not eliminated by merely establishing by expert opinion that the patient had less than a fifty percent chance of survival had the negligence not occurred.”).

74. *Espinosa*, 37 Cal. Rptr. 2d at 548–52.

75. *Id.* at 550. This approach can be usefully compared with the Illinois variant of relaxed causation that substitutes “preponderance of the evidence” proven to “a reasonable degree of medical certainty” for strict “preponderance of the evidence.” See *N. Trust Co. v. U. of Chi. Hosps. & Clinics*, 821 N.E.2d 757, 768 (Ill. App. Ct. 2004) (holding that plaintiff can establish causation in a medical malpractice suit when his expert “demonstrates within a reasonable degree of medical certainty that [the defendant’s] breach in the standard of care is more probably than not the cause of” the patient’s injury).

76. See, e.g., *Day v. Brant*, 697 S.E.2d 345, 352 (N.C. Ct. App. 2010) (holding that the causation requirement in a medical malpractice case can be satisfied only when an expert witness attests that “the connection between the medical negligence and the injury is ‘probable, not merely a remote possibility,’” and that courts should reject expert testimony that is “based merely upon speculation and conjecture” (quoting *White v. Hunsinger*, 363 S.E.2d 203, 206 (N.C. Ct. App. 1988))), *withdrawn and superseded by* No. COA09-573-2, 2012 WL 120042 (N.C. Ct. App. Jan. 17, 2012).

witness, it is generally enough for a patient's expert to testify that the patient had a statistically better chance of recovery in the absence of malpractice.

This rule is well illustrated by a recent North Carolina case, *Day v. Brant*, featuring the deficient emergency-room treatment of a car accident victim.⁷⁷ The emergency room doctors failed to order an ultrasound or CT scan of the victim's abdomen, which they should have done after observing a seatbelt abrasion stretching from the victim's shoulder to upper abdomen.⁷⁸ Instead, they sent the victim home with pain medications, where he died the next morning after suffering severe internal bleeding from a liver rupture.⁷⁹ This omission violated an established protocol for Level Two trauma centers across the nation.⁸⁰ The victim's death, however, was causally uncertain because the doctors might have been unable to save his life even if they knew that his liver was lacerated.⁸¹ The plaintiffs' expert testified that "survival is excellent (>51%) in patients [with liver lacerations] who arrive in the hospital and get proper initial and subsequent management,"⁸² while admitting that an individualized description of the victim as having had a 51% chance of recovery, rather than merely 49%, is nothing but speculation.⁸³ The court decided that this testimony was sufficient for establishing causation.⁸⁴ This relaxed approach to causation is prevalent in many jurisdictions across the United States⁸⁵ and empowers malpractice victims by allowing them to prove causation by statistical evidence.⁸⁶

77. *Id.* at 347.

78. *Id.* at 347-48.

79. *Id.* at 347.

80. *Id.* at 351-52.

81. *Id.* at 353.

82. *Id.* at 348 (internal quotation marks omitted).

83. *Id.* at 353.

84. *Id.* at 356-67.

85. *See, e.g.*, *Holton v. Mem'l Hosp.*, 679 N.E.2d 1202, 1213 (Ill. 1997) (holding that aggrieved patient will establish causation by showing "to a reasonable degree of medical certainty" that her "chance of recovery or survival [was] lessened by the [doctor's] malpractice" and that this chance may even be less than fifty percent because "[d]isallowing tort recovery in medical malpractice actions on the theory that a patient was already too ill to survive or recover may operate as a disincentive on the part of health care providers to administer quality medical care to critically ill or injured patients"); *Borowski v. Von Solbrig*, 328 N.E.2d 301, 305 (Ill. 1975) (holding that an aggrieved patient need not prove that "a better result would have been achieved absent the alleged negligence of the doctor"); *see also Bowman v. Kalm*, 2008 UT 9, 179 P.3d 754, 755-57 (allowing plaintiff to use "common knowledge" as a proof of causation in a case featuring a psychiatric patient who died after taking an excessive amount of sleeping pills that her doctor's negligent prescription allowed her to obtain); *Webb v. Smith*, 661 S.E.2d 457, 458-59 (Va. 2008) (allowing aggrieved patient to use common knowledge in establishing causation against doctor who forgot to perform bilateral salpingo oophorectomy in conjunction with hysterectomy, thereby forcing patient to undergo unnecessary surgery). For a more restrictive approach, *see Jelinek v. Casas*, 328 S.W.3d 526, 537-38 (Tex. 2010) (holding that a patient's suit fails when her expert cannot properly attest that a causal theory connecting her harm to the doctor's malpractice has a higher probability than a theory associating the harm

Courts are generally reluctant to base their determinations of facts upon naked statistics.⁸⁷ This reluctance characterizes courts' applications of the entry rules: statistics can virtually never establish an allegation that a doctor or other care provider committed malpractice.⁸⁸ Causation decisions that courts make in relation to care providers who committed medical malpractice exhibit no such reluctance. These decisions narrow malpractitioners' exits from liability.

2. Proof by Differential Etiology

In tune with their narrow-exit policy, courts also allow aggrieved patients to establish causation by "differential etiology."⁸⁹ This proof method introduces yet another significant relaxation into the preponderance-of-the-evidence requirement. Courts using this method allow the patient's expert to compile a list of potential causes of the injury allegedly resulting from the doctor's malpractice and select from that list the cause that has the comparatively highest probability of producing the injury in question. The first stage of this procedure—the "ruling in"—involves the listing of all medically or biologically plausible causes of the injury. At the second stage—

with a different cause); *see also* *Walton v. Patil*, 783 N.W.2d 438, 447 (Neb. 2010) (holding that a medical expert's "[o]pinions dealing with proximate causation in a medical malpractice action are required to be given in terms that express a probability greater than 50 percent"); *Powell v. Hawkins*, 175 Ohio St. 3s 138, 2007-Ohio-3557, 885 N.E.2d 958, 963 (holding that a plaintiff's expert testifying about causation must state expressly that its probability is greater than fifty percent). *But see* *THI of Tex. at Lubbock I, LLC, v. Perea*, 329 S.W.3d 548, 578–79 (Tex. App. 2010) ("The jury has broad latitude to infer proximate cause from the evidence and the circumstances surrounding the injury-producing act especially when it is not possible to produce direct proof of proximate cause or lack of proximate cause.").

86. *See* ARIEL PORAT & ALEX STEIN, TORT LIABILITY UNDER UNCERTAINTY 51–56, 103–17 (2001).

87. For an explanation and illustrations of this reluctance, *see* STEIN, *supra* note 21, at 238–39.

88. *See* PORAT & STEIN, *supra* note 86, at 44–56. As I indicated in Subpart I.A above, an aggrieved patient can establish medical malpractice with the help of the *res ipsa loquitur* presumption that relies on common knowledge. This presumption can also be instrumental in proving causation. *See, e.g., Ripley v. Lanzer*, 215 P.3d 1020, 1025–32 (Wash. Ct. App. 2009). The presumption's applicability, however, is limited to "foreign object" cases and other exceptional circumstances from which factfinders can easily deduce the presence of medical malpractice. *Id.* at 1026–27. Courts, therefore, apply it sparingly. *Id.* at 1027. Moreover, when a patient satisfies the *res ipsa loquitur* conditions by showing that her harm resulted from a foreign object or other instrumentality over which her doctor exercised exclusive control, her evidence is not purely statistical. Rather, it combines an experience-based statistical showing of malpractice with an individualized proof of serious medical irregularity (a foreign object in the patient's body or an improper use of the doctor's instrumentality). *See* PORAT & STEIN, *supra* note 86, at 84–92.

89. *See* *Marcum v. Adventist Health Sys./West*, 193 P.3d 1, 5–9 (Or. 2008) (adopting, explaining, and applying differential etiology as a method of proving causation between medical malpractice and patient's injury); *see also* *King v. Burlington N. Santa Fe Ry. Co.*, 762 N.W.2d 24, 49–51 (Neb. 2009).

the “ruling out”—the expert considers the patient’s individual circumstances and removes from the list causes that have the lowest probability scores.⁹⁰ Importantly, the expert need not affirmatively eliminate all alternative causes of the patient’s injury on her way to selecting the dominant cause.⁹¹ The cause that wins the statistical tournament need not be more probable than *not*, as required by the general preponderance standard. Instead, it only needs to be more probable than all other causes on the expert’s list.⁹² This list, in turn, need not account for potential causes that are not yet known. Courts allow experts to rule in only those causes that the medical community knows about, even when it actually does not know a lot.⁹³

The goal of this special proof method, once again, is not to allow negligent care providers to shield themselves against liability for malpractice by exploiting medical uncertainties. Courts do not allow those uncertainties to create a safe harbor for malpractitioners. The “differential etiology” doctrine blocks malpractitioners’ access to this safe harbor and further narrows their exit from liability.

To see how this doctrine works, consider Judge Calabresi’s decision in *Zuchowicz v. United States*—a case featuring a patient who overdosed on the drug Danocrine based on her doctors’ negligent prescription⁹⁴ and developed a fatal lung condition.⁹⁵ The defendant argued that the patient’s death was causally unrelated to the drug overdose. Technically, it argued that the plaintiff—the patient’s husband—failed to prove causation.⁹⁶ The plaintiff’s ability to prove causation was impaired by two factors: first, the *primary* (as opposed to secondary) pulmonary hypertension from which his wife died is a very rare condition; second, the medical community has had virtually no experience with overdose from Danocrine.⁹⁷ This evidential void made it impossible for the plaintiff to prove causation by a preponderance of the evidence. The plaintiff could not establish that the drug’s overdose

90. *Marcum*, 193 P.3d at 5–9.

91. See Note, *Navigating Uncertainty: Gatekeeping in the Absence of Hard Science*, 113 HARV. L. REV. 1467, 1474 (2000).

92. See *id.* at 1474–75.

93. See *Easum v. Miller*, 2004 WY 73, 92 P.3d 794, 803 (“Courts that accept the differential diagnosis as reliable will permit it to establish legal causation when applied to an illness with some unknown causes.”).

94. *Zuchowicz v. United States*, 140 F.3d 381, 383 (2d Cir. 1998). The defendant stipulated that the negligence could equally be attributed to its pharmacists who, together with the doctors, worked at a Naval Hospital in Groton, Connecticut. *Id.* at 384.

95. *Id.* at 383.

96. *Id.* at 385, 387.

97. *Id.* at 385.

was likely enough (51% or more) to be a “substantial factor” in bringing about his wife’s premature death.⁹⁸

Writing for the Second Circuit, Judge Calabresi underscored the half-century-old trend of mitigating the proof requirements for plaintiffs trying to establish causation against negligent tortfeasors.⁹⁹ He then went on to attest that Connecticut law, under which the case was decided, incorporates this trend.¹⁰⁰ Connecticut law, held Judge Calabresi, allows an aggrieved patient to prove causation by the “differential etiology” method that the plaintiff’s lead expert witness used.¹⁰¹ This expert did not consider every possible cause of primary pulmonary hypertension.¹⁰² However, he excluded as medically irrelevant “all the causes of secondary pulmonary hypertension.”¹⁰³ Based on the deceased’s medical history as an active young woman with no cardiovascular problems, the expert also ruled out the “drug-related causes of primary pulmonary hypertension” that medical science knew about.¹⁰⁴ This elimination procedure was far from comprehensive. The trial court nonetheless deemed it sufficient to single out the overdose of Danocrine as comparatively the most probable cause of the deceased’s fatal illness that broke out shortly after her excessive consumption of the drug.¹⁰⁵ Judge Calabresi affirmed this decision.¹⁰⁶ According to him, the expert’s testimony alone was good enough to establish the required causation.¹⁰⁷

3. Narrowing Malpractitioners’ Defenses

Courts’ narrow-exit policy has reached additional domains. Specifically, it motivated courts’ decisions to restrict the applicability of comparative-negligence defenses in medical malpractice cases.¹⁰⁸ Malpractitioners’ ability to successfully invoke those defenses is limited by the “timeline rule”

98. *Id.* at 387–88 (attesting that the case was decided under Connecticut’s “substantial factor” requirement for causation (citing *Edwards v. Tardif*, 692 A.2d 1266, 1269 (Conn. 1997))).

99. *Id.* at 388 n.6 (“In the last fifty years the strictness of the requirement that the plaintiff show that without defendant’s act or omission the accident would not have occurred has been mitigated in several types of cases.”).

100. *Id.* at 391.

101. *Id.* at 385, 387.

102. *Id.* at 385.

103. *Id.*

104. *Id.*

105. *Id.* at 390–91.

106. *Id.* at 391.

107. *Id.* at 390. For a recent application of the “differential etiology” method in a medical malpractice suit, see *Goudreaux v. Kleeman*, 965 A.2d 1040, 1050–51 (N.H. 2009) (ruling that medical expert’s “differential etiology” analysis that established causation between doctor’s malpractice and patient’s injury was admissible).

108. These defenses include contributory negligence, comparative negligence, and avoidable consequences.

separating the pre-treatment, the malpractice, and the post-malpractice periods.¹⁰⁹ Under this rule, a patient's "health habits, conduct or omissions" that took place prior to her treatment do not count toward comparative negligence that generally reduces, and sometimes even eliminates, the defendant's liability in torts.¹¹⁰ These factors still bear on the causation issue,¹¹¹ but as I just showed, the law lightens an aggrieved patient's burden of establishing causation as well. Moreover, the negligent doctor will normally have to bear "the burden of segregating recoverable damages from those solely incident to the preexisting disease."¹¹²

By the same token, a patient's irresponsible and even self-destructive conduct that takes place after she suffers from the doctor's malpractice also does not constitute comparative negligence.¹¹³ This conduct only activates the "avoidable consequences" rule that allows the malpractitioner to deduct the appropriate percentage from his compensation duty to the patient.¹¹⁴ Under extreme circumstances, in which the patient's self-destructive conduct causes her entire damage, thereby making the doctor's malpractice causally insignificant, the court may completely deny the patient compensatory relief.¹¹⁵ Otherwise, the doctor must compensate the patient for the damage resulting from his malpractice.¹¹⁶ Hence, "only the conduct of the patient and his or her omissions from the beginning of the pertinent treatment until the time of the alleged malpractice may be considered by the jury as evidence of the patient's fault under comparative negligence principles."¹¹⁷

109. See, e.g., *D'Aries v. Schell*, 644 A.2d 134, 139-40 (N.J. Super. Ct. App. Div. 1994) (citing *Ostrowski v. Azzara*, 545 A.2d 148, 151-52, 155-57 (N.J. 1988)).

110. *Id.* at 139-40.

111. *Id.*

112. *Fosgate v. Corona*, 330 A.2d 355, 358 (N.J. 1974).

113. *D'Aries*, 644 A.2d at 139-40.

114. *Id.* at 140.

115. See *Ostrowski v. Azzara*, 545 A.2d 148, 156 (N.J. 1988) (stating that, under the doctrine of avoidable consequences, "the patient's fault will not be a bar to recovery except to the extent that her fault caused the damages").

116. *Id.* at 154 ("Negligent conduct is not 'immunized by the concept of 'avoidable consequences.' This argument should more properly be addressed to the question of diminution of damages; it does not go to the existence of a cause of action." (quoting *Associated Metals & Minerals Corp. v. Dixon Chem. & Research, Inc.*, 197 A.2d 569, 582 (N.J. Super. Ct. App. Div. 1963))); see also RESTATEMENT (SECOND) OF TORTS § 918 cmt. a (1977) ("The avoidable consequences doctrine applies only to the diminution of damages and not to the existence of a cause of action.").

117. *D'Aries*, 644 A.2d at 140. For a recent application of these rules, see *Son v. Ashland Cmty. Healthcare Servs.*, 244 P.3d 835, 839-45 (Or. Ct. App. 2010) (holding that the drug overdose that led to the deceased's hospitalization did not constitute comparative negligence, and that only the deceased's failure to tell the doctors about the overdose activated this defense and the consequent apportionment of the damage because "the focus in a medical malpractice case is on the injury caused by the negligent treatment, not the original injury that created the need for treatment").

4. The Lost-Chance Doctrine

The lost-chance doctrine¹¹⁸ is probably the most significant exit-narrowing measure that courts have taken. This doctrine entitles an injured patient to recover compensation from a doctor who did not treat her properly even when the patient is completely unable to prove that her injury resulted from the doctor's malpractice. The patient only needs to establish that the doctor's malpractice might have worsened, or might have failed to improve, her condition.¹¹⁹ The actionable probability threshold—the “lost chance”—varies from one jurisdiction to another: some jurisdictions grant recovery for virtually any lost chance, even one that equals only 5%, while others require the chance to be more “substantial,” even though less than 50%.¹²⁰ These two variants do not occupy the entire doctrinal landscape. Some states are yet to establish the lost-chance doctrine¹²¹ and a number of other states have refused to adopt it.¹²² The doctrine, however, is widespread enough to constitute a significant feature of our medical malpractice system.

To illustrate how the lost-chance doctrine works, consider the Washington Supreme Court's decision in *Herskovits v. Group Health Cooperative of Puget Sound*.¹²³ This decision has been immensely influential, as it paved the way to the doctrine's multistate recognition.¹²⁴ The decision concerned a patient with lung cancer that the doctors negligently failed to diagnose on time.¹²⁵ A credible medical expert testified that this malpractice had reduced the patient's chances to recover from 39% to 25%.¹²⁶ The patient ultimately died from cancer.¹²⁷ Because the patient's chances to recover prior to malpractice fell distinctly below 50%, his widow could not

118. See generally PORAT & STEIN, *supra* note 86, at 101–29. For a classic account of the lost-chance doctrine, see Joseph H. King, Jr., *Causation, Valuation, and Chance in Personal Injury Torts Involving Preexisting Conditions and Future Consequences*, 90 YALE L.J. 1353 (1981).

119. See, e.g., *Wendland v. Sparks*, 574 N.W.2d 327, 333 (Iowa 1998) (recognizing patient's lost chance as actionable even when it fell below 50% prior to the doctor's malpractice by analogizing the chance to a lottery ticket); *Reynolds v. Gonzalez*, 798 A.2d 67, 80 (N.J. 2002) (holding that plaintiff will be allowed recovery upon showing that defendant's malpractice contributed to her injury in any way that is not “remote” or “inconsequential,” in which case, “[t]he relative weight of an increased risk . . . can be reflected by the jury in the apportionment of damages between the increased risk and the pre-existing condition”).

120. For excellent policy analysis that supports the doctrine's adoption across the board, see King, *supra* note 118, at 1376–87.

121. See Brie D. Wallace, Note, *Poor Policy Stunts Tennessee Tort Law Again: The Need for Tennessee's Adoption of the Loss of Chance Doctrine in Medical Malpractice Litigation*, 40 U. MEM. L. REV. 215, 226–31, 271–73 (2009) (specifying variants and jurisdictions' acceptance of the lost-chance doctrine).

122. *Id.* at 274–77.

123. *Herskovits v. Grp. Health Coop. of Puget Sound*, 664 P.2d 474 (Wash. 1983).

124. See Wallace, *supra* note 121, at 222–23.

125. *Herskovits*, 664 P.2d at 475.

126. *Id.*

127. *Id.*

prove by a preponderance of the evidence that the negligent doctors caused his death.¹²⁸ The patient's preexisting condition had a 61% probability of causing his death, which made it the most significant cause even under the relaxed causation doctrine.¹²⁹ The doctors' malpractice, nonetheless, still deprived the patient of a 14% chance of recovery.¹³⁰ This chance, admittedly, was not very substantial, but it still belonged to the patient, and the doctors negligently extinguished it.

The court ruled that the doctors' negligent destruction of the patient's recovery prospect called for an imposition of the compensation duty on the doctors.¹³¹ Making such wrongdoings non-actionable, held the court, gives malpractitioners immunity from liability in all cases in which the patient's chances to recover from illness are below 50%.¹³² This immunity brings about a perverse incentive for the careless doctors, who will go scot-free. The court therefore decided that the medical testimony, showing that the patient's survival rate decreased from 39% to 25%, was sufficient enough to allow the issue to go to the jury.¹³³ Courts from several other jurisdictions have followed suit,¹³⁴ and the widespread adoption of the lost-chance doctrine has reduced malpractitioners' opportunity to escape liability.

C. TREATMENT AND SETUP RULES

Differentiating between treatment and setup rules helps show how entries and exits function. Treatment rules govern care providers' applications of their medical knowledge to help improve their patients' health, regardless of costs, operational logistics, and other important—but not medical—factors. These rules control all the diagnostic and treatment procedures carried out by care providers. The vast majority of court decisions in the medical malpractice area are about doctors' applications of

128. *Id.* at 475–76.

129. *See id.* at 476.

130. *Id.*

131. *Id.* at 477.

132. *Id.*

133. *Id.* at 479.

134. *See* Wallace, *supra* note 121, at 271–74. Commentators have criticized courts' calculation of damages in lost-chance cases. *See* PORAT & STEIN, *supra* note 86, at 122–24 (arguing that doctors' liability for destroying patients' prospects of cure should be based on the probability that the malpractice caused the patient's injury); Ariel Porat & Alex Stein, *Indeterminate Causation and Apportionment of Damages*, 23 OXFORD J. LEGAL STUD. 667, 679–88 (2003) (developing a formal compensation model based upon probability of causation and showing that plaintiff in *Herskovits's* case ought to have recovered 19%, rather than 14%, of the total damage associated with her husband's wrongful death); *see also* RESTATEMENT (THIRD) OF TORTS: PHYSICAL & EMOTIONAL HARM § 26 cmt. n (2010) (recommending the Porat–Stein method of calculating damages in lost-chance cases in which patients actually suffered harm).

treatment rules. These decisions adjudicate patients' complaints about diagnostic and treatment procedures that they underwent.¹³⁵

Setup rules, in contrast, integrate medical knowledge but are not determined by this knowledge alone. These rules regulate care providers' management of medical resources that include hospital and outpatient facilities, medical equipment and personnel, and medical information. Courts apply setup rules in determining the adequacy of the conditions—the setups—under which care providers diagnose and treat patients.

Medical setups do not produce good and bad outcomes as a matter of course. A careless doctor may commit malpractice while treating a patient under excellent conditions. Conversely, a skilled doctor may beat the odds and deliver a very successful treatment in a poor medical setup. Furthermore, some medical setups do not affect the *medical* adequacy and consequences of the underlying treatments. Consider doctors' provision of medical information to their patients. When a doctor keeps her patient uninformed about the available treatment options and the chosen treatment, she may—and often will—achieve a medically outstanding result: she may actually cure the patient completely. Whether the doctor achieves this result depends on what she knows, not on what the patient knows. The doctor's failure to properly inform the patient about the treatment consequently damages the patient's autonomy, but not her anatomy.

Setup rules and treatment rules are structurally similar to each other. Both categories of rules encompass entries into liability for medical malpractice and exits from that liability. This structural similarity, however, is the only feature that the two types of rules have in common. There are substantial operational differences between these types of rules. First, setup-related entries consist of broad standards rather than narrowly defined rules. More importantly, courts play an active role in determining the scope of setup-related entry rules. In making these determinations, courts take into account what doctors and other specialists say about the adequacy of medical setups but do not defer to those specialists' opinions. The next Subparts illustrate these differences.

1. Medical Resource Management

I discuss medical resource management first. Consider the landmark case, *Helling v. Carey*, in which the Washington Supreme Court refused to defer to ophthalmologists' customary policy not to give patients under the age of forty the eye-pressure test for glaucoma.¹³⁶ This policy was the

135. For an illustration, see *supra* notes 76–82 and accompanying text (discussing *Day v. Brant*).

136. *Helling v. Carey*, 519 P.2d 981, 982–83 (Wash. 1974).

defendants' only reason for denying the test to the plaintiff, Barbara Helling, and for subsequently failing to diagnose and treat her glaucoma.¹³⁷

The court ruled that the ophthalmologists' policy was wrong and held that the plaintiff was, indeed, mistreated by the defendants.¹³⁸ The court based this determination on the pressure test's availability and low cost and on the plaintiff's glaucoma symptoms.¹³⁹ By making this decision, the court did not step into the doctors' shoes. At the same time, it also did not allow the plaintiff's doctors to assume the role of economists and carry out a cost-benefit analysis of their own. This decision therefore did not second-guess the doctors' medical opinion as to how to diagnose glaucoma. All it did was permit a finding that the doctors mismanaged a diagnostic resource: the pressure test. The court decided that this resource mismanagement constituted malpractice because it created a defective setup for glaucoma patients.

The academic commentary describing *Helling* as an anomalous decision that has little precedential value¹⁴⁰ is misguided. This opinion fails to notice the fundamental difference between treatment rules and setup rules. The medical profession is granted a near-unilateral power to determine treatment-related entries, but it is given no such power in relation to setup-related entries. Liability for defective medical setups is a matter for courts' determinations. Courts' decisions in this area take into account doctors' customs and practices, but do not defer to them.

Helling's academic assessment as a bellwether decision that broke away from the courts' deferential approach to medical customs¹⁴¹ is inaccurate as well. This assessment, too, fails to separate setup rules from treatment rules. This oversight accounts for the over-interpretation of *Helling* as a decision that "rejected reliance on custom in favor of a reasonability test."¹⁴² *Helling* indeed substituted the custom benchmark with a reasonability test, but it did so only in relation to the economics of doctors' resource management.

Gates v. Jensen, a more recent decision of the Washington Supreme Court, has clarified this pivotal point.¹⁴³ This decision upheld *Helling* as applied to cases in which doctors develop a deficient protocol that allows them not to use a readily available and generally approved method of

137. *Id.* at 982.

138. *Id.* at 983.

139. *Id.*

140. See WILLIAM J. CURRAN ET AL., HEALTH CARE LAW AND ETHICS 383-84 (5th ed. 1998); Eric E. Fortess & Marshall B. Kapp, *Medical Uncertainty, Diagnostic Testing, and Legal Liability*, 13 LAW, MED. & HEALTH CARE 213, 215 (1985).

141. See Philip G. Peters, Jr., *The Quiet Demise of Deference to Custom: Malpractice Law at the Millennium*, 57 WASH. & LEE L. REV. 163, 171-72 (2000).

142. *Id.* at 169.

143. *Gates v. Jensen*, 595 P.2d 919, 923-24 (Wash. 1979).

treatment.¹⁴⁴ *Gates* was one of those cases: there, ophthalmologists failed to apply two diagnostic tests that could help them identify glaucoma in the eye of a patient with borderline glaucoma symptoms who they could not conclusively diagnose using other procedures.¹⁴⁵ These supplementary tests had been widely known as “simple, inexpensive, conclusive and risk free.”¹⁴⁶ The ophthalmologists’ decision not to administer them and to follow, instead, the customary protocol therefore did not reflect medicine’s state of art. Rather, it reflected the profession’s rationing of medical care. The court consequently felt free to disagree with the profession’s cost-benefit analysis and to review its setup for treating glaucoma patients. As in *Helling*, the court found the doctors’ setup prima facie defective.¹⁴⁷ Arguably, the cost of the tests that the ophthalmologists could use to minimize the patient’s glaucoma damage was far below the expected damage.¹⁴⁸ The court therefore remanded the case for a new trial.¹⁴⁹

2. Institutional Liability

Similarly, courts’ determinations of hospitals’ institutional liability for iatrogenic injuries take into account the medical profession’s customs and practices, but do not treat them as decisive.¹⁵⁰ The doctrine of institutional liability, as adopted by many jurisdictions across the United States, requires hospitals

to use reasonable care in the maintenance of safe and adequate facilities and equipment. . . . to select and retain only competent physicians; . . . to oversee all persons who practice medicine within [their] walls as to patient care; and . . . to formulate, adopt and enforce adequate rules and policies to ensure quality care for the patients.¹⁵¹

These requirements aim at securing the establishment of safe medical setups for patient treatment.

In implementing these requirements, courts proceed under the general negligence doctrine and carry out independent analyses of the relevant costs and benefits. Courts defer to doctors’ medical knowledge while scrutinizing care providers’ non-medical decisions. Specifically, courts treat care providers’ compliance with their profession’s rules, practices, and protocols

144. *Id.* at 924.

145. *Id.*

146. *Id.*

147. *Id.*

148. *Id.*

149. *Id.*

150. See Peters, *supra* note 141, at 172–79.

151. *Welsh v. Bulger*, 698 A.2d 581, 585 (Pa. 1997) (quoting *Thompson v. Nason Hosp.*, 591 A.2d 703, 707 (Pa. 1991)).

as evidence of adequate care, but do not automatically endorse the economic wisdom of those rules, practices, and protocols. Courts scrutinize this wisdom under the general negligence criteria to make sure that hospitals and other institutional providers of medical care¹⁵² exercise cost-effective precautions against harm.¹⁵³

Cases involving malfunctioning medical equipment and unskilled or overworked personnel provide the simplest examples of the courts' design of setup rules.¹⁵⁴ Consider the case of a patient who sustains injury from falling on the floor from an MRI table.¹⁵⁵ Assume that the hospital devised no protocols instructing operators of medical equipment on how to assist patients. The hospital will not be able to justify the protocols' absence by alluding to customary practice. The court will surely take this practice into account, as it does for non-medical customs, but it will determine the hospital's liability by applying the general cost-benefit criteria for negligence.¹⁵⁶ Moreover, courts sometimes categorize accidents resulting

152. See, e.g., *Jones v. Chi. HMO Ltd. of Ill.*, 730 N.E.2d 1119, 1128 (Ill. 2000) (holding that health management organizations can be liable for medical malpractice under regular negligence standard); *Petrovich v. Share Health Plan of Ill., Inc.*, 719 N.E.2d 756, 764 (Ill. 1999) (same); *Advincula v. United Blood Servs.*, 678 N.E.2d 1009, 1027-28 (Ill. 1996) (holding, in relation to blood bank's liability for AIDS resulting from transfusion of blood contaminated with HIV, that "conformance with professional standards of care, proven by expert testimony or other evidence of professional standards, is indicative but not conclusive of due care[, and s]uch evidence may be overcome by a sufficient showing of contrary expert opinion testimony (or its equivalent) that the prevailing professional custom or usage itself constitutes negligence"); *McClellan v. Health Maint. Org. of Pa.*, 604 A.2d 1053, 1059 (Pa. Super. Ct. 1992) (holding that health management organizations can be liable for medical malpractice under regular negligence standard), *appeal after remand*, 660 A.2d 97 (Pa. Super. Ct. 1995), *aff'd*, 686 A.2d 801 (Pa. 1996).

153. *Darling v. Charleston Cmty. Mem'l Hosp.*, 211 N.E.2d 253, 256-57 (Ill. 1965) (holding that a patient's complaint about the hospital's failure to properly credential and supervise an emergency room doctor, who did orthopedic work, was properly adjudicated under general negligence standards and without absolute deference to doctors' practices and customs). Since then, institutional liability has become universal. See *Larson v. Wasemiller*, 738 N.W.2d 300, 303-10 (Minn. 2007) (holding that a hospital can be liable in torts for negligently credentialing its doctors and that the statutory peer-review process for doctors does not preclude this liability); *Schelling v. Humphrey*, 123 Ohio St. 3d 387, 2007-Ohio-2202, 916 N.E.2d 1029, 1033; *Strubhart v. Perry Mem'l Hosp. Trust Auth.*, 903 P.2d 263, 274-76 (Okla. 1995); *Boyd v. Albert Einstein Med. Ctr.*, 547 A.2d 1229, 1231-32 (Pa. Super. Ct. 1988); *Ripley v. Lanzer*, 215 P.3d 1020, 1026 (Wash. Ct. App. 2009); *Adamski v. Tacoma Gen. Hosp.*, 579 P.2d 970, 974-76 (Wash. Ct. App. 1978); *Peters*, *supra* note 141, at 172-79.

154. Cf. Robert L. Rabin, *Three Perspectives on Medical Injury: A Commentary*, 54 DEPAUL L. REV. 527, 535 (2005) (urging scholars and policymakers to pay more attention to care providers' ill-designed work environment: residents' "round-the-clock, on-call service when sleep deprivation is a serious concern"; inexperience of nurses and technicians; and equipment failures).

155. See *Chandler v. Opensided MRI of Atlanta*, 682 S.E.2d 165 (Ga. Ct. App. 2009), *aff'd*, 696 S.E.2d 640 (Ga. 2010).

156. See *Moore v. Louis Smith Mem'l Hosp., Inc.*, 454 S.E.2d 190, 192 (Ga. Ct. App. 1995).

from an improper operation of medical equipment as a garden-variety tort and not as medical malpractice.¹⁵⁷

The same policy animates courts' decisions with regard to hospitals' liability for negligently credentialing doctors.¹⁵⁸ Doctors work in hospitals in two capacities. Some doctors are on the hospital's payroll as employees, while others are independent contractors with attending privileges. The independent-contractor format is prevalent among specialty doctors, who often bring their own patients to the hospital for treatment. Both types of doctors need to be properly credentialed by their hospital's peer-review and credentialing committees.¹⁵⁹ If a credentialing process goes wrong (or does not take place at all) and the ill-qualified doctor subsequently causes harm to a patient, the hospital will assume liability for the doctor's negligent credentialing and the ensuing harm.¹⁶⁰

157. *Id.* at 191 (holding that a nursing home resident who was injured when being moved from her wheelchair to her bed can sue the nursing home under the general negligence doctrine because “[n]ot all injuries that occur in a hospital, nursing home or other health care facility are the result of professional negligence; they may be solely attributable to ordinary or simple negligence”); *id.* at 191–92 (“[S]imply because an alleged injury occurs in a hospital setting, a suit to recover for that injury is not necessarily a ‘medical malpractice’ action. Likewise, not every suit which calls into question the conduct of one who happens to be a medical professional is a ‘medical malpractice’ action.” (citation omitted) (internal quotation marks omitted)); *see also* *Brown v. Tift Cnty. Hosp. Auth.*, 635 S.E.2d 184, 186 (Ga. Ct. App. 2006). *But see* *Husby v. S. Ala. Nursing Home, Inc.*, 712 So. 2d 750, 751–54 (Ala. 1998) (denying recovery to the estate of a nursing home resident, who fell out of bed, fractured her femur and died shortly after femoral surgery, due to failure to establish medical malpractice under specialist nursing standards).

158. *See* *Larson*, 738 N.W.2d at 315 (allowing patient to sue hospital for negligent credentialing of doctor and holding that peer-review privilege does not preempt such suits); *Schelling*, 916 N.E.2d at 1033 (setting up procedure for negligent-credentialing suits that generally requires aggrieved patient to establish doctor's malpractice prior to suing hospital); *Albain v. Flower Hosp.*, 553 N.E.2d 1038, 1042 (Ohio 1990) (holding that hospitals' negligent credentialing of doctors is actionable in torts and articulating common law principles of negligence-credentialing suits), *overruled on other grounds* by *Clark v. Southview Hosp. & Family Health Ctr.* 628 N.E.2d 46 (Ohio 1994); *Moreno v. Quintana*, 324 S.W.3d 124, 134–35 (Tex. App. 2010) (holding that Texas precedents—*Romero v. KPH Consol., Inc.*, 166 S.W.3d 212 (Tex. 2005), *Garland Cmty. Hosp. v. Rose*, 156 S.W.3d 541 (Tex. 2004), and *St. Luke's Episcopal Hosp. v. Agbor*, 952 S.W. 2d 503 (Tex. 1997)—recognize hospitals' improper credentialing of doctors as actionable in torts not only when it was driven by malice but also when it resulted from negligence); *Archuleta v. St. Mark's Hosp.*, 2009 UT 36, 238 P.3d 1044, 1048–49 (recognizing hospitals' negligent credentialing of doctors as actionable malpractice); *Johnson v. Misericordia Cmty. Hosp.*, 301 N.W.2d 156, 174 (Wis. 1981) (upholding trial court's imposition of tort liability on a hospital upon finding “credible evidence to the effect that a hospital, exercising ordinary care, would not have appointed [the doctor responsible for the plaintiff's injury] to its medical staff”); *see also* Richard L. Griffith & Jordan M. Parker, *With Malice Toward None: The Metamorphosis of Statutory and Common Law Protections for Physicians and Hospitals in Negligent Credentialing Litigation*, 22 TEX. TECH L. REV. 157, 183 n.146 (1991) (stating that credentialing affects medical treatment of hospital patients but is not an actual part of “treatment or care”).

159. *See, e.g.*, Kenneth S. Abraham & Paul C. Weiler, *Enterprise Medical Liability and the Evolution of the American Health Care System*, 108 HARV. L. REV. 381, 391–93 (1994).

160. *See supra* note 158.

Courts adjudicate negligent-credentialing claims by applying the general cost-benefit criterion. Under this criterion, a hospital becomes liable for a doctor's negligent credentialing when it fails to obtain and properly consider information about the doctor's malpractice history.¹⁶¹ Following the enactment of the Health Care Quality Improvement Act of 1986 ("HCQIA"),¹⁶² courts draw the negligence inference against non-inquiring hospitals almost automatically. The HCQIA has set up the National Practitioner Data Bank, which collects information about malpractice-related penalties and payments of compensation.¹⁶³ To facilitate the Bank's collection of this information, the HCQIA imposes expansive reporting duties on both public and private actors that investigate, adjudicate, and settle medical malpractice complaints.¹⁶⁴ The HCQIA also contains a legal presumption attributing to hospitals full knowledge of their doctors' malpractice records.¹⁶⁵

3. Informing Patients

Another important aspect of the medical-setup standards is information that doctors give their patients. Doctors provide their patients with medical information at two points in time: prior to the patient's treatment (*ex ante*) and after that treatment (*ex post*). *Ex ante*, a doctor must inform her patient about the diagnosis, the available treatments, and the treatments' risks and benefits.¹⁶⁶ This information should enable the patient to make an

161. See, e.g., *Fridena v. Evans*, 622 P.2d 463, 466 (Ariz. 1980) (attesting that "[t]he emerging trend is to hold the hospital responsible where the hospital has failed to monitor and review medical services being provided within its walls" and summarizing Arizona decisions that held hospitals liable for failure to properly credential and monitor doctors employed as independent contractors).

162. Health Care Quality Improvement Act of 1986, 42 U.S.C. §§ 11101-52 (2006).

163. See U.S. Dep't of Health & Human Servs., *About Us*, DATABANK, <http://www.npdb-hipdb.hrsa.gov/topNavigation/aboutUs.jsp> (last visited Jan. 19, 2012).

164. 42 U.S.C. §§ 11131-34.

165. See *id.* § 11135(b) ("With respect to a medical malpractice action, a hospital which does not request information respecting a physician or practitioner as required under subsection (a) of this section is presumed to have knowledge of any information reported under this subchapter with respect to the physician or practitioner.").

166. See, e.g., *Willis v. Bender*, 596 F.3d 1244, 1252-60 (10th Cir. 2010) (summarizing and applying extant rules of informed consent); *Canterbury v. Spence*, 464 F.2d 772, 780 (D.C. Cir. 1972) (setting up influential precedent for informed-consent requirements); *Albany Urology Clinic, P.C. v. Cleveland*, 528 S.E.2d 777 (Ga. 2000) (stating and applying rules of informed consent while underscoring patient's right to autonomy); *Matthies v. Mastromonaco*, 733 A.2d 456, 460-64 (N.J. 1999) (same); see also EPSTEIN, *supra* note 22, § 6.3, at 143-44 (summarizing doctors' duties to inform patients about proposed treatments' benefits, risks, and alternatives and honor patients' decisions). See generally Thomas L. Hafemeister & Selina Spinos, *Lean on Me: A Physician's Fiduciary Duty To Disclose an Emergent Medical Risk to the Patient*, 86 WASH. U. L. REV. 1167 (2009) (basing doctors' duty to inform patients about medical risks emerging during treatment on fiduciary law); Peter H. Schuck, *Rethinking Informed Consent*, 103 YALE L.J. 899 (1994) (stating, analyzing, and criticizing the rules of informed consent).

informed decision about the treatment. Failure to obtain the patient's informed consent to the treatment is an actionable tort that entitles the patient to recover compensation from the doctor. This compensation redresses not only the physical harm that results from the misinformed patient's choice of treatment¹⁶⁷ but also the patient's emotional harm.¹⁶⁸

Doctors' ex ante disclosure obligation consists of two elements. The first element is medical relevancy. Doctors only need to give patients information that the medical profession considers relevant to the choice of treatment.¹⁶⁹ For example, a doctor has no duty to inform her patient about experimental treatments that the medical profession has not yet approved.¹⁷⁰ The second element is a reasonable patient's expectation: to secure the patient's right to autonomy and self-determination, doctors have to provide all information that can rationally facilitate her understanding and choice of the treatment.¹⁷¹ Commonly identified as "materiality,"¹⁷² this element is independent of doctors' disclosure practices.¹⁷³

Courts tend to interpret "materiality" broadly in order to maximize doctors' supply of medical information to their patients.¹⁷⁴ This tendency explains the courts' rulings requiring doctors to tell patients about small

167. See *Willis*, 596 F.3d at 1260–61 (allowing an informed-consent claim where the patient can objectively show she would not have had the surgery had the risk been disclosed); *Howard v. Univ. of Med. & Dentistry of N.J.*, 800 A.2d 73, 85 (N.J. 2002) (holding that a patient will recover compensation from a doctor who violated the patient's right to informed consent upon proof that the patient actually sustained damage from ill-chosen treatment); DOBBS, *supra* note 6, § 250, at 657.

168. See, e.g., *Lugenbuhl v. Dowling*, 96-1575, pp. 14–15 (La. 10/10/97); 701 So. 2d 447, 455 (holding that a patient who "failed to prove physical damages or pecuniary loss [following informed-consent violation] is still entitled to an award of general compensatory damages . . . for deprivation of self-determination, insult to personal integrity, invasion of privacy, anxiety, worry and mental distress" (citing 2 DAN B. DOBBS, LAW OF REMEDIES § 7.1 (1993))); see also *Bader v. Johnson*, 732 N.E.2d 1212, 1215, 1222 (Ind. 2000) (allowing a mother who delivered a child with a birth defect to assert a claim for emotional distress resulting from her doctor's negligent failure to inform her during pregnancy of a potential birth defect in the child, thereby extinguishing her opportunity to terminate the pregnancy); *Evers v. Dollinger*, 471 A.2d 405, 411 (N.J. 1984) (attesting that mental anguish and emotional distress are compensable as free-standing damages under New Jersey's medical malpractice law (citing *West v. Underwood*, 40 A.2d 610 (N.J. 1945))).

169. See DOBBS, *supra* note 6, § 250, at 655.

170. See *Moore v. Baker*, 989 F.2d 1129, 1133 (11th Cir. 1993) (noting that doctors need not inform patients about experimental treatments and that "[t]he law requires disclosure only of those alternatives that are 'generally recognized and accepted by reasonably prudent physicians'").

171. See DOBBS, *supra* note 6, § 250, at 655–56.

172. *Id.*

173. *Id.* at 656.

174. *Id.* at 655. Doctors, however, are entitled to withhold information when the revelation puts at risk the patient's mental or emotional well-being. Under any such scenario, the doctor may still be obligated to make the disclosure to the patient's relative. *Id.* at 656–57.

risks of severe consequences,¹⁷⁵ to reveal their diseases and addictions,¹⁷⁶ and to disclose their rate of success with certain surgeries.¹⁷⁷ Courts also require doctors to disclose their financial interests and incentives in the patient's treatment,¹⁷⁸ especially when the treatment is experimental.¹⁷⁹ The information-disclosure standards set by the law thus came to dominate the medical standards.¹⁸⁰

Doctors and other care providers have an additional duty to document patients' treatment and inform patients about the treatment's course and results.¹⁸¹ This setup-related duty overrides doctors' customs and practices.¹⁸² Doctors and hospitals face harsh penalties for violating this duty. Failure to generate and keep the required medical evidence constitutes "spoliation"¹⁸³—a tort that entitles the evidentially incapacitated patient to two legal reliefs. The first and most common relief is reversal of the burden of proof: the spoliator will be obligated to disprove the patient's malpractice and causation allegations by a preponderance of the evidence.¹⁸⁴ If the

175. See, e.g., *Canterbury v. Spence*, 464 F.2d 772, 974 (D.C. Cir. 1972) (holding that doctors must disclose 1% risk of paralysis associated with spinal cord surgery); *McKinney v. Nash*, 174 Cal. Rptr. 642, 644, 646–47 (Ct. App. 1981) (holding that doctors must disclose 0.5% risk of testicular atrophy due to vascular damage resulting from a hernia repair operation). *But cf.* *Henderson v. Milobsky*, 595 F.2d 654, 659 (D.C. Cir. 1978) (denying relief due to patient's failure to prove causation but holding that doctors need not disclose a 0.001% chance of parathesia associated with tooth extraction).

176. See DOBBS, *supra* note 6, § 250, at 661–62. This requirement is widespread but not universal. See, e.g., *Albany Urology Clinic, P.C. v. Cleveland*, 528 S.E.2d 777, 780–81 (Ga. 2000) (holding that a doctor need not disclose his drug use outside of work).

177. See *Johnson v. Kokemoor*, 545 N.W.2d 495, 505–06 (Wis. 1996). For analysis of this far-reaching decision and its effects on the rules of informed consent, see Aaron D. Twerski & Neil B. Cohen, *The Second Revolution in Informed Consent: Comparing Physicians to Each Other*, 94 N.W. U. L. REV. 1 (1999). For a recent decision applying this requirement, see *Goldberg v. Boone*, 912 A.2d 698, 717 (Md. 2006) (holding that a surgeon's inexperience presents a jury issue of whether informed consent was given).

178. See, e.g., *Moore v. Regents of the Univ. of Cal.*, 793 P.2d 479, 483 (Cal. 1990); *Neade v. Portes*, 710 N.E.2d 418 (Ill. App. Ct. 1999), *rev'd on other grounds*, 193 Ill.2d 433 (2000).

179. See *Estrada v. Jaques*, 321 S.E.2d 240, 254 (N.C. Ct. App. 1984).

180. In some jurisdictions, patients can sue doctors for informed-consent violation only under an assault or battery theory. See, e.g., *Morgan v. MacPhail*, 704 A.2d 617, 620 (Pa. 1997). Under this narrow approach, a patient can prosecute an informed-consent action only in connection with surgery or other invasive procedure, but not in connection with the doctor's prescription of a therapeutic drug. *Id.* at 619–20. To expand doctors' disclosure duties, courts have allowed aggrieved patients to sue doctors for negligent misrepresentation. See *Bloskas v. Murray*, 646 P.2d 907, 915 (Colo. 1982); *Duttry v. Patterson*, 771 A.2d 1255, 1259 (Pa. 2001).

181. See PORAT & STEIN, *supra* note 86, at 170, 187–88.

182. *Id.* at 187–88.

183. *Id.*

184. *Welsh v. United States*, 844 F.2d 1239, 1247 (6th Cir. 1988), *overruled on other grounds* by *Adkins v. Wolever*, 554 F.3d 650 (6th Cir. 2009); *Sweet v. Sisters of Providence in Wash.*, 881 P.2d 304, 310–13 (Alaska 1994), *withdrawn*, 893 P.2d 1252 (Alaska 1995), *withdrawn*, 895 P.2d 484 (Alaska 1995); *Keene v. Brigham & Women's Hosp., Inc.*, 786 N.E.2d 824, 832–35 (Mass. 2003).

spoliator cannot meet this burden, he will have to internalize the cost of uncertainty and lose the case.¹⁸⁵ The second relief is compensation. Courts determine this relief by evaluating the patient's chances of prevailing in his malpractice suit by using the information that the spoliator failed to retain.¹⁸⁶ Courts afford this relief to plaintiffs only on rare occasions.¹⁸⁷

Setup-related exits operate identically to treatment-related exits. Both types of rules reduce malpractitioners' opportunities to escape liability. The relaxed causation doctrine¹⁸⁸ consequently applies to cases in which the patient proves that her care providers treated her under a defective medical setup. In any such case, the patient benefits from relaxed proof requirements with respect to both causation and damage.¹⁸⁹ Furthermore, some courts redress violations of informed consent by entitling an aggrieved patient to recover compensation for dignitary harm.¹⁹⁰ This entitlement effectively exempts the patient from the duty to prove that she actually suffered damage as a result of the violation.

II. INSTITUTIONAL INFRASTRUCTURE

The preceding discussion revealed that our system of medical malpractice consists of narrow treatment-related entries, broad setup-related entries, and extremely narrow exits. This discussion also demonstrated that the medical profession single-handedly determines the entries into treatment-related liability for malpractice, with courts playing an active part in the design of setup-related entries. Importantly, I also showed that courts exercise a nearly exclusive power in formulating the exits from both treatment- and setup-related liability. In this Part of the Article, I unfold the system's institutional infrastructure and show how it explains the chosen configuration of rules and rulemaking powers.

185. See, e.g., *Smith v. United States*, 128 F. Supp. 2d 1227, 1234-35 (E.D. Ark. 2000).

186. See PORAT & STEIN, *supra* note 86, at 167-69.

187. See, e.g., *Jost v. Lakeland Reg'l Med. Ctr., Inc.*, 844 So. 2d 656 (Fla. Dist. Ct. App. 2003) (dismissing a spoliation claim as premature when it was brought before the underlying cause of action had been resolved); *Bondu v. Gurvich*, 473 So. 2d 1307 (Fla. Dist. Ct. App. 1984) (holding that hospital's failure to maintain and furnish medical records is actionable in torts).

188. See *supra* notes 66-75 and accompanying text.

189. See, e.g., *Verdicchio v. Ricca*, 843 A.2d 1042, 1055-59 (N.J. 2004); *Hamil v. Bashline*, 392 A.2d 1280, 1284-88 (Pa. 1978).

190. See, e.g., *Lugenbuhl v. Dowling*, 96-1757, p. 15 (La. 10/10/97); 701 So. 2d 447, 455 (allowing dignitary damages for "deprivation of self-determination" and "insult to personal integrity"). *But cf.* Mary Crossley, *Infected Judgment: Legal Responses to Physician Bias*, 48 VILL. L. REV. 195, 296 (2003) (describing "the law regarding the availability of dignitary damages against physicians in the absence of physical injury" as "embryonic").

A. CHOICE OF RULES: FORM, COST, AND INSTITUTIONAL COMPETENCE

When a patient requiring medical treatment visits a doctor and the two reach an agreement with regard to the patient's treatment, this agreement virtually never stipulates that "the doctor will make her best effort to diagnose and cure the patient's illness" or that "the doctor will do for the patient what the good practice of medicine requires her to do." Instead, the doctor and the patient agree about a specific course of treatment or formulate a plan specifying the anticipated medical contingencies and the doctor's responses to those contingencies. Doctor-patient agreements encompass doctors' prescriptions of specified drugs and medical devices, as well as X-rays, MRIs, CT scans, blood tests, tooth extractions, cardiac bypass surgeries, mammograms, cyst removals, arthroscopic knee operations, and so forth. To enable the doctor to proceed with the chosen treatment, the patient must give informed consent to the treatment's specifics. The doctor-patient agreement consequently imposes on the doctor a series of specific obligations, as opposed to a single standard-based duty to do one's best.

Treatment-related entries into malpractice liability track the doctor-patient agreement¹⁹¹ in that they, too, consist of high-resolution provisions identified as rules rather than broad standards.¹⁹² The system's choice of the rules format was economically inevitable. First, the fact that doctors and patients contract for specific diagnoses and treatments, as opposed to "good care" in general, is a sufficient reason for making this choice. Doctors' liability for malpractice should reflect what they contract for, as any misalignment between the contracted treatment and the malpractice liability will engender unfairness and inefficiency. When a patient receives compensation for the doctor's failure to deliver a treatment not contracted for (expressly or impliedly), the patient is overcompensated while doctors experience excessive deterrence. The ensuing prospect of supracontractual liability induces doctors to update their contracts with patients by

191. Note that contracting can only raise a physician's treatment duties above the customary level. See generally *Sullivan v. O'Connor*, 296 N.E.2d 183 (Mass. 1973); *Hawkins v. McGee*, 146 A. 641 (N.H. 1929). Contracts purporting to take this duty below that level or to reduce doctors' responsibility for malpractice are not enforceable: courts void such contracts on public policy grounds. See, e.g., *Tatham v. Hoke*, 469 F. Supp. 914, 919 (W.D.N.C. 1979), *aff'd sub nom.* *Hoke v. Cappel*, 622 F.2d 584 (4th Cir. 1980) (unpublished table decision), and *aff'd sub nom.* *Tatham v. Hoke*, 622 F.2d 587 (4th Cir. 1980) (unpublished table decision); *Tunkl v. Regents of the Univ. of Cal.*, 383 P.2d 441, 447 (Cal. 1963); *Porubiansky v. Emory Univ.*, 275 S.E.2d 163, 169 (Ga. Ct. App. 1980), *aff'd*, 282 S.E.2d 903 (Ga. 1981). For a comprehensive rejection of contract as a regulatory mechanism for health care, see Jennifer Arlen, *Contracting over Liability: Medical Malpractice and the Cost of Choice*, 158 U. PA. L. REV. 957 (2010) (demonstrating that by giving up standardization of care and associated network benefits, contractual liability will create a suboptimal legal regime even when patients are informed). Professor Arlen's thesis has an important implication for general legal theory as well: it shows that transaction costs are not the only downside of contract, while optimal deterrence of injurers is not the only upside of torts.

192. See *supra* notes 6-7.

introducing more defensive medicine and by charging higher fees.¹⁹³ The added defensive-medicine measures and the higher cost of the same treatment are socially wasteful. They are morally objectionable as well because the additional cost of the treatment will be borne predominantly by people with more serious illnesses and the diminished ability to pay for the treatments they need. Conversely, when a court denies a patient compensation for the doctor's failure to deliver a treatment that the two have contracted for, the patient does not get her money's worth and the doctor receives a windfall. Moreover, the doctor and similarly situated physicians get a socially perverse incentive to treat patients with suboptimal care and effort.

Minimizing adjudicative error is another good reason for formulating treatment-related entries as bright-line rules. Under the "good practice" standard, courts' resolutions of medical malpractice disputes will be highly uncertain and unpredictable. By and large, they will depend on how factfinders will second-guess the defendant's calls after observing the battle between the plaintiff's and the defendant's experts, who will interpret the "good practice" requirement to their client's benefit. As Clarence Morris aptly remarked in one of his classic works, "The reasonably prudent man 'test' would enable the ambulance chaser to make a law suit out of any protracted illness."¹⁹⁴

This uncertainty will induce doctors to overcomply. To fend off liability for malpractice, doctors will proceed on the assumption that the "good practice of medicine" requires them to go way beyond the optimal care level.¹⁹⁵ Doctors will also gear up their defensive-medicine efforts to generate evidence showing that they went above and beyond their call of duty in treating the patient.¹⁹⁶ These overcompliance and wasteful defensive-medicine measures will gradually become part of the "good practice" standard: the more doctors implement those measures, the more customary and binding they become. This doctrinal feedback will steadily transform

193. Supracontractual liability is never efficient, but supracontractual performance may be. See Robert Cooter & Melvin A. Eisenberg, *Fairness, Character, and Efficiency in Firms*, 149 U. PA. L. REV. 1717, 1720–21 (2001) (showing how firms' employees' supracontractual performance can be both fair and welfare enhancing).

194. Morris, *supra* note 22, at 1165.

195. See John E. Calfee & Richard Craswell, *Some Effects of Uncertainty on Compliance with Legal Standards*, 70 VA. L. REV. 965, 966–67, 975–81 (1984) (associating overcompliance with the imprecision of general legal standards).

196. See Gideon Parchomovsky & Alex Stein, *The Distortionary Effect of Evidence on Primary Behavior*, 124 HARV. L. REV. 518, 537–38, 545–46 (2010) (identifying inefficiencies of defensive medicine as a socially wasteful evidence-generating activity).

the standard by turning more and more medically unnecessary procedures and treatments into mandatory ones.¹⁹⁷

Cost of enforcement is the third and final reason for our system's selection of the rules format. Adjudicating medical malpractice under specific rules is much cheaper than under a broad standard. Under the rules regime, expert witnesses only need to juxtapose the disputed medical treatment against the applicable rules and evaluate the doctor's conformance with those rules. Under the "good practice" or other broad standards, this juxtaposition occurs only at the second stage of the expert's evaluation procedure. Before reaching that stage, the expert needs to find out what "good practice" means for the disputed treatment. Specifically, she needs to translate "good practice" into a set of specific medical rules and defend her translation against the opposition. The expert, in other words, has to convince the court that her understanding of what "good practice" means for the treatment in question is superior to that of other expert witnesses. Every expert testifying in a medical malpractice case will make a sustained and expensive effort in that direction. Courts, in turn, will have to conduct expensive trial procedures in order to determine which expert is most reliable as a rule selector.

Our medical malpractice system avoids this expense by following a technical "rule-recognition method." Courts applying this method treat any medical procedure or treatment as adequate so long as it appears on the medical profession's list of recognized or acceptable treatments and procedures. Conversely, if the procedure or treatment chosen by the care provider does not appear on that list, the court identifies it as malpractice.

To illustrate this method, consider the Michigan Supreme Court's decision in *Locke v. Pachtman*.¹⁹⁸ This decision examined the viability of a medical malpractice suit complaining about a hernia repair operation that went wrong when part of the needle that the doctor used to perform the operation broke off and lodged in the patient's muscle.¹⁹⁹ To remove the needle, the patient had to undergo an additional surgery that allegedly caused her pain, mental and emotional distress, and other damages.²⁰⁰ The fact that the patient's first surgery went wrong, however, does not necessarily mean that it was carried out negligently. Thin surgical needles are not unbreakable, and the patient's doctor therefore may have done nothing improper. To prove that the doctor was negligent, the patient called an expert witness to attest that "a surgeon's 'incorrect technique' often causes a needle to break," which happens when the "surgeon fails to manipulate the

197. See James Gibson, *Doctrinal Feedback and (Un)Reasonable Care*, 94 VA. L. REV. 1641, 1641 (2008) (uncovering the "doctrinal feedback" dynamic where overcautious doctors' excessive precautions against harm cyclically transform into legally binding customs and practices).

198. *Locke v. Pachtman*, 521 N.W.2d 786 (Mich. 1994).

199. *Id.* at 787-88.

200. *Id.* at 788.

needle correctly, such as by inserting it at the wrong angle or applying too much force.”²⁰¹

The Michigan Supreme Court ruled that the doctor rightly won the directed verdict in the lower courts.²⁰² Because the patient’s expert failed to identify any specific rule, protocol, or practice that the doctor violated, her testimony was “insufficient to establish a standard of care.”²⁰³ The patient consequently made no prima facie showing for moving the case to the jury.²⁰⁴

For an example of a plaintiff’s successful use of the rule-recognition method, consider another textbook decision, *Franklin v. Gupta*.²⁰⁵ This decision dealt with a patient’s preoperative anesthetic preparation and complications developed therefrom. To achieve local anesthesia that was meant to prepare the patient for a wrist surgery, the anesthesiologist and his nurse used a brachial plexus block and an anesthetic drug (Sublimaze).²⁰⁶ During this process, the patient developed an acute heart problem.²⁰⁷ To save his life, doctors treated him by intubation, Atropine, and cardiopulmonary resuscitation until his heartbeat returned to normal.²⁰⁸ After this experience, the patient withdrew from the wrist surgery and filed a malpractice suit instead.²⁰⁹

The patient’s suit against the anesthesiologist and the anesthesiologist’s nurse was successful because his expert identified five specific violations of the protocols for anesthetic treatments.²¹⁰ According to the expert, these violations included a flawed preoperative evaluation that failed to account for the patient’s medical history.²¹¹ Under the criteria set by the American Society of Anesthesiologists (“ASA”), the patient should have been categorized as a high-risk ASA IV patient.²¹² The anesthesiologist’s nurse, however, mistakenly placed him into the medium-risk ASA III category and consequently failed to give him the treatment for high-risk patients.²¹³ Other violations included lack of communication between the anesthesiologist and his nurse, to whom the anesthesiologist improperly delegated the patient’s

201. *Id.* at 788–89.

202. *Id.*

203. *Id.* at 791.

204. *Id.*

205. *Franklin v. Gupta*, 567 A.2d 524 (Md. Ct. Spec. App. 1990).

206. *Id.* at 527.

207. *Id.* at 528.

208. *Id.*

209. *Id.* at 526–28.

210. *Id.* at 529.

211. *Id.*

212. *Id.*

213. *Id.*

treatment;²¹⁴ the anesthesiologist's failure to periodically check on the patient;²¹⁵ the nurse's failure to call the anesthesiologist to the patient's room;²¹⁶ and, finally, the improper administration of Sublimaze when the patient started experiencing breathing difficulties.²¹⁷ Based on this testimony, the Maryland Special Court of Appeals reinstated the jury's verdict against the anesthesiologist and the nurse.²¹⁸

This case is a particularly good illustration of the rule-recognition approach. The patient's expert testified about bright-line rules—a set of well-articulated protocols and practices of anesthesiologists—and then juxtaposed the patient's treatment against those rules. This technical approach is prevalent in jurisdictions across the United States.²¹⁹

The system's choice of the rules' format dictates the rulemaker's identity. Courts and legislators do not know medicine and are consequently not competent to devise rules for medical diagnoses and treatments. To devise those rules competently, courts and legislators would need to engage numerous medical specialists as their rulemaking advisors. This rulemaking method has a serious flaw: because medicine develops quickly, courts and legislators would have to re-engage their experts periodically in order to revise and update the applicable rules. This process would be cumbersome, expensive, and unaffordably slow. As a result, rules governing the delivery of medical treatments and diagnoses would lag far behind the state of the art.

Courts and legislators are only competent to set up a broad legal standard that alludes to "good medical practice" or another general benchmark. This standard's formulation requires no medical knowledge: the lawmaker's understanding of the law suffices. This competence, however, is of no avail. My preceding discussion showed that adoption of any such standard would make our medical malpractice system inefficient and unfair.²²⁰

Fortunately, our system does not have to choose between court-made (or legislative) rules, on the one hand, and court-made (or legislative) standards, on the other hand. There is a third possibility: delegation of the rulemaking power to an institutionally competent rulemaker—the medical

214. *Id.* at 530.

215. *Id.*

216. *Id.* at 530–31.

217. *Id.* at 530.

218. *Id.* at 532.

219. For a recent application of the rule-recognition approach, see *In re Med. Review Panel Claim of Dunjee*, 2010-1217 (La. App. 4 Cir. 1/26/11); 57 So. 3d 541. In this case, an appellate court in Louisiana affirmed the trial court's finding of medical malpractice based on an expert testimony that "[l]aparoscopic myomectomy to remove a myoma 10 centimeters in size in conjunction with a colpotomy, also in the presence of extensive laproscopic [sic] surgery, is a deviation from the standard of care in a juvenile diabetic not in good control." *Id.* at p. 6, 57 So. 3d 546.

220. See *supra* notes 163–72 and accompanying text.

profession.²²¹ This rulemaking method is most efficient. Unsurprisingly, our system has adopted this method and implemented it across the board. All jurisdictions across the United States require care providers to treat patients in accordance with the rules, protocols, and practices that have been devised by the medical profession. Failure to comply with those rules, protocols, and practices constitutes malpractice. By the same token, care providers' conformance with those rules, protocols, and practices constitutes a complete defense against allegations of malpractice.

This delegation of the core rulemaking power to a private actor is quite unique.²²² The law delegates this power to the medical profession alone, while treating other industries' safety standards as inconclusive.²²³ Hence, a doctor's compliance with her profession's internal norms defeats a malpractice suit almost automatically,²²⁴ whereas in all other cases courts are free to reject the industry's standards as unsafe.²²⁵

This disparity calls for an explanation, which can possibly be found in the contractual customer-provider relationship between doctors and patients.²²⁶ Doctors' customers—the patients—care about their own health and are consequently willing to pay for doctors' precautions. Doctors' ability to pass on the cost of precautions to patients makes it safe for our system to rely on the medical profession's norms.²²⁷ Other industries do not always deal with customers and thus have no market-based incentives to cut back on activities that might injure individuals who do not purchase their products. These individuals will not pay anything for the safety measures that the industries might consider implementing in order to protect them against harm. Firms within such industries will therefore take no precautions against non-customers' injuries. If a firm takes such precautions and then

221. See Isaac Ehrlich & Richard A. Posner, *An Economic Analysis of Legal Rulemaking*, 3 J. LEGAL STUD. 257, 261 (1974) ("Sometimes the demand for [rules'] specificity is satisfied by private rulemakers rather than by courts.").

222. See KEETON ET AL., *supra* note 54, § 32, at 189 (attesting that the law of torts "gives the medical profession . . . the privilege, which is usually emphatically denied to other groups, of setting their own legal standards of conduct, merely by adopting their own practices" (footnote omitted)).

223. See Gideon Parchomovsky & Alex Stein, *Torts and Innovation*, 107 MICH. L. REV. 285, 291-92 (2008).

224. *Id.* at 301.

225. For Judge Learned Hand's classic statement of this rule, see The T.J. Hooper, 60 F.2d 737, 740 (2d Cir. 1932) ("[I]n most cases reasonable prudence is in fact common prudence; but strictly it is never its measure; a whole calling may have unduly lagged in the adoption of new and available devices.").

226. There is only one doctor-patient situation in which no contractual relationship is present: emergency-room treatment pursuant to the Emergency Medical Treatment and Active Labor Act, 42 U.S.C. § 1395dd (2006). This Act makes it mandatory for hospitals to provide stabilizing treatment to a patient who has an "emergency medical condition" regardless of the patient's ability to pay for the treatment. *Id.* § 1395dd(b)(1).

227. See RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 219 (8th ed. 2011).

tries to shift their cost to customers, another firm will necessarily undercut it.²²⁸ Anticipating this consequence, the entire industry might adopt a norm that entrenches a suboptimal level of care.²²⁹

Another possible explanation can be found in the plurality of regulatory mechanisms that channel care providers' behavior. Medical malpractitioners do not pay only tort damages; they also face bad publicity, negative peer review, collegial censure, suspension of licenses, revocation of hospital privileges, and expulsion from patient-referral networks.²³⁰ These repercussions can destroy malpractitioners' business and lower their self-esteem.

These explanations are still incomplete because neither of them pays enough attention to the profession's motivation to benefit its members. Market and other inducements cannot eradicate this motivation. They certainly cannot achieve this effect through the contact mechanism when a well-informed provider (the medical profession) can easily take advantage of its ill-informed customers (the patients).²³¹ Moreover, even when the profession designs its rules for patient treatment benevolently, it might still formulate them in a way that will forestall doctors' liability for malpractice. This prospect is not unrealistic. Many doctors perceive malpractice liability as a social evil and would be happy to replace it with a system of peer supervision and control that will offer injured patients no redress besides insurance.²³²

For all these reasons, giving the medical profession an unchecked power to devise rules for patient treatment is not a socially viable option. In parallel with authorizing the profession to devise those rules, our malpractice system therefore gives courts the authority to prevent misuses of this rulemaking power. The system also authorizes courts to scrutinize the profession's cost-benefit tradeoffs that set up the conditions for patients' treatment. As demonstrated in Part I, courts used this authority to fashion setup rules in accordance with their own vision of efficiency and fairness.

228. *Id.* at 218–19.

229. *Id.* The Supreme Court's historic decision in *Texas and Pacific Railway Co. v. Behymer*, 189 U.S. 468 (1903), illustrates this market failure. This decision examined the railroad companies' Dickensian custom to require employees to de-ice cars while standing on their slippery tops, without making sure that the cars do not move. *Id.* at 469–70. Justice Oliver Wendell Holmes, Jr., who wrote the Court's decision, rejected this custom after famously pronouncing that “[w]hat usually is done may be evidence of what ought to be done, but what ought to be done is fixed by a standard of reasonable prudence, whether it usually is complied with or not.” *Id.* at 470.

230. See EPSTEIN, *supra* note 22, § 6.2, at 141. Doctors are also driven by social norms that push them to do their best “when life is on the line.” *Id.*

231. See Kenneth J. Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AM. ECON. REV. 941 (1963).

232. See, e.g., Sandra H. Johnson, *Regulating Physician Behavior: Taking Doctors' “Bad Law” Claims Seriously*, 53 ST. LOUIS U. L.J. 973, 974–76 (2009) (documenting physicians' dissatisfaction with the laws regulating health care).

Courts, indeed, rightly consider themselves institutionally competent to override doctors' economic and moral decisions, while deferring to their medical opinions. This allocation of powers has created a balanced mechanism of dual-rulemaking, to which I now turn.

B. DUAL RULEMAKING

Courts never second-guess doctors by examining the benefits and the risks of their patient-treatment rules. At the same time, courts carry out a two-level scrutiny to prevent misuses and unpermitted expansions of the medical profession's rulemaking power. Rules that the profession is authorized to make need to utilize medical knowledge to diagnose and cure patients. Those rules consequently must be based on medical reasons. Courts scrutinize those reasons for minimal plausibility to make sure that the profession's rules are not blatantly unsafe to patients. Furthermore, the profession has no exclusive authority to base its rules of patient treatment upon reasons extraneous to medicine. Correspondingly, courts fully scrutinize the profession's non-medical reasons and decisions. Whenever the profession's rules implicate economic balancing of risks and resources, courts step in and do their own tradeoff.

The first and most basic level of this scrutiny focuses on whether the profession's rule rests upon facially plausible medical reasons. Whether these reasons are actually persuasive is for the profession to determine, and courts do not question those determinations. Courts only need to verify that the medical reasons underlying the profession's rule are facially plausible. When these reasons are facially plausible, the rule passes muster. When they are not facially plausible, the court invalidates the rule.

The oft-cited decision of the Ohio Supreme Court *Ault v. Hall* provides a paradigmatic example of this scrutiny.²³³ This decision adjudicated a suit filed by a patient who underwent an abdominal operation.²³⁴ During that operation, the surgeon and nurses used sponges to wall off the abdominal cavity and cover intestines in order to prevent infections and hemorrhage.²³⁵ At the operation's close, they forgot to remove one of those sponges.²³⁶ This sponge stayed in the patient's body for eight weeks and rotted a hole in her stomach.²³⁷ The patient alleged that her injury resulted from the surgeon's malpractice.²³⁸ The surgeon responded by showing his compliance with the profession's custom.²³⁹ According to this custom, it was the nurse's job—not

233. *Ault v. Hall*, 164 N.E. 518 (Ohio 1928).

234. *Id.* at 518.

235. *Id.* at 519.

236. *Id.*

237. *Id.*

238. *Id.* at 518.

239. *Id.* at 519.

his—to count the sponges before and after the operation.²⁴⁰ The surgeon relied on this custom so strongly that he could not even tell the court whether he asked the nurse about sponge count.²⁴¹ The Ohio Supreme Court decided that the custom followed by the surgeon was manifestly unsafe and hence medically implausible.²⁴² Surgeons cannot withdraw their supervision from postsurgical sponge counting by a nurse.²⁴³

This and similar decisions make it clear that courts overturn the profession's patient-treatment rules only in extreme cases. These extreme cases typically involve a rule, a custom, or a practice so blatantly unsafe for the patient that no medical reason can ever justify it. In all other cases, courts defer to the profession's rule.

The second level of courts' scrutiny examines the profession's rules for the presence of reasons extraneous to medicine. Courts' cautious approach to clinical practice guidelines is a good illustration of this type of scrutiny. Clinical practice guidelines summarize prevalent approaches to medical treatments and present them in a convenient form to doctors. Many of those guidelines are compiled and published by specialty boards and other medical societies, as well as by governmental agencies.²⁴⁴

Courts routinely admit into evidence guidelines developed by the government and the medical profession. Those guidelines give courts a useful summary of the applicable treatment rules.²⁴⁵ Managed care organizations and health insurers also develop clinical practice guidelines for doctors.²⁴⁶ These guidelines are suspect because their promulgators are business entities that have an incentive to cut back on medical care regardless of the patient's need.²⁴⁷ Courts consequently tend not to rely on these guidelines.²⁴⁸

240. *Id.*

241. *Id.* at 520.

242. *Id.* at 521–23.

243. *Id.* at 523 (“Surgical science should be commended for the practice of having a nurse whose special task is to account for sponges, but it ought to be severely condemned if it places sole reliance upon that practice. The duty of a surgeon to exercise care cannot be delegated to another, without recourse.”). This decision can also be understood as invalidating an unsafe medical setup and finding the defendant responsible for using that setup to his patient's detriment.

244. See Michelle M. Mello, *Of Swords and Shields: The Role of Clinical Practice Guidelines in Medical Malpractice Litigation*, 149 U. PA. L. REV. 645, 650–54 (2001).

245. *Id.* at 662–67; see also *Hinlicky v. Dreyfuss*, 848 N.E.2d 1285, 1287–92 (N.Y. 2006) (approving trial court's admission of clinical practice guidelines as auxiliary evidence); *Ellis v. Eng*, 895 N.Y.S.2d 462, 466–67 (N.Y. App. Div. 2010) (same).

246. See Mello, *supra* note 244, at 651–52.

247. *Id.* at 652 (“While guidelines developed by professional medical societies are focused primarily on achieving the best medical outcomes, guidelines developed by health care payers are heavily influenced by cost-control concerns.”).

248. *Id.* (“Thus, payer-developed guidelines should be viewed as less authoritative than those developed by economically disinterested researchers and clinicians.”); see also *Neade v.*

The courts' skepticism about insurers' guidelines resonates with their approach to setup rules that ration medical care. *Helling* and other cases I used to illustrate these rules involve care providers who make decisions about the care's economics. These decisions rely on statistical distributions of the relevant medical conditions across different groups of patients that reflect the patients' age, sex, and medical history. Based on this information, the medical profession formulates rules and clinical guidelines advising doctors to use certain diagnostic and treatment methods only when they treat a "statistically vulnerable" patient.²⁴⁹ Patients not falling into a statistically vulnerable category will thus be passed over. This rationing policy can be legitimate only when the cost of the patient's diagnosis or treatment exceeds her expected harm. When the patient's expected harm is greater than the cost of her diagnosis or treatment, the doctors ought to deliver the requisite care. Failure to do so amounts to negligence that courts can determine by carrying out a straightforward cost-benefit analysis. Courts are institutionally best positioned to make such economic decisions, given their vast experience with tradeoffs and superior procedural mechanisms for resolving controversies over facts. Unlike doctors, courts are also impartial, as they have no personal stakes in the outcomes of their decisions. Courts' decisions, therefore, are more likely to promote social welfare than doctors' economic policies.²⁵⁰

The distinction between care-rationing tradeoffs and rules of medical treatment is not always tidy. The key factor in this distinction is the medical profession's reasons and motivation. When the profession devises a rule on the basis of general statistics, as opposed to the actual knowledge of medical causation,²⁵¹ the rule most likely represents a care-rationing tradeoff. When cutting the cost of medical care is among the profession's motivations for making the rule, the rule likely falls into the care-rationing category as well. These indicators, however, are not conclusive because doctors often use naked statistical data to determine the best treatment for an individual patient.²⁵² Courts, nonetheless, should always scrutinize those factors in

Portes, 739 N.E.2d 496, 506 (Ill. 2000) (holding that evidence of a doctor's incentive to help MCO cut its costs by downsizing patient's treatment was admissible). For an insightful reform proposal in this area, see Ronen Avraham, *Private Regulation*, 34 HARV. J.L. & PUB. POL'Y 543 (2011) (proposing to privatize production of clinical guidelines that doctors will be able to purchase at competitive prices and then follow in exchange for immunity against suit).

249. See George Weisz et al., *The Emergence of Clinical Practice Guidelines*, 85 MILBANK Q. 691, 706-15 (2007) (describing and explaining the evolution of standardized, statistic-based, and cost-containing guidelines for a broad range of medical treatments across the United States).

250. See POSNER, *supra* note 227, at 725-31 (explaining why courts are best positioned to maximize social utility by applying legal rules).

251. See L. Jonathan Cohen, *Bayesianism Versus Baconianism in the Evaluation of Medical Diagnoses*, 31 BRIT. J. PHIL. SCI. 45 (1980) (distinguishing between doctors' individuated-causative and statistical diagnoses of patients).

252. *Id.*

order to stay on guard. Fuzziness of the treatment/setup distinction is not a good reason for giving doctors a free hand to ration medical care.

This dual-rulemaking mechanism would fail to secure adequate care for patients if it did nothing to reduce doctors' ability to exploit their informational advantage. If courts (or legislators) did not step in to neutralize this advantage, doctors would be able to manipulate the relevant medical information and block patients' access to it. Patients, consequently, would rarely be able to sue doctors for malpractice, and our entire system would become dysfunctional. To avoid this socially deleterious consequence, courts and legislators have imposed expansive disclosure duties upon doctors. As I explained in Subpart I.C.3, these duties encompass pretreatment (ex ante) and post-treatment (ex post) obligations to generate medical information and disclose it to the patient. The ex ante obligations—rules of “informed consent”—improve patients' ability to select the optimal treatment and care provider. The ex post obligations—the “spoliation” rules—work to empower malpractice victims in their suits against care providers. These obligations require care providers to fully document their procedures and make the documentation available to patients. Failure to do so will expose the care provider to the “spoliation inference”—a special rule prompting factfinders to interpret factual uncertainties in a way most favorable to the patient's case.²⁵³ This interpretation will often allow the patient to win the suit.²⁵⁴

These rules put care providers under two distinct pressures: pressure from the market and pressure from courts. The ex ante disclosure obligations enable a patient to shop for a suitable treatment and care provider. The patient's enhanced ability to select the desirable treatment, doctor, and medical facility motivates care providers to compete with each other and release more information to the market. This dynamic increases the market's awareness of the available treatments and the treatments' risks and benefits. The well-informed market and equally informed courts consequently are able to eradicate unsafe medical practices. This ability is further enhanced by the care providers' ex post disclosure obligations. These obligations give providers a choice: make sure that the patient receives complete information about her treatment or risk adverse inferences in court. The providers' preference for full disclosure helps courts separate malpractitioners from good doctors.

C. COURTS AS EXIT KEEPERS

The prevalent doctrine of causation makes a wrongdoer's liability correlate with the harm that he brought about as a matter of fact.²⁵⁵ This

253. See *supra* note 184.

254. See PORAT & STEIN, *supra* note 86, at 160–67.

255. See DOBBS, *supra* note 6, §§ 166–67, at 405–09.

correlation fits well into both desert-based and deterrence-oriented theories of liability: civil and criminal. When a wrongdoer's penalty corresponds to the harm he actually caused, the wrongdoer pays for what he did—neither more nor less—and hence he deserves this penalty.²⁵⁶ Adjusting wrongdoers' penalties to the harm they cause also removes the prospect of excessive penalties and the consequent chilling of activities that are socially beneficial.²⁵⁷ This fit, however, comes with a limitation. Factual causation can function as a liability benchmark only when neither the plaintiffs nor the defendants have the ability to distort factfinding by withholding or manipulating evidence. When the distortion prospect is real, the causation doctrine becomes dysfunctional, and the law consequently needs to switch to another benchmark.

This switch is what our medical malpractice system tries to accomplish by applying the relaxed causation doctrine and other anti-exit rules.²⁵⁸ These legal mechanisms counteract doctors' informational superiority and reduce malpractitioners' ability to hide behind their patients' preexisting conditions. By doing so, they improve care providers' deterrence against malpractice.

By appointing courts as exit keepers, our system strikes the right balance of power between the medical profession and legal actors. This balance reflects an axiomatic economic principle that calls for a maximal reduction of agency costs: when you authorize an agent to take care of your business, you should set up the agent's incentives in a way that minimizes the cost of his self-seeking behavior.²⁵⁹ Based on this axiom, the system puts courts in charge of its exit rules and prevents doctors from participating in the rules' design.

III. VIRTUES AND VICES OF OUR MEDICAL MALPRACTICE SYSTEM

This Part of the Article transitions from positive law to the normative domain. In what follows, I evaluate our malpractice system's virtues and vices. My goal is to find out whether the system exposes care providers to excessive or, conversely, insufficient liability for tort damages. My analysis assumes that treatment rules formulated by the medical profession generally align with the state of the art. This plausible assumption allows me to focus on two factors: care providers' ability to avoid malpractice by following the requisite rules and courts' ability to avoid erroneous malpractice decisions. Maximizing these two abilities at the lowest possible cost will make the system economically efficient.

256. See PORAT & STEIN, *supra* note 86, at 11–12.

257. *Id.* at 11.

258. See *supra* Subpart I.B.

259. See, e.g., POSNER, *supra* note 227, at 434–36.

The doctrinal setup unfolded in Parts I and II aims at achieving this maximization. Whether it actually succeeds in that endeavor is a separate question that I address below in Subpart III.A. I offer no empirical answers to this question, but I do develop a theoretical argument that our medical malpractice system works reasonably well. This argument forms the basis for my policy recommendations outlined in Subparts III.B and III.C.

By saying that our system works “reasonably well,” I allude to pragmatic efficiency—a criterion that relies on incrementalism—as opposed to a top-down efficiency theory. Under the incrementalist view, our medical malpractice system—as all other systems of common law rules—is not a product of central planning.²⁶⁰ Rather, it has been developed step by step as a series of context-specific responses that courts gave to the problems they faced and anticipated. Every making of a new rule was a cautious small step towards the system’s improvement. Each of those steps involved courts’ balancing of efficiency and fairness concerns in the presence of uncertainty about the new rule’s future implications.²⁶¹

This framework places a heavy burden of proof upon law reformers. To show that the law requires a change, its reformers must identify a distortion brought about by a specific rule (or a set of rules) and then demonstrate how a new rule (or a new set of rules) can remove that distortion. Absent such demonstration, the law will be deemed well functioning. Our medical malpractice system is efficient (and also fair) in this pragmatic sense.

A. IS OUR SYSTEM EFFICIENT?

To be efficient, a tort system must achieve optimal deterrence of injurers at the lowest possible cost.²⁶² This goal is easy to formulate but extremely difficult to attain because tort rules often have discordant effects on prospective injurers, on the one hand, and on adjudication, on the other hand.²⁶³ Thus, a rule that induces prospective injurers to exercise optimal care—the Hand formula, for example²⁶⁴—may be too costly to implement

260. See, e.g., Richard A. Epstein, *Toward a General Theory of Tort Law: Strict Liability in Context*, 3 J. TORT L. no. 1, Jan. 2010, at 1, 6 (“This basic view is that the entire structure of the common law of torts—and by implication the common law—is too nuanced to be captured by a single broad proposition.”).

261. For an insightful account of common law’s incrementalism, see Shyamkrishna Balganesh, *The Pragmatic Incrementalism of Common Law Intellectual Property*, 63 VAND. L. REV. 1543, 1568–70 (2010).

262. See generally GUIDO CALABRESI, *THE COST OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS* 24–33 (1970); POSNER, *supra* note 227, at 213–17; STEVEN SHAVELL, *FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW* 177–93 (2004).

263. See generally A. Mitchell Polinsky & Steven Shavell, *The Economic Theory of Public Enforcement of Law*, 38 J. ECON. LITERATURE 45 (2000).

264. See *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947); POSNER, *supra* note 227, at 214.

due to evidential complexities that arise in courts.²⁶⁵ Mindful of those complexities, the lawmaker may decide to formulate a different—more technical—rule that presents no serious enforcement difficulties. This rule, however, will likely be overinclusive or underinclusive: the liability scope that it will set for prospective injurers will be either too broad or too narrow.²⁶⁶ The system's deterrence of prospective injurers will consequently be excessive or, alternatively, insufficient.

Our medical malpractice system mitigates this tension by implementing a number of measures. My preceding discussion already identified these measures.²⁶⁷ In the paragraphs ahead, I carry out a systematic normative analysis that evaluates the measures' utility.

Under extant doctrine, a patient's treatment constitutes malpractice only when it fails to align with the medical profession's rules.²⁶⁸ This formulation of care providers' entries into malpractice liability is rigid and technical. As such, it makes it easy for care providers to abide by the rules and avoid malpractice. The practical effect of this formulation is that a care provider is identified as a malpractitioner only when her treatment of the patient is grossly negligent.²⁶⁹

Courts can apply this formulation without incurring excessive costs. All they need to do to make a decision is hear expert witnesses, who identify the applicable medical rule and tell the court whether the disputed treatment aligned with that rule. Making the decision is never easy because plaintiffs' and defendants' experts usually disagree with each other. But it will not be too difficult either because the burden-of-proof doctrine resolves courts' dilemmas with respect to expert witnesses. Under this doctrine, when the patient's and the care provider's experts are equally credible, the factfinder must adopt the testimony of the provider's expert because it is the patient's burden to prove her allegations against the provider by a preponderance of the evidence.²⁷⁰ Furthermore, in cases in which experts disagree about rule identification, courts are free to decide that the medical profession allowed care providers to choose between different methods of treatment.

Medical expert testimony is not cheap. Experts' engagement by plaintiffs and defendants makes medical malpractice adjudication expensive. This expense, however, is unavoidable because any system of medical

265. See Richard A. Epstein, *The Perils of Posnerian Pragmatism*, 71 U. CHI. L. REV. 639, 643–44 (2004).

266. See generally Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J. 557 (1992).

267. See *supra* Subparts II.A–B.

268. See *supra* Subpart I.A.1.

269. See Richard A. Epstein, *Medical Malpractice: The Case for Contract*, 1 AM. B. FOUND. RES. J. 87, 108–13 (1976); Morris, *supra* note 22, at 1165.

270. See STEIN, *supra* note 21, at 124–33; 219–23 (explaining courts' applications of the preponderance requirement).

malpractice needs to rely on experts. For that reason, the social cost of expert testimony need not generally be accounted for in comparing one system of medical malpractice against another. This cost should only play a role in the efficiency analysis when one of the systems makes it abnormally high or low.

There is nothing special in our system of medical malpractice that abnormally increases the cost of experts. On the contrary, the applicable causation rules that seal off the exits for malpractitioners' escape from liability tend to reduce this cost. As I mentioned in Subpart I.B, these rules have replaced the traditional cause-in-fact requirement with the relaxed causation doctrine. This substitution turns causation into a predominantly legal issue. As such, it reduces the amount of expert work and the cost of experts. Moreover, the aggrieved patients' ability to rely on differential etiology and obtain compensation for lost chances introduces into the system substantial economies of scale and scope. Both doctrines allow patients to prove causation by general medical statistics.²⁷¹ The required statistical evidence needs to be generated only once, and then—subject to updating—it can be used in multiple trials.

As I explained in Subpart II.B, our system also needs to make sure that the medical profession does not abuse its rulemaking power. To this end, the system authorizes courts to scrutinize the profession's rules, protocols, and practices. This scrutiny is not cheap. Its cheapest part is the work that courts need to put in to identify and repeal the profession's rules, protocols, and practices that are manifestly unsafe. Those rules, protocols, and practices are rare and easy to spot.

All other tasks to which courts need to attend are costly. They include the scrutiny of doctors' policies and decisions that ration medical care. This scrutiny involves a comprehensive cost-benefit analysis. From the courts' viewpoint, this analysis is far more expensive to carry out than deferring to doctors' policies and decisions. Our system is willing to incur this expense in order to produce a greater benefit.²⁷²

Courts' participation in the design of medical setups is costly as well. But it is also socially beneficial.²⁷³ Courts supervise the safety of medical facilities and equipment, oversee personnel recruitment, and control the exchange of information between doctors and patients. These supervision, oversight, and control put pressure on doctors and other providers of medical care. They force care providers to reveal information about available treatments and the quality of care that they deliver to patients. This information allows patients to select a suitable treatment, care provider, and medical facility, and to file and prosecute a suit in the event of malpractice.

271. See *supra* Subpart I.B.2.

272. See *supra* Subpart I.C.1.

273. See *supra* Subparts I.C.2–3.

For all these reasons, I believe that our medical malpractice system is well designed. Whether it actually attains its efficiency goals is a difficult empirical question. This question is difficult to answer because there is no hard evidence that can prove the system's effects on the quality of medical care.²⁷⁴ On the whole, American doctors provide excellent care to those who can pay for it,²⁷⁵ but whether the quality of this care is induced in part by the prospect of malpractice liability is uncertain. The available empirical evidence is one-sided: it only reveals the system's costs because these costs are observable, verifiable, and unquestionably high. But the system also brings about an important social benefit by motivating care providers to deliver adequate treatment to patients. Unlike spreadsheets of expenses, this motivation has no empirically recognizable form. The effects of this motivation are therefore difficult to evaluate empirically. This difficulty, however, is purely methodological rather than substantive. Our medical malpractice system may well have a positive net effect on society's welfare.

B. PROCEDURAL TORT REFORM

Rules associated with procedural tort reform work to maximize the accuracy of court decisions at an affordable cost.²⁷⁶ Another important objective of those rules is to skew the risk of adjudicative error in a way that best promotes the system's substantive goals.²⁷⁷ Courts are bound to make mistakes in adjudicating medical malpractice (and many other) cases. Some of their decisions will exonerate malpractitioners, while others will impose liability on faultless doctors.²⁷⁸ The procedural tort-reform rules minimize the prospect of erroneous liability for care providers who follow their profession's rules. By skewing the risk of error in that direction, the rules

274. Cf. Michelle M. Mello & Kathryn Zeiler, *Empirical Health Law Scholarship: The State of the Field*, 96 GEO. L.J. 649, 679-92 (2008) (reporting stark disagreements among empirical scholars studying the effects of medical malpractice reforms and identifying directions for more fruitful studies.); BAKER, *supra* note 19, at 22-44 (making no empirical claims about the malpractice system's effect on doctors' behavior but arguing that aggrieved patients do not file enough suits against malpractitioners).

275. See, e.g., AGENCY FOR HEALTHCARE RESEARCH & QUALITY, U.S. DEP'T OF HEALTH & HUMAN SERVS., NATIONAL HEALTHCARE QUALITY REPORT 2009, at 1-4, 12-13, <http://www.ahrq.gov/qual/nhqro9/nhqro9.pdf> (finding that quality medical care is generally available but only to those patients who can pay for care or have adequate health insurance).

276. Maximization of accuracy is the most fundamental objective of all rules of evidence and procedure. See STEIN, *supra* note 21, at 141-42.

277. Evidentiary and procedural rules promote predominantly this objective. See *id.* at 1-12, 133-43; *Hill v. Humphrey*, 662 F.3d 1335, 1355 (11th Cir. 2011) (attesting that "[a]ll kinds of rules serve to allocate the risk of an erroneous decision—procedural rules that determine who can participate in the presentation of evidence and argument, evidentiary rules that determine what evidence the trier of fact can consider, and decisional rules like the standard of proof at issue here." (citing Alex Stein, *Constitutional Evidence Law*, 61 VAND. L. REV. 65, 67-68 (2008))).

278. All adjudicative systems must choose between these two types of error: false positives and false negatives. See STEIN, *supra* note 21, at 143-53.

necessarily increase the incidence of malpractitioners' undeserved exonerations.

The rules effectuate this tradeoff by requiring plaintiffs to go through a rigorous and costly suit-verification procedure. As part of this procedure, plaintiffs must file in court the "merit certificate": an attestation by the plaintiff's attorney that the suit relies in good faith on a medical expert's testimony that confirms its malpractice allegations against the defendant.²⁷⁹ Many jurisdictions also require plaintiffs to accompany their suits with a supporting affidavit from a medical expert.²⁸⁰

Another set of rules has created an additional screening mechanism: special advisory panels that function as pretrial assessors and mediators of medical malpractice suits.²⁸¹ The panels' members are doctors and attorneys who advise the parties on the suit's merits and help settle it out of court.²⁸² The parties must participate in the panel's discussions but are not obligated to accept the panel's assessment of the suit's merits. This assessment, however, influences the parties' subsequent litigation strategies and decisions. For example, when the panel opines that the plaintiff's allegations are weak because his expert did not properly identify the defendant's malpractice, the defendant will certainly file a motion asking the court to dismiss the suit. Anticipating this motion and its likely success, the plaintiff will try to obtain an expert whose testimony properly identifies the defendant's malpractice. If the plaintiff fails to obtain such testimony, he may well decide to drop the suit.

These special procedures allow care providers that follow their profession's rules of medical treatment to minimize the prospect of being successfully sued for malpractice. Substantive rules of medical malpractice cannot minimize this prospect by themselves because courts might misapply those rules. Our malpractice system consequently needs to skew the risk of adjudicative error to the benefit of care providers who go by the rules. The procedural tort-reform rules achieve this effect by exposing patients to the risk of being erroneously denied legal remedies. This consequence is not to be celebrated, but it must be accepted as unavoidable. Weakening doctors' protection against adjudicative errors will lead to much worse consequences that include defensive medicine and a high cost of medical care.

279. See Benjamin Grossberg, Comment, *Uniformity, Federalism, and Tort Reform: The Erie Implications of Medical Malpractice Certificate of Merit Statutes*, 159 U. PA. L. REV. 217, 222-25 (2010) (surveying certificate-of-merit requirements for medical malpractice suits).

280. *Id.*; see also *supra* note 46.

281. See CATHERINE T. STRUVE, EXPERTISE IN MEDICAL MALPRACTICE LITIGATION: SPECIAL COURTS, SCREENING PANELS, AND OTHER OPTIONS 55-68 (2003), available at http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Medical_liability/medical_malpractice_101603.pdf.

282. *Id.*

The procedural tort-reform rules therefore make a lot of sense. They fit into our system's design and improve its performance.²⁸³ Unfortunately, I cannot say the same about the substantive tort reform that reduced care providers' liability on the theory that the pre-reform regime had forced them to pay too much.²⁸⁴ I now turn to discuss this issue.

C. SUBSTANTIVE TORT REFORM

The substantive reform of our medical malpractice system brought about three big changes.²⁸⁵ The most significant of those changes was the enactment of statutes that capped compensation for medical malpractice victims.²⁸⁶ Statutory caps have been set predominantly (but not exclusively) for pain, suffering, emotional distress, and all other noneconomic damages.²⁸⁷ Only a few jurisdictions have decided to cap economic damages as well.²⁸⁸ The cap amounts vary from one jurisdiction to another. On the low end, the maximal recovery amount for noneconomic damages is set at \$250,000²⁸⁹ and on the high end at \$1,500,000.²⁹⁰ The caps have been

283. Tort reformers' agendas include an additional procedural measure: setting up specialized courts for medical malpractice suits. For a good discussion and good criticism of this idea, see STRUVE, *supra* note 281, at 68–77.

284. BAKER, *supra* note 19, at 1–21, famously called this theory—and proved it to be—“the medical malpractice myth.”

285. For a nationwide state-by-state summary of tort reforms, see Ronen Avraham, Database of State Tort Law Reforms (DSTLK 4th) (Sept. 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=902711.

286. See DOBBS, *supra* note 6, § 384, at 1071–73.

287. *Id.* at 1071–72.

288. See, e.g., COLO. REV. STAT. § 13-64-302(1)(b) (2011) (capping total damages recoverable by medical malpractice victims in Colorado at \$1,000,000); VA. CODE ANN. § 8.01-581.15 (2011) (capping total damages recoverable by medical malpractice victims in Virginia at \$1,500,000); see also Charles R. Ellington et al., *State Tort Reforms and Hospital Malpractice Costs*, 38 J.L. MED. & ETHICS 127, 128–29 fig.1 (2010) (collecting statutes). Another tort reform, thus far implemented only in Florida and Virginia, relocates compensation claims pertaining to birth-related neurological injuries from courts to administrative programs. See FLA. STAT. § 766.302 (2011); VA. CODE ANN. § 38.2-5002 (2011). Participation in these programs is optional for both patients and care providers. By electing to receive treatment from a participating provider, the patient commits herself and her future child to pursue any compensation claim for birth-related neurological injury before a special administrative judge. The program compensates injured children for disability damages not covered by the government, health benefit plans, and private insurance. Pain, suffering, and other noneconomic damages are either noncompensable (as in Virginia) or capped at a low amount (as in Florida). Compensation, however, is granted without proof of malpractice. These programs are funded by statutory contributions from doctors, hospitals, and liability insurers. For details, see THE FLA. BIRTH-RELATED NEUROLOGICAL INJURY COMP. ASS'N, <http://www.nica.com> (last visited Feb. 13, 2012); VA. BIRTH-RELATED NEUROLOGICAL INJURY COMP. PROGRAM, <http://www.vabirthinjury.com> (last visited Feb. 13, 2012).

289. See CAL. CIV. CODE § 3333.2(b) (West 2010).

290. See FLA. STAT. ANN. § 766.118(3)(b) (setting maximal noneconomic recovery for catastrophic injury or death at \$1,500,000).

challenged in state courts on constitutional grounds, for the most part unsuccessfully.²⁹¹

Another important change was the abolition of the “collateral source” rule.²⁹² Under this rule, a wrongdoer cannot rely on the fact that insurance, a government program, or another third party compensated or reimbursed his victim for some or all of her damages.²⁹³ Following the rule’s abolition, malpractitioners can offset their liability by the amount received by the plaintiff from collateral sources.²⁹⁴ This offset turns negligent providers of substandard medical care into the actual beneficiaries of private and governmental payments toward victims’ damages.²⁹⁵

The reform has also shortened the limitations period and set up rigid repose provisions for medical malpractice suits. These measures bring about a quick erosion of an aggrieved patient’s ability to sue her doctor for malpractice. Under the typical limitations statute, the patient can only sue her doctor within two years starting from the day on which she actually knew or could have known that her medical condition worsened, or did not improve, because of the doctor’s negligence.²⁹⁶ The “could have known”

291. See *Evans v. State*, 56 P.3d 1046, 1049–57 (Alaska 2002) (upholding the constitutionality of Alaska’s cap); *Fein v. Permanente Med. Grp.*, 695 P.2d 665, 679–84 (Cal. 1985) (upholding the constitutionality of California’s \$250,000 cap on noneconomic recovery); *Johnson v. St. Vincent Hosp.*, 404 N.E.2d 585 (Ind. 1980) (upholding the constitutionality of Indiana’s \$500,000 cap on medical malpractice judgments); *Butler v. Flint Goodrich Hosp.*, 607 So.2d 517 (La. 1992) (upholding the constitutionality of Louisiana’s \$500,000 cap on medical malpractice judgments); *Gourley ex rel. Gourley v. Neb. Methodist Health Sys., Inc.*, 663 N.W.2d 43, 64–77 (Neb. 2003) (upholding the constitutionality of Nebraska’s cap); *Arbino v. Johnson & Johnson*, 116 Ohio St. 3d 468, 2006-Ohio-1212, 880 N.E.2d 420, 529–39 (upholding constitutionality of Ohio’s cap because statutory exception was made for seriously injured victims); *MacDonald v. City Hosp., Inc.*, 715 S.E.2d 405, 413–22 (W. Va. 2011) (upholding the constitutionality of West Virginia’s two-tier cap). *But see Atlanta Oculoplastic Surgery, P.C. v. Nestlehuett*, 691 S.E.2d 218, 221 (Ga. 2010) (voiding a \$350,000 statutory cap on noneconomic damages for violating Georgia’s Constitutional guarantee that “[t]he right to trial by jury shall remain inviolate” (alteration in original) (quoting GA. CONST. OF 1983, art. 1, § 1, para. 1(a)) (internal quotation marks omitted)); *Lebron v. Gottlieb Mem’l Hosp.*, 930 N.E.2d 895, 908–14 (Ill. 2010) (striking down as unconstitutional Illinois’ \$1,000,000 cap on a medical malpractice victim’s noneconomic recovery); *Ferdon v. Wis. Patients Comp. Fund*, 701 N.W.2d 440 (Wis. 2005) (voiding an inflation adjusted \$350,000 cap on noneconomic damages for violating Wisconsin’s constitutional guarantee of equal protection).

292. See generally Kevin S. Marshall & Patrick W. Fitzgerald, *The Collateral Source Rule and Its Abolition: An Economic Perspective*, 15 KAN. J.L. & PUB. POL’Y 57, 71 app. I (2005).

293. See DOBBS, *supra* note 6, § 380, at 1058.

294. *Id.* at 1059.

295. See F. Patrick Hubbard, *The Nature and Impact of the “Tort Reform” Movement*, 35 HOFSTRA L. REV. 437, 485 (2006).

296. See, e.g., *Schlote v. Dawson*, 676 N.W.2d 187 (Iowa 2004) (stating that the statute of limitations begins to run on the date the plaintiff knew, or could have known, that she was injured); *Baird v. Am. Med. Optics*, 713 A.2d 1019, 1027–28 (N.J. 1998) (explaining that the two-year statute-of-limitations period starts the day on which the patient knew, or could have

proviso—commonly called “constructive knowledge” or “injury notice”—is pivotal.²⁹⁷ This proviso activates the limitations period at the point in time at which a reasonable person could have realized that his doctor may have mistreated him.²⁹⁸ The patient’s unawareness of his condition and of his doctor’s malpractice as a likely cause of that condition does not toll this period.²⁹⁹

The repose doctrine further expands malpractitioners’ immunity against suit. This doctrine extinguishes an aggrieved patient’s ability to sue her doctor after a certain period of time (four to ten years from the alleged mistreatment, depending on the jurisdiction).³⁰⁰ This period starts to run when the doctor completes the treatment the patient claims to be responsible for her injury.³⁰¹ The accrual of the patient’s cause of action and her actual or constructive awareness of the doctor’s malpractice are of no consequence.³⁰² The fact that the patient has not yet sustained harm from

known, that she might have been mistreated by her doctor and sustained damage from that mistreatment).

297. See *Booth v. Wiley*, 839 N.E.2d 1168, 1170 (Ind. 2005); *Harrison v. Valentini*, 184 S.W.3d 521, 524 (Ky. 2005); *Williamson v. Hebert*, 2010-0071, p. 1 (La. 4/5/10); 31 So. 3d 1047, 1048; *Sherrill v. Souder*, 325 S.W.3d 584, 595–96 (Tenn. 2010).

298. See, e.g., *Rathje v. Mercy Hosp.*, 745 N.W.2d 443, 447–63 (Iowa 2008) (explaining statute of limitations for medical malpractice suits and applying the “injury notice” principle).

299. *Id.* at 450; see also *Van Dusen v. Stotts*, 712 N.E.2d 491, 498–99 (Ind. 1999) (reaffirming and clarifying Indiana’s “constructive knowledge” rule for purposes of the limitations statute); *Winfield v. Brandon HMA, Inc.*, 2012 WL 265958, at * 3 (Miss. App. 2012) (“The discovery rule tolls the statute of limitations until a plaintiff should have reasonably known of some negligent conduct, even if the plaintiff does not know with absolute certainty that the conduct was legally negligent” (quoting *Neglen v. Breazeale*, 2005-IA-01309-SCT (Miss. 2006); 945 So.2d 988, 990)); *supra* note 296.

300. See, e.g., *Orlak v. Loyola Univ. Health Sys.*, 885 N.E.2d 999, 1003 (Ill. 2007) (applying Illinois’s four-year repose rule and clarifying that “[t]he statute of repose sometimes bars actions even before the plaintiff has discovered the injury.”); *Joslyn v. Chang*, 837 N.E.2d 1107, 1109–10 (Mass. 2005) (applying Massachusetts’s seven-year repose rule and holding that the repose period is not tolled even when a defendant conceals the cause of action); *Methodist Healthcare Sys. of San Antonio v. Rankin*, 307 S.W.3d 283 (Tex. 2010) (holding that Texas’s ten-year statutory repose period for medical malpractice suits aligns with the state’s Constitution).

301. See, e.g., *Kaminer v. Canas*, 653 S.E.2d 691, 694 (Ga. 2007) (“[I]n most misdiagnosis cases, the two-year statute of limitations and the five-year statute of repose begin to run simultaneously on the date that the doctor negligently failed to diagnose the condition and, thereby, injured the patient.” (emphasis added)); *Rudenauer v. Zafiropoulos*, 837 N.E.2d 278, 281–83 (Mass. 2005) (explaining and applying a repose statute); *Kerr v. Richland Mem’l Hosp.*, 678 S.E.2d 809 (S.C. 2009) (explaining and applying a repose statute).

302. *Rudenauer*, 837 N.E.2d at 281–82. Attention, however, should be paid to cases in which the doctor’s treatment of the patient was continuously negligent. In any such case, the patient can sue the doctor for a mistreatment that has not yet become non-actionable under the repose statute, provided that she can causally connect her injury to that specific mistreatment. See *Schramm v. Lyon*, 673 S.E.2d 241 (Ga. 2009); *Cunningham v. Huffman*, 609 N.E.2d 321 (Ill. 1993).

the doctor's negligence and consequently cannot sue the doctor does not postpone the onset of the repose period.³⁰³

Under these rules, a patient with a serious prospect of injury brought about by her doctor's malpractice has no choice but to wait until this prospect ripens into actual injury. Before this ripening, the patient cannot sue the doctor because she sustained no actionable harm. The ripening, however, may well occur only after the expiration of the repose period—a point in time at which the doctor will be immune against suit. Hence, if the aggrieved patient sues the doctor prior to becoming injured, the court will dismiss her suit because she filed it too early; and if she sues the doctor after becoming injured, the court will dismiss the suit because she filed it too late. The repose doctrine will thus tell the patient that suing her doctor is never a good idea.

The substantive tort reform is misguided. As I demonstrated in Subpart I.A, our system imposes severe restrictions on patients' ability to sue doctors for negligent mistreatment. These restrictions make malpractice liability a low-probability event for average doctors who go by the book.³⁰⁴ A doctor's expected liability payout consequently becomes low as well.

Tort reformers may not take the doctrine as seriously as I do. They may, and probably will, argue that the empirical reality of medical malpractice markedly differs from my doctrinal reality.³⁰⁵ This Article is not an empirical project, and I therefore will not try to respond to this argument. Instead, I will make another theoretical point: if our medical malpractice system is only good on paper but does not properly function in the real world, why would any of its reforms—damage caps and all others—improve its functioning?

Tort reformers have no satisfactory answer to this question. The tort reform's welfare effects are uncertain at best.³⁰⁶ Care providers' diminished exposure to liability may well have weakened their incentive to provide adequate care to patients. Hence, granted that the reform has reduced the costs of medical care and increased its affordability—which is a big and likely unrealistic assumption—patients may now be paying less for less. Furthermore, damage caps cannot extinguish jurors' desire to award high compensation to a seriously injured victim of medical malpractice. In tune with this intuition, Professor Catherine Sharkey has identified the

303. See, e.g., *Rudenauer*, 837 N.E.2d at 282; *Hoffner v. Johnson*, 2003 ND 79, 660 N.W.2d 909, 913–17.

304. Cf. BAKER, *supra* note 19, at 22–44 (demonstrating that negligent doctors are rarely sued by aggrieved patients).

305. For studies of this empirical reality and tort reforms' effects, see Daniel P. Kessler, *Evaluating the Medical Malpractice System and Options for Reform*, 25 J. ECON. PERSP. 93 (2011).

306. See Ronen Avraham & Max Schanzenbach, *The Impact of Tort Reform on Private Health Insurance Coverage*, 12 AM. L. & ECON. REV. 319, 319 (2010).

“crossover” dynamic that dampens damage caps’ intended effects.³⁰⁷ Facing caps on their clients’ noneconomic recovery, patients’ attorneys expand and vigorously pursue their clients’ claims for economic damages. Jurors tend to accept those claims because boosting the aggrieved patient’s economic recovery brings the award closer to the figure they believe is right.³⁰⁸

CONCLUSION

Grant Gilmore, the inventor of the entries/exits taxonomy, applied it to report the “death of contract”: the merging of the classic “bargain” principle into torts and specialized business and consumer laws.³⁰⁹ In this Article, I used Gilmore’s taxonomy to report the opposite development in the area of torts: the resilience of common law rules that form the prevalent doctrine of medical malpractice. On a broad theoretical level, my account of the medical malpractice doctrine fits into Gilmore’s theory of contract. Under this theory, the “death of contract” correlates with the vitality of torts.

But the vitality of torts also depends on the reach of regulatory law. My analysis of the medical malpractice doctrine that evolved at common law speaks unequivocally in the doctrine’s favor. This commendation is at odds with the understandings underlying the tort reform that undercuts patients’ ability to successfully sue doctors and other providers of medical care. According to these understandings, care providers’ liability for malpractice is excessive and needs to be reduced dramatically. To achieve this effect, tort reformers have downsized malpractitioners’ compensation duties and expanded their immunities under statutes of limitations and repose. If this process continues and spreads itself across the nation, its consequence will be the death of torts.

307. Catherine M. Sharkey, *Unintended Consequences of Medical Malpractice Damages Caps*, 80 N.Y.U. L. REV. 391 (2005).

308. *Id.*

309. GILMORE, *supra* note 1, at 87–88.