How Liability Insurers Protect Patients and Improve Safety

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HOW LIABILITY INSURERS PROTECT PATIENTS AND IMPROVE SAFETY

Tom Baker* and Charles Silver**

INTRODUCTION

Forty years after the publication of the first systematic study of adverse medical events,1 the patient safety world has changed. Among other developments, there is greater access to information about adverse medical events and increasingly widespread acceptance of the view that patient safety requires more than vigilance by well-intentioned medical professionals. In this Article, we describe some of the ways that medical liability insurance organizations contributed to this transformation, and we catalog the roles that those organizations play in promoting patient safety today.

While we will not explore in any detail the tort liability regime that provides the raison d’être for medical liability insurance, it is important to emphasize that medical liability insurers exist, and therefore do everything that they do, only because injured patients have the right to legal recourse. Moreover, we know what we know about the landscape of adverse medical events largely because of medical malpractice claims. This is obviously the case for the many important studies that use insurance company closed claim files as the data source. However, people often forget that the most important, large-scale, hospital-based studies of adverse medical events had their origins in efforts by the medical profession to prove there was a better way to address patient injuries than tort litigation.2 While the studies failed to

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achieve that goal, they did achieve something important: documenting that serious adverse medical events are a major public health problem.³

Of course, medical liability insurers know that most patients who bring medical malpractice claims have suffered significant injuries and that many of those claims meet the legal standard for tort liability.⁴ They also know that many of those injuries are preventable and that hospitals and other places where patients receive care still have room for improvement.⁵ Thus, it is hardly surprising that medical liability insurance organizations have been and remain at the forefront of efforts to promote patient safety. Insurers undoubtedly undertake these efforts primarily to improve their internal operations and profitability, but these efforts also support the patient safety movement in health care, as we describe and document in this Article.

Consistent with medical liability insurers’ focus on patient claiming, we begin by discussing how insurers protect patients by providing compensation that helps insurers deal with the consequences of medical mistakes. We then place insurers’ efforts to improve patient safety more directly within the broader context of insurance as a form of

large part on Mills, Medical Insurance Feasibility Study, supra note 1); Troyen A. Brennan et al., Incidence of Adverse Events and Negligence in Hospitalized Patients: Results of The Harvard Medical Practice Study I, 324 NEW ENG. J. MED. 370 (1991) [hereinafter Brennan et al., Harvard Medical Practice Study]. For a summary of closed claim studies as of 2005, see Baker, The Medical Malpractice Myth, supra, at 77–83. For more recent closed claim studies, see, for example, Allen Kachalia et al., Missed and Delayed Diagnoses in The Emergency Department: A Study of Closed Malpractice Claims From 4 Liability Insurers, 49 ANNALS EMERGENCY MED. 196 (2007); Aaron S. Kesselheim et al., Using Malpractice Claims to Identify Risk Factors for Neurological Impairments Among Infants Following Non-Reassuring Fetal Heart Rate Patterns During Labour, 16 J. EVALUATION CLINICAL PRAC. 476 (2010); Eric G. Poon et al., Cognitive Errors and Logistical Breakdowns Contributing to Missed and Delayed Diagnoses of Breast and Colorectal Cancers: A Process Analysis of Closed Malpractice Claims, 27 J. GEN. INTERNAL MED. 1416 (2012); Scott E. Regenbogen et al., Patterns of Technical Error Among Surgical Malpractice Claims: An Analysis of Strategies to Prevent Injury to Surgical Patients, 246 ANNALS SURGERY 705 (2007); Hardeep Singh et al., Medical Errors Involving Trainees: A Study of Closed Malpractice Claims From 5 Insurers, 167 ARCHIVES INTERNAL MED. 2030 (2007).

3. See generally INST. OF MED., TO ERR IS HUMAN: BUILDING A SAFER HEALTH SYSTEM (Linda T. Kohn et al. eds., 2000) (relying in large part on Brennan et al., Harvard Medical Practice Study, supra note 2, and the closed claim studies). On the unsuccessful efforts of some of the Harvard Medical Practice Study researchers to suggest that medical malpractice litigation was a similarly serious problem, see generally Tom Baker, Reconsidering the Harvard Medical Practice Study Conclusions About the Validity of Medical Malpractice Claims, 55 J. LAW, MED. & ETHICS 501 (2005).

4. See, e.g., Baker, The Medical Malpractice Myth, supra note 2, at 77–83; Kachalia et al., supra note 2; Kesselheim et al., supra note 2; Poon et al., supra note 2; Regenbogen et al., supra note 2; Singh et al., supra note 2.

5. See Baker, The Medical Malpractice Myth, supra note 2, at 31–33 (explaining that an Australian health care study found that “half of the medical management injuries were preventable”).
private governance. By doing so, we link this Article to prior work growing out of two scholarly traditions: the law and economics scholarship that took hold in U.S. law schools in the early 1980s and a contemporaneous sociological tradition that entered into legal scholarship through the Law and Society Association. We cannot provide the full genealogy of this “insurance as governance” research in this Article. Our goal here is to strengthen our qualitative account of the role of medical liability insurers in promoting patient safety by providing a theoretical grounding and links to research documenting similar governance activities by insurers in other fields.

As we discuss, medical malpractice insurers promote patient safety in at least six ways: (1) Insurers identify subpar providers in ways that provide the opportunity for other institutions to act. (2) Insurers provide incentives for providers by charging premiums that are based on risk and by refusing to insure providers who are too high-risk. (3) Insurers accumulate data for root cause analysis. (4) Insurers conduct loss prevention inspections of medical facilities. (5) Insurers educate providers about legal oversight and steps that they can take to manage their risks. (6) Finally, insurers provide financial and human capital support to patient safety organizations.

I. LIABILITY INSURERS COMPENSATE VICTIMS FOR INJURIES ATTRIBUTABLE TO MALPRACTICE

Liability insurers protect patients from the consequences of adverse events by compensating them for the losses they sustain. Broadly speaking, these losses come in two forms: (1) financial costs, which may be attributable to need for additional medical treatments, lost income, or other expenses; and (2) debilitation, which may include ongoing pain, physical disfigurement, and psychological impairment.

Researchers have studied the medical malpractice liability system many times, and many aspects of the system are well understood. For example, it is known that, with occasional exceptions, patients must sue to obtain recoveries, and to sue successfully they must hire attorneys. Because malpractice cases are expensive to prepare and are defended zealously by insurers, plaintiffs’ attorneys choose cases with care. Typically, they only accept clients with meritorious claims whose injuries are sufficiently severe to generate sizeable recoveries. The ratio of rejections to acceptances is high.

Even so, plaintiffs’ attorneys often drop malpractice cases after accepting them because evidence acquired during discovery frequently
reveals hidden weaknesses. This pattern of high drop rates despite careful initial assessments likely reflects the underlying distribution of potential cases, in which weak cases (i.e., those in which adverse outcomes occur as a result of natural causes) greatly outnumber strong ones (i.e., those in which medical negligence is the cause). For example, suppose the following: Among patients who experience bad outcomes, the ratio of weak cases to strong ones is 9–1; a lawyer evaluates 100 cases selected at random; and the lawyer sorts the cases accurately 90% of the time. The group of potential cases will then include 90 weak cases and 10 strong cases. The lawyer will correctly reject 81 of the 90 weak cases, and the lawyer will incorrectly reject 1 of the 10 strong cases. The group of accepted cases will then include 9 strong cases and 9 weak ones—a 50-to-50 distribution. Despite the lawyer’s highly accurate evaluation process, the skew in the underlying distribution makes it seem as though the lawyer is as willing to accept weak cases as strong ones.

As the accepted cases proceed through discovery, many are dropped while others are dismissed on motions or settled. Cases with weak merits are more likely to be dismissed, to be dismissed quickly, and to be dismissed with less expense than others. The time from filing to disposition appears to be influenced by insurers’ subjective assessments of claim strength. Insurers dispute claims until they are convinced of their merit, at which point they settle.

Settlements occur before trials, after trials, and often during the appeal process. Regardless of the stage of resolution, empirical studies have shown that the payments patients receive, when they do receive them, conform to certain patterns. First, when the providers are independently-employed physicians, insurers provide all but a minute fraction of the dollars that are paid. Second, payments rarely exceed primary carriers’ policy limits, even when jury verdicts establish that


8. See Fenn & Rickman, supra note 6.


10. On the connection between information about claim quality, claim managers’ assessments, and settlement, see Fenn & Rickman, supra note 6.

the legal value of plaintiffs’ claims is far higher. 12 Third, trial verdicts and settlement payments grow in size as injuries become more severe and the strength of the evidence of malpractice increases. 13 Fourth, a “death discount” exists, meaning that payments tend to be larger when patients sustain grave, permanent injuries than when they die. 14 Fifth, the most serious and persistent defect in the tort system more broadly—other than litigation costs—is the tendency to under-compensate victims with meritorious claims. 15 Juries often send deserving plaintiffs home empty-handed, and severely injured plaintiffs frequently receive smaller payments than they deserve. The more grievous the injury, the more likely and more serious the problem of under-compensation tends to be.

Liability insurance matters from beginning to end, that is, from case selection to the conclusion of litigation. Even when injuries are large and the facts strongly indicate that negligence occurred, plaintiffs’ attorneys often decline requests for representation when providers carry little or no malpractice coverage. In the main, plaintiffs’ attorneys are in the business of collecting from insurers; only in exceptional cases do they go after doctors’ personal assets. An empirical study of Texas found that patients suffered compensation shortfalls because the providers who treated them carried less insurance than needed to compensate them in full. 16 Because Texas has strong debtor-protection laws, settlements above the policy limits that involve payments from physicians are uncommon. 17 For the same reason, Texas settlements may be smaller than those in other states, where the law gives tort claimants better access to providers’ personal assets. 18

As a rough generalization, it is usually true that patients’ recoveries in medical malpractice top out at the limits of doctors’ professional


15. See generally id.

16. See Hyman et al., supra note 12, at 53.

17. See Zeiler et al., supra note 11, at S39.

liability coverage.\textsuperscript{19} But it would be a mistake to view policy limits only as caps on injured patients’ recoveries because the existence of insurance coverage is what enables patients to obtain compensation. Insurers are the bankers for the tort system. Without them, the liability system as we know it could not function.

\section*{II. Medical Malpractice Insurance as Governance}

Medical malpractice insurance not only compensates injured patients \textit{ex post}, it also promotes patient safety \textit{ex ante}. In that regard, it can be useful to think of medical malpractice insurance as serving a regulatory function. We will discuss some of the ways that insurers “regulate” medical practice, but first we would like to place this discussion into the larger context of the “insurance as governance” scholarship that has grown out of two social scientific research traditions. The first is the law and economics tradition that has been so influential in U.S. legal scholarship generally. The second is a sociological tradition that is less familiar to most U.S. legal scholars.

For present purposes, the seminal law and economics theoretical work is that of Steven Shavell. Shavell used a deceptively simple model to describe how the moral hazard of liability insurance could undermine the deterrent effect of tort liability.\textsuperscript{20} As Shavell surely appreciated, this was an old idea, present at the birth of liability insurance in the late 19th Century.\textsuperscript{21} Shavell’s insight, and his impact on law and economics scholarship, came from what he did next: He extended the model to account for risk-based pricing and other moral hazard mitigation activities.\textsuperscript{22} This showed that even if these activities could not entirely restore the deterrent effect of tort liability, the overall social effect of tort liability with liability insurance was welfare-enhancing because of the combination of loss prevention and loss distribution benefits. Shavell’s work firmly linked liability and liability insurance together in the law and economics literature, and it taught legal economists to think about liability insurance in ways that made

\begin{footnotesize}
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\item \textsuperscript{19} Patients’ prospects may be better when they sue surgery centers, hospitals, or other institutions with sizeable assets that are not exempt from creditors.
\item \textsuperscript{21} See generally Kenneth S. Abraham, \textit{The Liability Century: Insurance and Tort Law from the Progressive Era to 9/11} (2008).
\item \textsuperscript{22} See generally Shavell, \textit{supra} note 20.
\end{itemize}
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them more receptive than they might otherwise have been to the qualitative empirical legal scholarship that drew on sociological tradition.23

From sociology, there are two seminal sources for the concept of “insurance as governance.” The first is a series of lectures that Michel Foucault gave in Paris and Berkeley in the late 1970s and early 1980s. Together with work by his French and American students, these lectures introduced a concept of insurance as governance that was more critical and less mechanical than the model-based concept from law and economics.24 Much less easily reduced to simple relationships than the economics of insurance (and less influential in legal academic work as a result), this research relies on qualitative methods and detailed description. This methodology documents how insurance simultaneously “underwrites the ability to play with danger” and “articulates standards of risk management that foster safety and security,” while serving in this and other dimensions as the paradigmatic institution of “governance beyond the state.”25 The second source is Carol Heimer’s research on how insurance companies manage moral hazard in insurance contracts.26 Her research revealed some of the diverse and sometimes unpredictable ways that insurance organizations and institutions accomplish the abstract, moral hazard mitigation assumed in Shavell’s models.27

The legal scholarship most strongly influenced by this sociological research includes studies of fraternity risk management, corporate governance, employment practices, police misconduct, and lawyers’


27. Carol Heimer was most interested in using insurance examples to demonstrate that markets need hierarchies and organizations, and she was less interested in developing a sociology of insurance.
professional liability. In each case, researchers have found insurers engaging in loss prevention efforts, with the conspicuous exception of directors and officers liability insurance sold to large, publicly traded companies. While many fields remain to be explored in detail, there is now a large body of research documenting what Ben-Shahar and Logue describe as the “insurance-as-regulation paradigm” that provides indirect support for our claim that medical liability insurance organizations promote patient safety \textit{ex ante}.

\textbf{A. Liability Insurers Help Identify Negligent Providers}

Although providers and their advocates often say otherwise, empirical research suggests that malpractice settlements are both good indicators of past negligence and good predictors of future claims. They are good indicators because both the likelihood and the size of payments correlate with the strength of the evidence of medical malpractice. They are good predictors because the number of past settlements correlates with the likelihood that more payments will be made. Settlements can serve as good proxies in these ways because, generally, liability insurers are willing to pay claimants, and physicians are willing to consent to settlements only when good evidence of malpractice exists.


30. See Ben-Shahar & Logue, \textit{supra} note 23, at 247.

31. See Lawrence E. Smart, \textit{A Comparative Assessment of the PIAA Data Sharing Project and the National Practitioner Data Bank: Policy, Purpose, and Application}, 60 \textit{Law & Contemp. Probs.} 59, 68 (1997) (“Monetary settlements to patients are often not indicative of negligent treatment by a physician.”).

32. See generally Studdert et al., \textit{Claims, Errors, and Compensation}, \textit{supra} note 9.

33. See David M. Studdert et al., \textit{Prevalence and Characteristics of Physicians Prone to Malpractice Claims}, 374 \textit{New Eng. J. Med.} 354, 358 (2016); Anna Almendrala, \textit{Many Doctors Who Face Malpractice Suits Are Serial Offenders}, \textit{Huffington Post} (Jan. 29, 2016, 11:56 AM), https://www.huffingtonpost.com/entry/doctors-malpractice-research_us_56a94bece4b05e4e37033d00 (explaining that doctors who have already paid multiple malpractice settlements are more likely to be involved in another settlement).
Given the diagnostic and predictive value of settlements, it should not be surprising to learn that the health care system uses them to identify providers who may pose dangers to patients. For example, in 1986, Congress created the National Practitioner Data Bank (NPDB) as a repository for information about malpractice payments, state disciplinary actions, and clinical practice restrictions. The NPDB includes reports on physicians, nurses, dentists, and other professionals filed by hospitals, liability insurers, state medical boards, and other entities.34

In theory, the NPDB can help state medical licensing boards identify dangerous physicians. When doctors seek to renew their licenses or apply for licenses in new states, the boards can query the database and learn about problems in applicants’ pasts. In practice, however, boards consult the NPDB infrequently. “In 2017, 30 state medical boards in the U.S. backgrounded a physician using the database fewer than 100 times, according to numbers from the Health Resources and Service Administration. Thirteen boards didn’t even check it once.”35 As a result, many physicians with checkered histories slip through the cracks. From 2011 to 2016, “more than 500 physicians” did so.36 These doctors had troubled pasts, including prescription drug problems, unsafe or unnecessary surgeries, and improper sexual relations with patients. Despite having been “chastised by one state medical board,” they were “able to hang their shingles at a new address with a ‘clean’ license” because the NPDB was not queried.37

Hospitals are required to consult the NPDB whenever new practitioners apply for privileges and every two years thereafter. The consequence of failing to query the database when required is that a hospital “is presumed to have knowledge of any information reported to the NPDB concerning the practitioner.”38 This information may be “use[d] in litigation against the hospital” by an attorney representing an injured patient.39 In fact, hospitals take the duty to consult the NPDB seriously, and the information it contains often affects their


36. Id.


38. Practitioner Data Bank Fact Sheet, supra note 34, at 2.

39. Id.
credentialing decisions. ᵃ⁻⁴⁰ “[I]n its first 13.3 years of operation . . . the NPDB processed more than 32 million queries.” ᵃ⁻⁴¹ Hospitals made 34% of them. ᵃ⁻⁴²

Hospitals appear to be less serious about reporting to the NPDB, however. One study found that more than two-thirds of the hospitals examined reported no adverse events to the NPDB over a five-year span. ᵃ⁻⁴³ Another estimated that 75% of “potentially reportable actions” and 60% of “unquestionably reportable actions” went unreported. ᵃ⁻⁴⁴ These omissions reduce the NPDB’s value.

Providers’ use of the so-called corporate shield impairs the NPDB’s completeness too. The shield is employed when “the medical corporation for which the doctor works is named in the suit, and the doctor is either not originally named or is released specifically for the purpose of avoiding a report to the NPDB.” ᵃ⁻⁴⁵ Although the extent to which this tactic reduces the number of payments that are reportable to the NPDB is not known, some authors believe that one-half of otherwise reportable adverse events are deflected by this means. ᵃ⁻⁴⁶

Given Congress’ decision to create the NPDB, it seems natural to regard the use of the “corporate shield” as a vice that denies the NPDB’s users of valuable information. But some advocates of early dispute resolution and quality improvement regard it as a virtue and discuss their use of the shield openly.

The University of Michigan Health System avowedly uses the corporate shield, and its settlements are generally in the institution’s name. UMHS is a staff-model institution in which physicians are employees rather than independent contractors, hence under this approach “reporting of individual caregivers in medical malpractice claims in the National Practitioner Data Bank is rare. However, full claims histories are maintained and reported for each involved caregiver, as required.” In other words, UMHS emphasizes thorough internal peer review as part of its overall quality process. Even though it rarely reports medical malpractice payments, it still ac-

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41. Id. at 32.
42. Id.
43. See Laure-Mae Baldwin et al., Hospital Peer Review and the National Practitioner Data Bank: Clinical Privileges Action Reports, 282 JAMA 349, 351 (1999).
44. Waters et al., supra note 40, at 37.
46. See Haavi Morreim, Malpractice, Mediation, and Moral Hazard: The Virtues of Dodging the Data Bank, 27 OHIO ST. J. ON DISP. RESOL. 109, 138 (2012) (“By the mid-1990s, somewhere around 50% of otherwise-required NPDB reports were thought to be diverted via the corporate shield.”).
actively reports adverse actions on a provider’s privileges or credentials to the NPDB.\textsuperscript{47}

Whether the benefits of the “corporate shield” exceed its costs is unknown, but the several authors who recommend eliminating the requirement to report malpractice payments to the NPDB presumably think the benefits do exceed the costs.\textsuperscript{48}

Because malpractice settlements send reliable, if noisy, signals of provider quality, state medical boards often use them to trigger investigations of physicians. For example, the Texas Medical Board is required to review “the medical competency of a licensee if three or more separate lawsuits and/or settlements are reported to the board based on health care liability claims within a five-year period.”\textsuperscript{49} Physicians licensed in California are required to report “civil judgments, settlements, and arbitration awards” to that state’s medical board too.\textsuperscript{50} In effect, these governmental bodies rely on private litigation. In particular, the governmental bodies rely on liability insurers’ willingness to make payments to identify negligent providers instead of expending the resources that would be needed to do so themselves. By enacting tort reform laws that make settlements less common, many states have prevented this arrangement from working as it previously did.\textsuperscript{51}

\begin{addmargin}{1em}
\textbf{B. Liability Insurers Provide Incentives for Patient Safety by Charging Risk-Adjusted Premiums and Denying Coverage to High-Risk Providers}
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The conventional wisdom has long been that medical malpractice insurers do not charge risk-based premiums. Thus, medical liability insurance premiums do not provide the usual loss prevention incentives of other kinds of liability insurance, except to the extent that the leaders of a medical specialty society decide to take on a goal of re-

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\item \textsuperscript{47} Id. at 140 (quoting Allen Kachalia et al., Liability Claims and Costs Before and After Implementation of a Medical Error Disclosure Program, 153 Annals Internal Med. 213, 214 (2010)).
\item \textsuperscript{48} Id.; see also William M. Sage et al., Bridging the Relational-Regulatory Gap: A Pragmatic Information Policy for Patient Safety and Medical Malpractice, 59 Vand. L. Rev. 1263, 1264 (2006).
\item \textsuperscript{49} 22 Tex. Admin. Code § 176.8 (2017).
\item \textsuperscript{50} Julianne D’Angelo Fellmeth & Thomas A. Papageorge, Final Report: Medical Board of California Enforcement Program Monitor 5 (2005).
\item \textsuperscript{51} On the impact tort reform laws have had on disciplinary actions by state medical boards, see generally Paul Jesilow & Julianne Ohlander, The Impact of Tort Reforms on the Sanctioning of Physicians by State Licensing Boards, 7 J. Empirical Legal Stud. 117 (2010).
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ducing the liability exposure of their specialty. 52 Although this conventional wisdom may have been true for physicians, liability insurance for hospitals and other health care enterprises has traditionally been underwritten on an individualized, risk-adjusted basis. 53

Three trends are increasing the degree to which health care enterprises’ medical liability insurance arrangements are risk-based. First, like large organizations in the United States generally, 54 health care organizations are retaining more risk through self-insured retentions, captive insurance, 56 and mutual insurance arrangements involv-


53. See generally MICHELLE M. Mello, UNDERSTANDING MEDICAL MALPRACTICE INSURANCE: A PRIMER (2006) (reporting that experience rating is not used for physicians, but that 25% of hospitals’ total insurance premiums are based on experience).

54. For a discussion of the trend that corporations in general are retaining more risk, see SCOTT E. HARRINGTON & GREGORY R. NIEHAUS, RISK MANAGEMENT AND INSURANCE 527 (2d ed. 2004) (reporting that “medium to large business insurance policies often include relatively large deductibles or self-insured retentions”); Tom Baker, The Shifting Terrain of Risk and Uncertainty on the Liability Insurance Field, 60 DEPAUL L. REV. 521, 535 (2011) (“There is one major cross-cutting development in the commercial lines marketplace that is worth singling out: businesses of all kinds are retaining greater levels of risk, as represented by the rising deductibles and self-insured retentions.”).

55. For an account of the general phenomenon that health care organizations are also retaining more risk, see Randall R. Bovbjerg, Beyond Tort Reform: Fixing Real Problems, 3 IND. HEALTH L. REV. 3, 7 (2006) (“More medical providers have also turned to unconventional, alternative risk mechanisms such as risk-retention groups, or, for hospitals, self insurance. Like claims made policies, these arrangements offer somewhat less protection than major carrier coverage: They have less capital for emergencies, and they are not backstopped by state guaranty funds that protect insureds in the case of conventional insurers’ insolvency.”).

56. For more information regarding self-insured retentions and captive insurance, see RISK MANAGEMENT HANDBOOK FOR HEALTH CARE ORGANIZATIONS 19 (Robert L. Carroll ed., 2009) [hereinafter RISK MANAGEMENT HANDBOOK] (“One strategy for managing an identified risk is risk retention. This treatment strategy involves assuming the potential losses associated with a given risk and making plans to cover the financial consequences of such losses. The retention options open to health care organizations include current expensing of losses, using an unfunded loss reserve (an accounting entry denoting a potential liability to pay for a loss), using a funded loss reserve (a reserve backed by set-aside funds within the organization), borrowing funds to pay for losses, and providing insurance through an affiliated captive insurer.”); Margo Schlanger, Operationalizing Deterrence: Claims Management (in Hospitals, a Large Retailer, and Jails and Prisons), 2 J. TORT L. 1, 49 (2008) (citing Michelle M. Mello et al., Hospitals’ Behavior in a Tort Crisis: Observations from Pennsylvania, 22 HEALTH AFF. 225, 229 (2003)) (“[L]arge teaching hospitals very often use a form of self-insurance known as captive insurers, in which the hospital owns the primary insurer and therefore retains all but catastrophic risk.”). For an introduction to captive insurance companies, see, for example, INT’L ASS’N OF INS. SUPERVISORS, ISSUES PAPER ON THE REGULATION AND SUPERVISION OF Captive INSURANCE Companies (Oct. 2006), https://www.iaisweb.org/page/supervisory-material/issues-papers/file/34279/issues-paper-on-regulation-and-supervision-of-captive-insurance-companies-october-2006.
Second, the consolidation of health care organizations means that an increasingly large share of health care is provided in hospitals and other organizations with the scale needed to take advantage of these alternative risk mechanisms. Third, the de-

57. For information regarding mutual insurance arrangements involving multiple organizations, see DONNA K. HAMMAKER & THOMAS M. KNADIG, HEALTH CARE MANAGEMENT AND THE LAW 60 (2d ed. 2018) (“The University of Pennsylvania (along with 17 other colleges and universities) were investors and early backers of Collegiate Health Care Corp. (CHCC), the nation’s first interuniversity managed care organization. CHCC attempted to develop a mutual health insurance plan for college students. More than 100 schools participated in the nationwide effort before the concept was abandoned, primarily because of its complexity.”); Agnus Smith, Co-Op Health Insurance – Cooperative Healthcare Plans, FIRST QUOTE HEALTH (June 14, 2018), https://www.firstquotethealth.com/health-insurance-news/co-op-health-insurance (“Health insurance co-ops are a type of mutual insurance plan. A mutual insurance plan is a plan that is owned and operated by the members of the group that owns the plan. All of the money that is earned by the group directly benefits its members by reducing costs (e.g. premiums), being distributed to the members, or being held within the group to benefit the entire group, which is why co-op health insurance plans are so affordable.”).

58. For documentation regarding the consolidation of health care organizations, see Robert I. Field, Government as the Crucible for Free Market Health Care: Regulation, Reimbursement, and Reform, 159 U. PA. L. REV. 1669, 1719–20 (2011) (“During the 1990s, as large, national managed care companies swallowed smaller local ones, their bargaining clout drove down fees paid to hospitals and physicians in many markets. This, in turn, led many providers to consolidate into health systems, hospital chains, and large physician-group practices to try to gain a better negotiating position. By the end of the 1990s, much of American health care had become a more centralized enterprise. In effect, the rise of managed care revised the organizational structure of health care provision overall . . . .”). On the movement of physicians into salaried staff positions with hospitals, see Bonnie Darves, Understanding the Physician Employment “Movement”, NEJM CAREERCENTER (July 23, 2014), http://www.nejmcareercenter.org/article/understanding-the-physician-employment-movement/. On consolidation in the hospital sector, see Matthew Kandrach, Hospital Consolidation Is Driving Up Consumer Costs, REALCLEARHEALTH (Feb. 1, 2018), https://www.realclearhealth.com/articles/2018/02/01/hospital_consolidation_is_driving_up_consumer_costs_110764.html. For a discussion of the relationship between scale and alternative risk mechanisms, see JOHN KOSTER ET AL., N=1: HOW THE UNIQUENESS OF EACH INDIVIDUAL IS TRANSFORMING HEALTHCARE 101, 106 (2015) (“Scale matters in delivering coordinated care. To deliver care across the continuum and to effectively manage the health of populations, scale is necessary. . . . Collaboration in information and data management is rapidly growing. The scale necessary to fully utilize big data and predictive analytics is beyond any single organization. Cloud computing is, by definition, scalable.”); RISK MANAGEMENT HANDBOOK, supra note 56, at 202 (“Health care organizations with collaborative ties have the benefit of identifying and analyzing adverse events and occurrences on a larger scale than is possible with data generated only internally.”); Mu-Sheng Chang, Alternative Risk Transfer: Evidence of Self-Insurance Among Hospitals in Pennsylvania for Workers’ Compensation Liability, 27 J. INS. REG., Winter 2008, at 59, 69–70 (“Even small or medium firms can self-insure under a consolidated self-insurance program. Therefore, in self-insurance, it is crucial whether a hospital, especially of small or medium size, is a member of a health care system. The system—an alliance of numerous health care providers—may experience the benefit of scale and/or scope economies by providing a complete spectrum of medical services and exercising purchasing power in obtaining supplies. Affiliated hospitals in a health care system are more likely to make similar decisions in assuming their WC liability. Due to economies of scale, the presence of a health care system offers an incentive for a hospital in the choice of self-insurance.”); Martin Gaynor & Deborah Haas-Wilson, Change, Consolidation, and Competition in Health Care Markets, 13 J. ECON. PERSPECTIVES 141, 147
cline of self-employed physicians means that an increasingly large share of physicians work in an “enterprise insurance” environment.59

Providing the liability insurance for the physicians and other providers who practice in enterprise facilities gives the enterprise obvious incentives to manage the liability exposure of those providers. Perhaps less obviously, enterprise liability insurance gives the administrative leaders of the hospital or medical school a lever to control physicians that is more fine-tuned than the “shape up or ship out” control that can be hard to exercise when a physician has tenure or a large practice. For example, in an informal interview we conducted with a former university official we learned of an instance in which a university was able to use its control over liability insurance for faculty members to stop a tenured medical school clinical faculty member from continuing to engage in a high-risk procedure.60

Moreover, Shirley Svorny’s qualitative research on the medical liability insurance market suggests that the conventional wisdom no longer holds true even for physicians who purchase their own medical malpractice insurance.61 Individual medical malpractice insurers generally charge premiums based on the location and medical specialty of the physician, not the physician’s individual experience or characteristics.62 But not all insurers are willing to insure all physicians. As Svorny explained, “[t]hough some experience rating takes place among physicians insured by a specific carrier, most experience rating takes place across carriers.”63 She reported three categories of insurers: (1) insurers that “pick physicians with spotless records,” (2) insurers that “underwrite physicians with somewhat higher risk,” and (3) surplus lines carriers that are willing to insure physicians who cannot get other coverage, for premiums that vary from “150 to 500 percent

60. See Interview with former university official (Dec. 21, 2017) (notes on file with authors).
61. See Svorny, supra note 52, at 4–5.
62. Id. at 6.
63. Id. at 6.
of those in standard markets.” Svorny quoted a medical liability insurance underwriter as follows:

I’m surprised that people have difficulty believing physicians’ malpractice premiums are impacted by the practitioner’s loss experience. Virtually every professional liability line has a premium modification formula for prior losses. Virtually every insurance coverage line discerns, on the basis of price risks with and without claims. Large risks—with credible experience—are specifically loss rated by actuaries. Small risks or risks without enough credibility on a stand-alone basis are pooled with other like/kind risks and within that pool, risks with prior losses will pay more.

In sum, medical liability insurance premiums are risk-based to a significant extent and thus, do provide the kind of loss prevention incentives that are assumed in Shavell’s economic models. How medical provider organizations respond to those incentives is, of course, an empirical question. Put simply, our point here is that risk-based pricing is one way that medical liability insurance promotes patient safety.

C. Liability Insurers Accumulate Data for Root Cause Analysis

Insurers’ claim files often contain a wealth of information that can help identify the root causes of medical errors, and they can also be used to reduce both the likelihood of mistakes and the severity of the injuries they cause. The first association of medical professionals to have examined insurers’ claim files for these purposes appears to be the American Society of Anesthesiologists (ASA), whose Closed Claim Project began in 1985. The ASA’s database includes thousands of anesthesia-related malpractice claims provided by more than thirty-five participating liability carriers. Over decades, hundreds of anesthesiologists have examined these files, which typically contain “hospital records, anesthetic records, narrative statements of involved personnel, expert and peer reviews, deposition summaries, outcome reports, and settlement or award details,” and which provide “recorded findings using a standard data collection form.” The ASA has published dozens of studies based on their findings.

64. Id. at 7; see also Brandon Stahl, High-risk Health Providers Stay in Business Thanks to State Insurance, STAR TRIBUNE (May 6, 2013, 6:16 PM) (describing how the Minnesota Joint Underwriting Association, a state-created insurer of last resort, provides coverage for doctors who cannot obtain conventional insurance).

65. Svorny, supra note 52, at 8.


67. Id.

68. Id.
By shedding light on the types of injuries that occur and their frequency, the ASA’s closed claim studies generated professional support for changes in anesthesia procedures that protected millions of patients from harm. Following the completion of a study published in 1990, the ASA’s Committee on Standards promulgated new treatment guidelines that required pulse oximetry and end-tidal carbon dioxide verification of endotracheal intubation, and that governed the management of difficult airways. By reducing the frequency and severity of injuries, these guidelines also protected anesthesiologists from malpractice claims and made their liability coverage cheaper. In To Err Is Human, the Institute of Medicine’s landmark report on medical errors, the ASA’s Closed Claim Project was touted as a model of patient safety.69

Even so, other professional societies were slow to follow the ASA’s lead. Instead of devoting resources to the study of root causes, they sought to reduce their members’ exposure to liability claims by lobbying for damages caps and other restrictions on lawsuits. These efforts benefited their members, but likely harmed patients by reducing the pressure the liability system exerted on providers to improve patient safety.

Eventually, however, a few other professional associations saw the value of closed claims studies and followed suit. The American Association of Nurse Anesthetists, a group whose research interests parallel those of the ASA, published its first study of closed claims involving Certified Registered Nurse Anesthetists in 2001.70 In 2012, an examination of “[t]he websites of all recognized medical specialties in the United States” found that obstetricians had also stepped up to the plate.71 One study of closed claims involving brain-injured children “led to the formulation and implementation of a comprehensive redesign of the patient safety process,” which was employed:

[A]t the Hospital Corporation of America, the nation’s largest private healthcare delivery system [with approximately 220,000 deliveries performed annually]. Working with a clinical advisory board and work group consisting of physicians and nurses, uniform processes, procedures, and checklists were developed. Every member of the obstetric team was empowered and required to intervene and halt any process deemed to be dangerous, and effective peer-review policies were instituted. Improved perinatal outcomes were

69. INST. OF MED., TO ERR IS HUMAN, supra note 3, at 144–45.
70. See generally Lorraine M. Jordan et al., Data-driven Practice Improvement: The AANA Foundation Closed Malpractice Claims Study, 69 AM. ASS’N NURSE ANESTHETISTS J. 301 (2001).
realized with a lower maternity and fetal injury rate, lower primary cesarean delivery rate, and reduced rates of litigation.\footnote{72}{Id. at 1401 (citing Steven L. Clark et al., \textit{Improved Outcomes, Fewer Caesarean Deliveries, and Reduced Litigation: Results of a New Paradigm in Patient Safety}, 199 \textit{A M. J. OBSTETRICS & GYNECOLOGY} 105.e1 (2008)).}

A second study by obstetricians used payouts and sentinel events in claims involving brain-injured newborns delivered at a major hospital in New York “to compare the delivery of care before and after the implementation of safety initiatives. The authors reported that the average compensation payment decreased dramatically from more than $27 million per year to approximately $2.5 million per year and that sentinel events decreased from five per year to none.”\footnote{73}{Id. (citing Amos Grunebaum et al., \textit{Effect of a Comprehensive Obstetric Patient Safety Program on Compensation Payments and Sentinel Events}, 204 \textit{A M. J. OBSTETRICS & GYNECOLOGY} 97, 97 (2011)).} Claim-based studies of obstetrics patient safety programs introduced at other hospitals have since yielded similar results.\footnote{74}{See Christian M. Pettker et al., \textit{A Comprehensive Obstetric Patient Safety Program Reduces Liability Claims and Payments}, 211 \textit{A M. J. OBSTETRICS & GYNECOLOGY} 319, 319 (2014) (explaining that Yale-New Haven Hospital’s obstetric program decreased the number of claims and payments significantly); William Riley et al., \textit{Decreasing Malpractice Claims by Reducing Preventable Perinatal Harm}, 51 \textit{HEALTH SERVS. RES.} 2453, 2453 (2016) (“There is a significant reduction in the number of perinatal malpractice claims paid, losses paid, and indemnity payments . . . . following interventions to improve perinatal patient safety and reduce perinatal harm.”).}


[In the two decades that followed implementation of the ASA safety guidelines, the posture of the obstetric community had been one of inaction. However, once the benefit of safety measures in the obstetric field were clear, one author that investigated this subject remarked that “Malpractice loss is best avoided by reduction in adverse outcomes and the development of unambiguous practice...\textsuperscript{72}”]}
guidelines, rather than by attempting to make unusual care more ‘defensible’ through the use of nonspecific guidelines.”76

When shown that they can help patients while also protecting themselves from malpractice suits, physicians’ attitudes toward guidelines can change.

Although anesthesiologists and obstetricians appear to be the only medical professionals to have developed treatment guidelines after studying closed malpractice claims, other providers are also using closed claims to enhance their understanding of medical errors. Recent years have seen the publication of closed claim studies by nurse practitioners,77 cardiologists,78 radiologists,79 and ophthalmologists,80 for example. But it remains true that professional societies could mine this resource much more deeply than they have.

Liability insurers and their industry groups have facilitated and supplemented the work of physicians and their professional societies by sharing closed claim data, providing analyses, and developing treatment guidelines of their own. The Doctors Company has produced closed claim studies of malpractice cases in which the defendant providers were nurse practitioners, general practitioners, obstetricians, cardiologists, plastic surgeons, hospitalists, and other physicians.81 It has also produced clinical practice guidelines for several specialties and for specific treatments, such as removal of pigmented skin lesions82 and handling hospitalized patients who are obese.83 Working with the National Patient Safety Foundation, The Doctors Company Foundation sponsored RCA2: Improving Root Cause Analyses and Actions to Prevent Harm, a volume whose purpose “is to ensure that efforts undertaken in performing RCA2 [Root Cause Analysis and Action] will

76. Pegalis & Bal, supra note 71, at 1401 (quoting Clark et al., supra note 72, at 105.e2).
78. See, e.g., William J. Oetgen, Characteristics of Medical Professional Liability Claims in Patients with Cardiovascular Diseases, 105 AM. J. CARDIOLOGY 745 (2010).
result in the identification and implementation of sustainable systems-based improvements that make patient care safer in settings across the continuum of care.”

The Controlled Risk Insurance Company (CRICO), created by the Harvard Medical organizations in the mid-1970s to provide liability insurance for those organizations, used closed claim data to improve the quality of care received by breast cancer patients.

In the 1990s when many physicians were being sued for failure to diagnose breast cancer, CRICO found their insured physicians had no uniform approach to monitoring breast lumps. The insurance firm developed a standard treatment algorithm, offered insured physicians who used it an insurance premium discount, and dramatically reduced litigation.

Today, CRICO has an ongoing project known as Strategies for Patient Safety, which “explores the myriad ways 30-plus years of analyzing medical malpractice data can guide physicians and nurses practicing amidst today’s patient safety risks.” CRICO calls its medical malpractice database the Comparative Benchmarking System (CBS), and boasts that CBS contains “approximately 30 percent of all US malpractice cases.” With nearly 400,000 cases involving 175,000 physicians and 400 hospitals, CBS is a remarkably rich source of information for many aspects of patient safety.

CRICO has mined CBS extensively. Its website lists an array of evidence-based guidelines, offers extensive decision support tools and treatment algorithms, provides detailed checklists for physicians to follow, and enables physicians to evaluate themselves by completing testing modules. Other insurance companies draw upon CBS too, including The Doctors Company and MMIC, whose biannual publication *Brink* puts the latest findings from closed claim studies into insured physicians’ hands.

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89. See Brink Magazine, MMIC, https://www.mmicgroup.com/resources/stay-current/brink-magazine (last visited Mar. 12, 2018). MMIC was formerly known as the Midwest Medical Insur-
The Medical Profession Liability Association (formerly known as the Physician Insurers Association of America) has long maintained a Data Sharing Project (DSP) that produces reports for its members. The DSP is designed:

[To provide evidence of the medical conditions, procedures, and practices that give rise to medical malpractice claims. It relies on a complex code system incorporating the International Classification of Diseases, 9th. Clinical Modification (ICD-9), to identify medical conditions and treatments, and on other systems of specialized codes to account for medico-legal issues.]

In doing so, the DSP “provides key information for . . . insurance companies and stakeholders with an interest in patient safety . . . [and includes] . . . the necessary statistical information needed to enhance risk management in medicine.”

Academic researchers have also used closed claim databases to generate a host of insights concerning patient safety. With funding from CRICO and the Agency for Healthcare Research and Quality, a team of researchers led by David M. Studdert studied a dataset that covered approximately 33,000 physicians, 61 acute care hospitals, and 428 outpatient facilities, using claim files provided by malpractice insurance companies across the United States. Dubbed the Malpractice Insurers’ Medical Error Surveillance and Prevention Study (MIMESPS), the research effort produced eight studies of health care quality and patient safety, plus three articles on the operation of the malpractice liability system. On the former topic, the problems addressed included instruments and sponges left inside surgery patients,

90. Smarr, supra note 31, at 59.


92. See generally Tejal K. Gandhi et al., Missed and Delayed Diagnoses in the Ambulatory Setting: A Study of Closed Malpractice Claims, 145 ANNALS INTERNAL MED. 488 (2006); Atul A. Gawande et al., Risk Factors for Retained Instruments and Sponges After Surgery, 348 NEW ENG. J. MED. 229 (2003); Caprice C. Greenberg et al., Patterns of Communication Breakdowns Resulting in Injury to Surgical Patients, 204 J. AM. C. SURGEONS 533 (2007); Kachalia et al., supra note 2; Mary R. Kwaan et al., Incidence, Patterns, and Prevention of Wrong-Site Surgery, 141 ARCHIVES SURGERY 353 (2006); Regenbogen et al., supra note 2; Selwyn O. Rogers et al., Analysis of Surgical Errors in Closed Malpractice Claims at 4 Liability Insurers, 140 SURGERY 25 (2006); Singh et al., supra note 2.

93. See generally Michelle M. Mello & David M. Studdert, Deconstructing Negligence: The Role of Individual and System Factors in Causing Medical Injuries, 96 GEO. L.J. 600 (2008); Studdert et al., Claims, Errors, and Compensation, supra note 9; David M. Studdert & Michelle M. Mello, When Tort Resolutions Are “Wrong”: Predictors of Discordant Outcomes in Medical Malpractice Litigation, 36 J. LEGAL STUD. 47 (2007).
wrong-site surgery, mistaken and delayed diagnoses, and communication breakdowns, among others. MIMESPS used physician-reviewers to determine whether errors occurred and to establish causes, insofar as possible.

MIMESPS has had important collateral effects. For example, in hope of taking the MIMESPS approach a large step further, the Stanford University Medical Center built an Enterprise Risk Management system that combines closed claim data analysis with other sources of information with the goal of identifying both risks to patients and opportunities to improve.94 Seeing the value that MIMESPS extracted from closed claim data, commentators have also called for greater access to medical malpractice settlements, the terms of which are often confidential.95

In view of the secular decline in the volume of medical malpractice cases, closed claims may be a less valuable resource in the future than they were in the past.96 Whether they continue to have significant value depends on several factors. First, to an unknown degree, the reported decline may reflect more widespread use of the “corporate shield,” discussed above, rather than a real reduction in claim frequency. If that is so, then hospitals and insurers will continue to have access to valuable information, and researchers with whom they share data will as well. To the extent that the decline in claim frequency reflects the progressive exclusion of small claims from the liability system, information will be lost, but larger claims, which tend to involve


95. See generally Chaffee, supra note 85. On confidentiality provisions in settlements, see William M. Sage et al., Use of Nondisclosure Agreements in Medical Malpractice Settlements by a Large Academic Health Care System, 175 JAMA Internal Med. 1130, 1131–33 (2015). In addition to utilizing closed claim data put together by malpractice insurers, hospitals and other medical providers often benefit from and analyze their own claim management data. Margo Schlanger suggests that “claim management practices . . . [in hospitals] produce an important secondary effect of enabling and encouraging a variety of harm-prevention or accident-avoidance measures.” See Schlanger, supra note 56, at 8 (suggesting that in hospitals, large retailers, and prisons, claim management strategies and personnel contribute to harm prevention). Like insurers, hospitals collect information about possible claims, through various reporting systems. “[E]very hospital has in place a policy for the reporting, investigation (‘root cause analysis’), and systemic response (‘action plan’) to every ‘sentinel event.’” Schlanger, supra note 56, at 28. Hospitals then analyze claim files and incident reports, allowing them to “assess safety and quality of care problems . . . [and] design useful interventions.” Schlanger, supra note 56, at 31.

severe injuries and solid evidence of negligence, will remain. Arguably, the latter cases identify defects in delivery systems that are most worth fixing.

D. Liability Insurers Conduct Loss Prevention Inspections of Medical Facilities

Medical malpractice insurers routinely conduct loss prevention inspections of medical facilities in two contexts: (1) as part of the underwriting process when providing liability insurance for the facility and (2) as a service offered outside of the underwriting process, typically without a fee to the facilities that they insure. Documenting the full extent of underwriting inspections would require extensive qualitative research, but the conventional wisdom within the industry is that such inspections are a routine occurrence.97 Medical liability insurers advertise the fact that they provide loss prevention services outside of the underwriting process,98 and we have personal knowledge of major hospital systems that have paid for such services from medical liability insurers.

Examples of how medical liability insurers advertise loss prevention inspection services to their members include:

- Medical Liability Mutual Insurance Company (MLMIC) provides policyholders with “on-site risk management surveys/audits.”99
- ProAssurance provides “a confidential on-site risk assessment to help identify opportunities for improvement.”100
- Illinois State Medical Inter-Insurance Exchange (ISMIE) provides “every policyholder the opportunity to undergo an on-site assessment of their medical professional liability risks” with “personalized feedback and recommendations to help address any potential issues.”101
- CHART Risk Retention Group offers members “onsite and online assessment surveys.”102

97. See Interview with senior medical liability insurance industry professional who has filled multiple roles (Dec. 21, 2017) (notes on file with authors).
99. Id.
The Doctors Company offers members the ability to “request a comprehensive on-site survey by [one of its] patient safety/risk management experts.”

Medical Mutual Group encourages members to request an “on-site risk assessment,” which is followed by “[s]pecific recommendations . . . outlined in a report.”

MMIC provides policyholders with “customized on-site assessments [t]o help identify areas of risk, and create actionable plans.”

Norcal Group offers policyholders “onsite risk management services.”

E. Liability Insurers Educate Medical Providers About Legal Oversight and Risk Management

Many medical malpractice insurers provide educational services to medical practitioners, one of the most common services being free courses on topics related to medical liability that meet state Continuing Medical Education (CME) requirements. Forty-six states have CME requirements, and we have gathered that free, insurer-provided courses are available in all of them. As well, many insurers offer premium discounts as an incentive for participation in loss prevention programs. Medical malpractice insurers also provide educational materials for physicians through their websites, such as resource docu-


108. See, e.g., Starnes, supra note 107, at 255 (encouraging “physicians who are insured by ProAssurance . . . to earn up to 2.5% premium credit by taking advantage of [its] online loss prevention seminar program”).
ments, checklists, sample forms, and podcasts. Some offer a help-line that policyholders may call to receive specialized advice and consultation.

As well as courses, seminars, and online materials, some medical malpractice insurers now offer simulation-based training and teamwork training to policyholders. CRICO seems to be at the forefront of this new risk management strategy, demonstrating that “there should be an active partnership between the malpractice carrier and the health care organization.” CRICO “has developed premium incentive plans that have incorporated simulation-based training and/or teamwork training” in three specialty areas: anesthesiology, obstetrics, and laparoscopic surgery. CRICO has also been involved in developing a “standardized multi-institutional operating room team training program using simulation” designed to practice teamwork, communication skills, assertiveness, and the use of the World Health Organization Surgical Safety Checklist. In order to incentivize participation in its simulation training, CRICO offered premium discounts, CME credits, and compensation for lost wages. Overall, the pilot test of this training system showed that this form of training is not only feasible, but can have a positive impact on its participants.

Medical malpractice insurers are specially situated to develop and provide these forms of safety training. Insurers and providers have a shared mission to improve patient safety and avoid preventable injuries, even if insurers are motivated by the less than altruistic goal of avoiding financial exposure. However, because providers often...

110. See, e.g., Starnes, supra note 107, at 255; Risk Management Solutions, supra note 107.
112. Other medical malpractice insurers have also begun developing simulation trainings. See e.g., id. (offering members “[o]n-request access to maternal, pediatric, infant, and central line simulators”).
114. Id.
116. Id. at 403.
117. Id. at 405.
118. Hanscom, supra note 113, at 985.
have competing priorities and lack the requisite resources to create harm prevention programs, medical malpractice insurers are in a better position to fill in the gaps and develop patient safety programs.\footnote{119} “Because malpractice cases can be directly linked to dollars . . . [malpractice entities] can draw attention to cases—and causative factors—that result in the ‘worst of the worst’ patient care disasters.”\footnote{120} CRICO also produces short films and podcasts that depict, for example, the impact medical errors have on patients and the psychological consequences that physicians and nurses suffer after mistreating them.\footnote{121}

Although the most common way that insurers try to lessen providers’ liability is through educational resources about improving safety and lessening risk, many insurers also try to help providers reduce the cost of adverse medical events by encouraging disclosure. One of the key groups behind the disclosure movement, The Sorry Works! Coalition (Sorry Works!), “is dedicated to promoting full disclosure and apologies for medical errors as a ‘middle-ground solution’ in the medical liability crisis.”\footnote{122} Some of the key members of Sorry Works! are insurers.\footnote{123} For example, Robert Kellogg, who is currently the President and CEO of Mesa Medical Insurance and who formerly served as both the COO of New Mexico Mutual and President/CEO of State Mutual Insurance Company in Michigan, is on the board of directors for Sorry Works!\footnote{124} The full-disclosure movement promulgated by groups like Sorry Works! aims to improve doctor-patient relationships, repair the reputation of providers, reduce litigation, and lessen costs.\footnote{125} “Qualitative research studies have identified . . . [that p]atients who feel ignored, deserted, or who suspect that there is a ‘cover up’ by the medical profession, may be more inclined to sue.”\footnote{126}

This full-disclosure program has been utilized by the University of Michigan Health System, which “halved the number of pending law-
suits and reduced litigation costs per case from $65,000 to $35,000, resulting in annual savings of approximately $2 million in defense litigation bills.”\textsuperscript{127} COPIC Insurance Company has also had success with this program and has “reduced the number of lawsuits by half and reduced settlement expenses by 25%.”\textsuperscript{128} The Veterans Affairs Medical Center in Lexington, Kentucky has benefited from full-disclosure too.\textsuperscript{129} By “honestly notif[y]ing patients of substandard care and offer[ing] timely, comprehensive help in filing claims . . . [the facility] diminishes the anger and desire for revenge that often motivates patients’ litigation,” leaving patients more willing to settle a claim “on the basis of calculable monetary losses rather than on the potential for large judgments that contain a punitive element.”\textsuperscript{130}

We cannot assess the impact these educational programs and risk management strategies have on physicians’ behavior. However, these programs and strategies provide one more way for medical liability insurers to reinforce both (1) legal oversight of physician behavior, especially when a serious injury occurs, and (2) steps that physicians and other providers can take to avoid, or at least reduce, liability.

\textbf{F. Liability Insurers Support Patient Safety Organizations}

Finally, medical liability insurers provide human capital and financial support to patient safety organizations. In 2005, as a response to the Institute of Medicine report, \textit{To Err is Human}, Congress enacted the Patient Safety and Quality Improvement Act, which set the groundwork for the development of government-certified Patient Safety Organizations (PSOs).\textsuperscript{131} Providers that work with a federally-listed PSO are entitled to privilege and confidentiality protections under the Act.\textsuperscript{132} “By conferring [these] privilege[s] . . . the Act was intended to promote shared learning to enhance quality and safety nationally.”\textsuperscript{133} In order to be considered a federally-listed PSO, an organization must be listed with the Agency for Healthcare Research

\textsuperscript{127} Wojcieszak, Banja, & Houk, \textit{supra} note 122, at 346.
\textsuperscript{128} Id.
\textsuperscript{130} Id. at 966.
\textsuperscript{131} See About the PSO Program, \textit{AGENCY FOR HEALTHCARE RESEARCH & QUALITY}, https://www.pso.ahrq.gov/about (last visited June 1, 2018).
\textsuperscript{132} Id.
\textsuperscript{133} Id.
and Quality (AHRQ), a division of the Department of Health and Human Services (HHS).  

Current medical malpractice insurance personnel are often on the boards of federally-listed Patient Safety Organizations, including the Kentucky Institute for Patient Safety and Quality and the Ohio Patient Safety Institute. Some former staff members for medical malpractice insurance companies end up working at federally-listed PSOs too, such as Clarity PSO. One organization, the CHART Institute, has even combined a PSO and a medical malpractice insurance company into one. “CHART combines an AHRQ-certified Patient Safety Organization with a 100% member-owned medical malpractice insurance company.” Also, although currently delisted due to voluntary relinquishment of its federal PSO status, MagMutual Insurance had its own PSO, the MagMutual Patient Safety Institute, between 2014 and 2017.

Many current and former medical malpractice insurance personnel are also on the boards of leading non-federally-listed patient safety groups, including the American Society for Healthcare Risk Management, the Schwartz Center for Compassionate Healthcare, the Alliance for Quality Improvement and Patient Safety, the National Patient Safety Foundation, the Anesthesia Patient Safety Foundation, Californians Allied for Patient Safety Protection, and the Leapfrog Group.

135. The Senior Vice President and COO of KHA Solutions Group, Brian Brezosky, is on the board of KIPSQ. See Board Members, KY. INST. FOR PATIENT SAFETY & QUALITY, http://www.kipsq.org/AboutKIPSQ/KIPSQBoard.aspx (last visited June 1, 2018); KY. HOSP. Ass’n, https://www.kyha.com/kha-staff (last visited June 1, 2018). Jade Thompson, a Clinical Risk Consultant at Coverys, is on the board of OPSI. See Board of Trustees, OHIO HOSP. Ass’n, https://www.ohiohospitals.org/Patient-Safety-Quality/Ohio-Patient-Safety-Institute-OPSI/Board-of-Trustees.aspx (last visited June 1, 2018).
136. Anne Marie Hajek, the President and CEO of Clarity Group, formerly served as both the President of the Healthcare Risk Services Group and the Executive Vice President of MMI Companies. See Who We Are, CLARITY PSO, http://www.claritygrp.com/patient-safety-organization/who-we-are (last visited June 1, 2018).
138. Id.
139. See Delisted PSOs, AGENCY FOR HEALTHCARE RESEARCH & QUALITY, https://www.pso.ahrq.gov/listed/delisted (last visited June 1, 2018).
140. The American Society for Healthcare Risk Management (an affiliated society of the American Hospital Association) has a number of people who work in medical liability insurance on its board. See Board, AM. SOC’Y HEALTH CARE RISK MGMT., http://www.ashrm.org/about/Board/bios.dhtml (last visited June 11, 2018). As well, the Risk Authority Stanford CEO, Jeff Driver, is a Distinguished Fellow of the American Society for Healthcare Risk Management and was also a past president. See Jeff Driver, JD, ARM, DFASHRM, MBA, RISK AUTHORITY, http/
We understand that medical malpractice insurers and individuals employed by medical malpractice insurers also make financial contributions to these organizations.\textsuperscript{141} In addition, some medical malpractice insurers have grant programs that provide funding for patient safety initiatives.\textsuperscript{142}


LIABILITY INSURERS

CONCLUSION

When discussing the history of liability insurance in the United States, Gary Schwartz noted the existence of a controversy concerning the extent to which insurance coverage would discourage potential tortfeasors from taking appropriate safety-enhancing steps. He wrote that “many scholars share in the view that tort law’s deterrence objective is ‘severely, perhaps fatally undermined’ by the prevalence of insurance” because insurance breaks the connection between liability and financial responsibility.

We now know that the matter is not that simple. Because they bear financial responsibility for losses, liability carriers use a variety of techniques to encourage health care providers to exercise reasonable care. They tie premiums to providers’ loss histories, accumulate data that can be used to identify the root causes of medical mistakes, conduct loss prevention assessments of providers’ facilities, develop practice guidelines, teach providers how to deliver quality care more consistently, and support patient safety research and initiatives. Liability insurers also help identify subpar providers by refusing to insure them and by settling malpractice claims only when there is solid evidence of negligence. Because carriers aggregate losses incurred by populations of physicians, their loss-prevention incentives are larger than individual providers’ incentives, as are their economies of scale in research and deployment. The combination of incentives and scale economies may lead insurers to develop better safety-enhancing measures than individual providers would on their own.

In practical effect, the incentives that insurers create and the monitoring services they deploy may preserve the deterrent effect of tort law by replacing (or more than replacing) the loss of provider-level financial responsibility for individual mistakes. Whether liability insurance discourages providers from improving safety—as many scholars once feared—or encourages them to protect patients from avoidable harms—as may also be true—is an empirical question that a survey paper like this one cannot resolve. But we have shown that insurers make serious efforts to reduce their losses by encouraging and helping providers to do better.


144. Id. at 313 (quoting John G. Fleming, The Role of Negligence in Modern Tort Law, 53 VA. L. REV. 815, 823 (1967)).
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