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Bridging the Relational-Regulatory Gap: A Pragmatic Information Policy for Patient Safety and Medical Malpractice

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Bridging the Relational-Regulatory Gap: A Pragmatic Information Policy for Patient Safety and Medical Malpractice

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I. PATIENT SAFETY AND INFORMATION POLICY

The medical malpractice crisis of the last few years has tapped a lot of scholarly energy. Time not spent on original research—adding to the store of knowledge about the medical malpractice system—is often spent communicating with policymakers and the public. These experiences have led us to think a lot about the amount and quality of information circulating within or concerning the medical malpractice system, and about public policy reforms that would improve information flow in the future.

No grand theory has emerged from this meditation. Instead, we have formed definite, though not immutable, opinions about a desirable information policy for patient safety and medical malpractice. Two specific recommendations convey a sense of our view. First, the mandatory malpractice payment reporting provisions of the National Practitioner Data Bank should be repealed. Second, confidential settlements of tort claims in medical malpractice cases should be prohibited, except perhaps as to the dollar amount of the payment.

But aren't these inconsistent? The former would reduce available information, while the latter would increase it. Furthermore, wouldn't combining the two reforms be self-defeating, with a net result of reconstructing national data simply by aggregating individual settlements?

We hope to persuade readers of this Article that these recommendations should receive a more favorable descriptor: "pragmatic." For reasons explained below, any seamless information policy is likely to reflect a foolish consistency—perhaps political ideology, perhaps tunnel vision regarding policy goals or regulatory silos—and should be avoided. Rather, information policy should be incremental and contextual. That is, it should be sensitive to the complicated, contentious history and psychology of health care quality oversight and medical liability.

One can model malpractice information policy by envisioning a "signal pathway" that divides the disclosure process into segments. Beginning from a medical incident, the critical steps in conveying information are content (signal), packaging (categorization), accessing (transmission), and interpretation (processing) of malpractice-related information about health care providers. Each stage of the pathway modifies the signal as it moves forward. Therefore, significant variables at each stage can affect the end result: what content is chosen, how it is categorized, who has access to it, and the final impression it creates.

The public debate over how governmental and professional policies should manage the signal pathway is primarily a conflict over access, with implications for accuracy, fairness, and effectiveness. All participants and observers claim to support detailed signals and clear categorization; disagreements arise over processing and its implications for transmission. Health care providers argue that limiting transmission through strict confidentiality rules allows more accurate signals to emerge from the pathway. The medical profession alone, they claim, can best determine what changes to its practices are necessary. By contrast, others favor broad transmission, despite the risk of reduced accuracy due to processing difficulties, on the grounds that parties whose opinions matter to health care providers can exert pressure on physicians to make such changes.

Physicians' objections often center on the presentation of an event, rather than the substantive content. For many subjects of profiling, the tools of informational accountability are too blunt. The need for accessibility and comparability in any publicly available database precludes the complete explanation of each item on a record. Rather, public information tends to focus in a reductionist fashion on tabulating incidents, thereby removing them from the context in which they occurred.

The ongoing debate over medical error reporting illustrates the complexities involved. Measurement and disclosure of error are important components of patient safety policy, though sometimes in contradictory ways. For example, the patient safety movement has substantially increased public pressure for greater transparency regarding physicians' and hospitals' mistakes, while simultaneously seeking to expand legal protection that would allow health care providers to keep internal efforts to detect and remedy safety problems confidential. During the 1990s, moreover, an independent governmental effort to protect patient privacy arose in response to the Internet revolution in information transmission.¹ Information policy for medical errors therefore must take account of heightened sensitivity regarding personal medical information.

There are also more general arguments supporting diversity in malpractice information policy. First, there are competing explanations for the information gaps that currently exist. Inadequacy and asymmetry of information can be attributed to a

1. See Health Insurance Portability and Accountability Act of 1996 (HIPAA), Pub. L. No. 104-191, § 264(c)(1), 110 Stat. 1936, 2033 (1996); Standards for Privacy of Individually Identifiable Health Information, 45 C.F.R. § 164.500 (2001), available at <http://aspe.hhs.gov>. See generally Lawrence O. Gostin, James G. Hodge, Jr., & Lauren Marks, *The Nationalization of Health Information Privacy Protections*, 8 CONN. INS. L.J. 283 (2001).

professional conspiracy to conceal error (the “white coat of silence”), reasonable fear among health care professionals of unfair retribution, commercial and proprietary interests of liability insurers or provider organizations, fragmentation of medical practice, lack of coordination among structural branches and geographic divisions of government, and insufficient social and private investment in information technology.

Second, there are overlapping mechanisms for generating, processing, and communicating information about safety and malpractice. The tort liability system is governed by state-level judicial rules punctuated by state legislative activity. Health care quality oversight is conducted by state regulators, private accreditation bodies such as the Joint Commission on Accreditation of Healthcare Organizations (“JCAHO”), internal institutional self-regulatory processes, and—through payment policy rather than explicit regulation—Medicare, Medicaid, and private health insurers. Liability insurance is monitored by state regulators and actuarial self-regulatory bodies. All three activities rely heavily on market competition, although each strays considerably from textbook microeconomic behavior.²

Third, there are myriad visions of the relationship between health care regulation and public policy.³ An often-invoked “professional paradigm,” for example, vests physicians with primary responsibility for quality control and uses law to identify and correct departures from professional norms of competence and fidelity. A “bioethics paradigm” gives primacy to individual autonomy, dignity, and self-determination enforced through legal rights and remedies. A “social justice paradigm” approaches health care as a societal resource supported by collective contributions, with law seeking to define the societal obligations of providers and to further equality of access and outcomes for patients. A “market competition paradigm” looks to self-interested relationships among producers of health care, end-users, and various commercial intermediaries to achieve cost-justified quality and to support efficient investment in future innovation. All

2. The classic depiction of market failure in health care is Kenneth J. Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AM. ECON. REV. 941 (1963). For a detailed analysis of Arrow’s thesis forty years after its exposition, see *UNCERTAIN TIMES: KENNETH ARROW AND THE CHANGING ECONOMICS OF HEALTH CARE* (Peter J. Hammer et al., eds., 2003).

3. See, e.g., James F. Blumstein, *Health Care Law and Policy: Whence and Whither?*, 14 HEALTH MATRIX 35 (2004) (describing different models for thinking about the relationship between health care regulations and public policy and discussing policy issues); Rand E. Rosenblatt, *The Four Ages of Health Law*, 14 HEALTH MATRIX 155 (2004) (same).

require information about patient safety and medical malpractice, but for different purposes.

A striking fact about these organizing principles of health policy is that they mix “private law” with “public law.” Over the course of decades, American health law has evolved from a sporadic supplement to medical ethics in situations involving individual doctors and patients to a structure governing nearly \$2 trillion in annual social expenditure. Medical malpractice law, for example, not only seeks micro-justice for individual patients, but also aspires to improve aggregate clinical practice. Efficient risk-bearing of malpractice costs, reduction of defensive waste from imprecise liability standards, and avoidance of unnecessary administrative expense have also properly become concerns of malpractice policy.

Put differently, relational obligations of health professionals to identifiable individuals are now entwined with regulatory obligations to society at large.⁴ The principal argument of this Article is that sound information policy for medical malpractice and patient safety must accommodate both relational and regulatory applications.⁵

4. The general law of negligence is a modern construct, particularly its focus on deterrence as well as compensation and justice. *See, e.g.*, GUIDO M. CALABRESI, *THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS* (1970) (suggesting deterrence and the cost of future accidents as an economic rationale for tort law); Donald G. Gifford, *Symposium: Calabresi's The Costs of Accidents: A Generation of Impact on Law and Scholarship*, 64 MD. L. REV. 1 (2005) (using Calabresi's work to question whether liability damages achieve the goal of deterrence). Moreover, negligence evolved largely in response to technological change, industrialization, and mass production. *See* Mark F. Grady, *Why Are People Negligent?: Technology, Nondurable Precautions, and the Medical Malpractice Explosion*, 82 NW. U. L. REV. 293 (1988) (demonstrating how negligence changes and grows with new technology). A consequence of industrialization has been to associate tort law with aggregate settlement of social claims and prevention of future injury to society as a whole. *See, e.g.*, Samuel Issacharoff & John Fabian Witt, *The Inevitability of Aggregate Settlement: An Institutional Account of American Tort Law*, 57 VAND. L. REV. 1571 (2004) (arguing that torts have resolved themselves into aggregate settlement structures); Catherine M. Sharkey, *Punitive Damages as Societal Compensatory Damages*, 113 YALE L.J. 347 (2004) (arguing that punitive damages are awarded for the purpose of societal compensation). However, a few scholars seek to preserve a private core of tort rights and remedies through constitutional law. *See, e.g.*, John C.P. Goldberg, *The Constitutional Status of Tort Law: Due Process and the Right to a Law for the Redress of Wrongs*, 115 YALE L.J. 524 (2005) (arguing that tort law is a basic part of our governmental structure and should be understood as a redress for private wrongs); John C.P. Goldberg, *Tort Law for Federalists (and the Rest of Us): Private Law in Disguise*, 28 HARV. J.L. & PUB. POL'Y 3 (2004) (arguing that tort law should not be a form of public regulatory law).

5. There are other ways to blend relational and regulatory concerns. For example, Leflar and Iwata assert that in Japan criminal law plays a greater role than tort litigation in response to medical errors. Robert B. Leflar & Futoshi Iwata, *Medical Error as Reportable Event, as Tort, as Crime: A Transpacific Comparison*, 12 WIDENER L. REV. (forthcoming 2006) (hypothesizing that Japanese prosecutorial objectives are well aligned with the objectives of victims of error because prosecutors emphasize information, apology, and patients' personal needs).

Accordingly, the Article distinguishes and explores three categories of information use:

- Helping patients understand and participate in their care;
- Improving patient safety, including analyzing medical errors and identifying unsafe health care providers and practices; and
- Assessing the performance of the medical liability system in its many dimensions including deterrence, compensation, justice, administrative efficiency, and stability.

For each category, the Article comments on existing laws or programs for information reporting or disclosure, points out major tensions or ambiguities, and suggests pragmatic improvements.

II. RELATIONAL AND REGULATORY USES OF SAFETY INFORMATION

Gathering information, often as a prelude to making that information widely available, is a common regulatory strategy. However, the political consensus that frequently emerges in favor of information-gathering equally often conceals divergent goals and motivations for reporting requirements, limiting their utility in practice.⁶ Mandatory reporting to the government by the private sector can be used to support existing regulatory responsibilities, to facilitate (or delay) new legislative and regulatory initiatives, to prompt self-examination and self-improvement among reporting entities, and (through public disclosure) to empower individuals as consumers or citizens.

The tensions affecting medical malpractice information policy cannot be resolved as long as the precise purpose of disclosure remains unarticulated. There are many possible objectives for gathering and communicating information about medical malpractice. Relational uses of information fall under two rubrics based on their respective goals: to enhance competition among providers, or to make it more likely that expert advisers will honor their responsibilities to the people they undertake to serve. Relational disclosure typically requires getting relevant information to private individuals or entities, as government itself is seldom in a (permissible) position to use the information for its own benefit as a contracting party. Therefore, government must collect the information through active

6. See generally William M. Sage, *Regulating Through Information: Disclosure Laws and American Health Care*, 99 COLUM. L. REV. 1701 (1999) (analyzing the rationales for information disclosure in managed care).

research, retransmit reports passively received pursuant to a reporting mandate, or require direct disclosure from information possessor to information user. Further, it may not always be the case that one of the two parties to a relationship has the information that the other needs; government may need to require a third party to release information, which is a regulatory function.

Regulatory, as opposed to relational, uses of information contemplate the government acting in the interest of society as a whole or a broad subset of the citizenry. Regulatory disclosure serves two general objectives of its own: enhancing system performance and supporting democratic processes. Using information to channel behavior in directions desired by government, or otherwise to facilitate direct government regulation of an activity, can be labeled a "performance rationale." If government knowledge of an area requiring regulation is inadequate and public research capacity is limited, mandatory reporting without public disclosure is usually sufficient for performance-motivated uses of information because it forces private investment in information gathering. However, direct disclosure obligations may be needed to create incentives for progress in the direction desired by regulators when measurement has not advanced to the point where government can intelligibly specify design or performance standards, or when self-regulatory mechanisms are superior to direct government intervention. Direct disclosure is also important where the government's performance as an agent for its citizens is primarily at issue. Circulating information in order to justify the expenditure of public funds or foster deliberation over the extent of social commitments can be described as a "democratic" rationale for informational mandates.

A. Accountability versus Improvement

The current medical malpractice crisis differs from its late 20th century predecessors in many ways, but the change most important to information policy is the political ascendancy of "patient safety." One of the authors has observed: "Patient safety may be the trigger that finally propels [comprehensive malpractice reform] from the academic literature into the real world."⁷ Although deterrence of substandard

7. William M. Sage, *Medical Liability and Patient Safety*, 22 HEALTH AFF., July/Aug. 2003, at 26, 26, 34 (2003); see also William M. Sage, *Understanding the First Malpractice Crisis of the 21st Century*, in HEALTH LAW HANDBOOK (Alice G. Gosfield ed., 2003) (identifying and discussing "four key areas in which changes to the health care system have altered both the . . . malpractice problem . . . and its range of potential solutions: patient safety, medical progress, industrialization, and cost-containment"). One possibility would be a system analogous to

care is ostensibly the principal goal of medical malpractice liability, legislative settlements of malpractice crises are typically focused on restraining litigation through caps on damages and similar tort reform, with seldom a nod to quality. Before the current liability crisis, the prevalence and origin of medical error was a minor subject in health policy and was absent from the debate over malpractice reform. By replacing anecdote with data and by originating within the medical and scientific establishment, the Institute of Medicine's 1999 report, *To Err is Human*, placed medical error on the national health care agenda.⁸ Weeks after the report's release, a Kaiser Family Foundation poll indicated that 51 percent of the public was aware of the IOM's findings, an unusually high number.⁹ The report's estimate that up to 98,000 patients die each year from preventable medical errors galvanized public attention, drew comment from President Clinton, launched Congressional hearings, and inspired patient safety improvements within hospitals at JCAHO's behest.

In the five years since publication of the IOM report, however, little concrete improvement in patient safety has been chronicled. Physicians by and large remain complacent about safety, notwithstanding public concern.¹⁰ The Journal of the American Medical Association recently published a retrospective review of the IOM report, analyzing changes in its wake.¹¹ The authors' conclusion: there is optimism for the future, but "the proven measured fruits of the IOM report so far are few."¹² Physicians remain unwilling to admit errors; safety measures recommended by the IOM or subsequent patient-safety advocates have not been implemented; even efforts to measure patient safety are rarely in place.

The present malpractice crisis puts policymakers in a quandary with respect to information about medical errors. Continuing revelations of widespread safety lapses in health care have increased pressure for public disclosure of physicians' and hospitals' safety

workers' compensation, featuring limited malpractice liability within a framework of reasonable compensation and incentives to keep patients safe. INSTITUTE OF MEDICINE, FOSTERING RAPID ADVANCES IN HEALTH CARE: LEARNING FROM SYSTEM DEMONSTRATIONS 81-89 (Janet M. Corrigan et al. eds., 2002).

8. See generally INSTITUTE OF MEDICINE, *TO ERR IS HUMAN: BUILDING A SAFER HEALTH SYSTEM* (Linda T. Kohn et al. eds., 2000).

9. Duncan Moore, *One Thing Leads to Another: Medical-Errors Report Means Money for Medical-Outcomes Research*, 30 MODERN HEALTHCARE 2, 2 (2000).

10. Robert J. Blendon et al., *Views of Practicing Physicians and the Public on Medical Error*, 347 NEW ENG. J. MED. 1933, 1933 (2002).

11. See generally Lucian L. Leape & Donald M. Berwick, *Five Years After To Err Is Human: What Have We Learned?*, 293 JAMA 2384 (2005).

12. *Id.* at 2384.

records. At the same time, the law's traditional focus on individual physician responsibility is at odds with emerging theories of systems-based quality improvement predicated on voluntary, confidential self-reporting. On this account, both malpractice liability and public disclosure create a "culture of blame" that arguably retards organizational improvement by inducing physicians to withhold and conceal information about medical errors. Thus it seems that two important uses for information about medical error—accountability and improvement—pull in opposite directions.

Does the threat of malpractice liability augment or reduce information about medical error? As a practical matter, those interested in measuring provider quality must rely on signals that are, at best, proxy measures of 'true' quality of care. The types of information available are far from ideal. Neither physicians nor hospitals routinely produce reports on the errors they make, or almost make. Instead, systems of forced accountability extrapolate these incidents. Malpractice suits are among the most salient indicators of quality failure, but there are many other forms of oversight and censure within the industry, such as medical staff privilege decisions by hospitals, affiliation decisions by managed care organizations, and disciplinary actions by professional societies and state medical boards. From these sources, potential signals include malpractice judgments and settlements, probation and suspension histories, patient complaints, staff incident reports, outcome statistics (provider report cards), and data on "near misses." The usefulness of these measures depends on the degree to which they corroborate the actual quality of the physician, as opposed to merely recording the occasional bad event or reflecting the biases of the decisionmaker. In fact, it is because of their heterogeneous nature that signals require categorization to make them useful as tools for quality improvement.

Signals differ in their specificity and sensitivity, which largely determine their utility or potential to mislead. Sometimes competent care is mistaken for negligence because the signal does not incorporate outlying factors. The Harvard Medical Practice Study found that nearly 85 percent of malpractice cases that resulted in compensation featured no evidence of negligence.¹³ Possible outlying factors include a jury sympathizing with a severely disabled plaintiff,¹⁴ a liability insurer choosing to settle to avoid the expense of litigation, and

13. HARVARD MEDICAL PRACTICE STUDY, PATIENTS, DOCTORS, AND LAWYERS: MEDICAL INJURY, MALPRACTICE LITIGATION, AND PATIENT COMPENSATION IN NEW YORK (1990).

14. See Troyen A. Brennan et al., *Relation Between Negligent Adverse Events and the Outcomes of Medical Malpractice Litigation*, 335 NEW ENG. J. MED. 1963 (1996) (finding correlation between degree of physical impairment and litigation outcome).

failings in the underlying practice environment that do not independently support legal relief, such as miscommunications among providers that cannot clearly be prevented or restrictions imposed by managed care organizations that are sheltered from suit by federal ERISA law.¹⁵

In other cases, because of imprecise signals, negligent care can be mislabeled as competent. A doctor with a clean malpractice record does not necessarily have a perfect practice. Because patients may be ignorant of the facts of their case or averse to the delay and expense of filing a claim, only a small number of avoidable injuries result in payments through trial or settlement. The Harvard study concluded that less than 7 percent of patients who suffer an injury as a result of medical negligence receive financial compensation.¹⁶ Additionally, a hospital may offer to settle a case on the condition that individually named physicians be dismissed as defendants.

Despite this imprecision within the malpractice system, malpractice records are not uninformative. Physicians who practice poor medicine are more likely to generate lawsuits than those who meet the standard of care.¹⁷ The informational value of malpractice claims outcomes depends on the differences between cases that find against a physician and those that do not. If the errors that result in a malpractice payment are systematically more egregious or severe than those that do not, then a provider's malpractice record may be an informative signal, albeit one about relative rather than absolute quality because the "standard of care" is a comparative construct.¹⁸ If, on the other hand, the difference between cases depends mostly on characteristics of injured patients and their families, such as attitudes toward litigation and access to legal counsel, then cases pursued, dropped, or never brought may look similar in clinical terms. If this is the case, then malpractice claim outcomes say little about physician quality. The same is true if poor communication skills, as opposed to incompetence, is the primary driver of the lawsuit, although there is

15. The Employee Retirement Income Security Act of 1974 (ERISA) preempts state law claims relating to employee benefit plans. The Supreme Court recently held that ERISA precludes recovery of extra-contractual damages (e.g., future medical expenses, pain and suffering) from managed care organizations whose utilization review procedures denied patients medically necessary treatment. *Aetna Health Inc. v. Davila*, 542 U.S. 200, 213–14 (2004).

16. HARVARD MEDICAL PRACTICE STUDY, *supra* note 13.

17. Michelle M. Mello & David Hemenway, *Medical Malpractice as an Epidemiological Problem*, 59 SOC. SCI. & MED. 39, 40 (2004).

18. Professional negligence is generally defined by state law as divergence from customary practice, although some courts apply a standard closer to objective "reasonableness." Philip G. Peters, Jr., *The Quiet Demise of Deference to Custom: Malpractice Law at the Millennium*, 57 WASH. & LEE L. REV. 163 (2000).

increasing evidence that physicians who generate a large number of patient complaints are also more likely to practice negligently.¹⁹

Some aspects of processing a patient safety signal, such as the identity of the signal's recipient, are separate from the signal's nature. Individuals without medical training may misinterpret signals when selecting health care professionals as consumers or when being cared for as patients. For doctors, there is bureaucratic risk because insurance companies, hospitals, or other large organizations can be in a position to discipline or dismiss affiliated physicians based on quality reports that may not warrant such severe responses. The fact of signal transmission can also change the behavior of the signal's readers apart from the specific information received. For example, patients may be more likely to sue if they lose confidence in health care, which is one risk of increased public awareness of medical error following the Institute of Medicine's 1999 report.²⁰ On the other hand, a similar signal conveyed in a different manner may have the opposite effect. Research on communicating with patients following medical errors suggests that honest explanations and appropriate apologies can decrease litigation.²¹

Even if the medical profession were fully assured that signals consisting of safety information would be accurate and immune from misuse, there is no guarantee that such signals would in fact be generated absent mandatory reporting and disclosure laws. Moreover, there are several mechanisms by which information about malpractice litigation and other indicators of patient safety might (or might fail to) affect the delivery of health care. The politically charged debate over accountability versus improvement therefore provides only a starting point for information policy design, not a formula.

19. See generally Gerald B. Hickson et al., *Patient Complaints and Malpractice Risk*, 287 JAMA 2951 (2002).

20. Cf. Troyen A. Brennan, *The Institute of Medicine Report on Medical Errors – Could It Do Harm?*, 342 NEW ENG. J. MED. 1123 (2000) (suggesting that mandated disclosure of error could also lead to more lawsuits).

21. See, e.g., Gerald B. Hickson et al., *Factors That Prompted Families to File Medical Malpractice Claims Following Perinatal Injuries*, 267 JAMA 1359 (1992) (finding that many families file claims because physicians are not open with them and not willing to talk to them); Wendy Levinson et al., *Physician-Patient Communication: The Relationship with Malpractice Claims Among Primary Care Physicians and Surgeons*, 277 JAMA 553 (1997) (finding that no-claims primary care physicians used humor more, solicited patient opinions, and used more statements of orientation).

B. Competition

Information-based regulatory strategies involving malpractice and medical error often piggyback on market mechanisms for good conduct. This “competition rationale” envisions identifiable buyers and sellers of medical care engaging in transactions based at least in part on quality. Seen through the lens of competition, poor provider performance—failing to prevent patient injury, for example—is often attributable to patients having inadequate information about the individuals and institutions from which they seek treatment. Easily accessible data regarding mishap rates might enable patients to select less error-prone providers, which in a competitive market would weed out poor performers and induce better performance by the rest.²²

Competitive uses of information are relational because their utility depends on the outcome of two-party commercial interactions. Public disclosure in health care would allow consumers to vote with their feet.²³ Its application is primarily prospective: as-yet-uninjured current patients and possible future purchasers are the most important targets of information, not individuals who have already been victims of medical error or injury. Patients with health insurance shoulder little direct cost from seeking providers who take extra precautions. This threat of lost business would place strong incentives on providers to exercise sufficient care.

In a health care system dominated by third-party payment and provider-payer contracting, information might also inform decisions by employers, private health insurers, and even competition-minded government programs regarding with whom to affiliate and how much to pay. In essence, providers would compete on measurable safety to attract business much as they currently compete on general reputation.

The value of a government mandate, either for reporting or direct disclosure, depends on factors familiar to those who justify

22. Many state “report card” systems for sharing information about errors involving health plans and hospitals were initiated for the express purpose of helping consumers choose safe, high-quality medical care. The best of these systems explicitly counsel readers that the competitive potential of the information is limited. The first annual report of the Minnesota Department of Health, for example, explained that hospitals’ reporting habits vary and absolute numbers of errors per hospital are small. The report also emphasized the utility of self-critical analysis by health care providers (a performance rationale), but disclaimed a public regulatory purpose for collecting and disseminating information about medical errors. See MINNESOTA DEPARTMENT OF HEALTH, ADVERSE HEALTH EVENTS IN MINNESOTA HOSPITALS: FIRST ANNUAL PUBLIC REPORT (2005), available at www.minnesotahealthinfo.org.

23. Marc A. Rodwin, *Patient Accountability and Quality of Care: Lessons from Medical Consumerism and the Patients’ Rights, Women’s Health, and Disability Rights Movements*, 20 AM. J.L. & MED. 147, 153–54 (1994).

regulation by identifying “market failures.” These include consumers not already having but wanting the information offered, private mechanisms for obtaining the information being unavailable, buyers rationally incorporating the information into their decisions and having market opportunities to do so, government providing a credible auditing and enforcement function, and the imposition of a legal obligation not having negative effects on the quality, quantity, or cost of response that outweigh the information’s competitive benefits.²⁴

C. Agency

Information about malpractice and medical error can also have agency-enhancing applications, making it easier for patients (as “principal parties”) to judge whether the physicians they consult are acting in their best interests (as “agents”) and enabling patients to supplement gaps in agency through self-help. A patient who learns of her physician’s proclivity to commit errors or to allow injuries to result from errors will be more vigilant when entrusting herself to that physician. Such a physician’s lapses will also reflect on her character as much as her technical skill. Because serious malpractice can be viewed as a proxy indicator of betrayal of trust, the patient (and other physicians) may regard information about malpractice or medical error as calling into question the subject physician’s commitment to upholding professional values. By revealing information, moreover, the physician is honoring the dignity of the patient as a human being worthy not only of compassion but also of respect.²⁵ Following an error or injury, an informed patient will also be better prepared to mitigate loss both factually (e.g., by seeking alternative or additional care) and legally (e.g., by filing a claim for compensation).

Information conveyed for these purposes is highly relational—in fact, upholding professional agency obligations is a far more intimate and personal goal than facilitating transactions in markets—but does not depend for its effectiveness on any individual’s

24. The complexities of information disclosure in health care have been studied primarily in relation to managed care. See, e.g., Judith H. Hibbard et al., *Strategies for Reporting Health Plan Performance Information to Consumers: Evidence from Controlled Studies*, 37 HEALTH SERVICES RES. 291 (2002) (discussing the influence of information presentation on decision accuracy).

25. Mazor and colleagues presented patients with hypothetical situations involving medical error and varying degrees of disclosure, and found that full disclosure by the physician was associated with greater trust, satisfaction, and likelihood of remaining under the physician’s care. Kathleen M. Mazor et al., *Health Plan Members’ Views About Disclosure of Medical Errors*, 140 ANNALS INTERNAL MED. 409 (2004); see also Douglas N. Frenkel & Carol B. Liebman, *Words That Heal*, 140 ANNALS INTERNAL MED. 482, 482 (2004) (“Apologies have a potential for healing that is matched only by the difficulty most people have in offering them.”).

commercial motivation or the existence of a functioning aggregate competitive dynamic.²⁶ The key factor for this rationale to succeed is effective information exchange between agents and principal parties because the fiduciary act of disclosure by an agent and the reflective act of listening and responding by a principal matters in addition to the specific information that is conveyed.²⁷

A direct disclosure mandate can be effective for these purposes, but mandatory reporting and public availability of reported data is not. Information that effectively serves the population of potential future patients will likely differ in detail and mode of communication from information that helps current victims of unexpected medical outcomes. The interposition of an additional intermediary, particularly a governmental body charged with receiving and analyzing event reports, may even be destructive of agency because it compromises the confidentiality at the heart of the agency relationship. For this reason, inculcation of norms of conduct regarding information exchange, with the hope of having those norms internalized, may be strongly preferable under the agency rationale to external observation and enforced compliance.²⁸

D. Performance

Antiquated systems for generating and sharing information are often blamed for lack of safety and efficiency in American health care. The cost of updating these systems has necessitated incremental

26. Some commentators elide the distinction between competitive uses of health care information and agency-enhancing uses by emphasizing that patients value physicians of high "interpersonal" as well as "technical" quality. See, e.g., Constance H. Fung et al., *Patients' Preferences for Technical Versus Interpersonal Quality When Selecting a Primary Care Physician*, 40 HEALTH SERVICES RES. 957 (2005) (reporting respondents' reactions to simulated physician report cards); see also AVEDIS DONABEDIAN, EXPLORATIONS IN QUALITY ASSESSMENT AND MONITORING: THE DEFINITION OF QUALITY AND APPROACHES TO ITS ASSESSMENT (1980) (distinguishing technical from interpersonal quality of care); Avedis Donabedian, *Evaluating the Quality of Medical Care*, 44 MILBANK MEMORIAL FUND Q. 166 (1966) (same).

27. Current research on medical error disclosure emphasizes the process of disclosure, and tends to favor early, iterative conversations that integrate information exchange with sound medical care, rather than formal dispute resolution. See CAROL B. LIEBMAN & CHRIS STERN HYMAN, MEDICAL ERROR DISCLOSURE, MEDIATION SKILLS, AND MALPRACTICE LITIGATION: A DEMONSTRATION PROJECT IN PENNSYLVANIA (2005), available at www.pewtrusts.org (suggesting four alternatives to formal litigation, including better early communication, information sharing, mediation, and apologies); Kathleen M. Mazor et al., *Communicating With Patients About Medical Errors*, 164 ARCHIVES INTERNAL MED. 1690 (2004) (reviewing empirical research on disclosure and finding inadequate attention to the disclosure process and the consequences of disclosure for patients and health care providers).

28. For an overview of norm theory, see Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338 (1997).

rather than immediate reform.²⁹ Therefore, another reason to circulate information about medical malpractice and medical error is to spur performance improvement by health care providers. In theory, understanding the prevalence of threats to patient safety, and creating opportunities for detailed review and feedback (e.g., JCAHO's "sentinel event" policy) can help reduce errors and avoid malpractice disputes. Many researchers assert that medical errors are generally the result of interconnected behavioral, technical, and organizational missteps, rather than individual malfeasance.³⁰ Consequently, counting errors and attributing them to individual physicians through external disclosure may not be sufficient to prevent recurrences. Rather, ensuring safety arguably requires systematic *internal* collection and analysis of safety-related information.

Performance improvement is primarily a regulatory (and professional self-regulatory) use of information. Performance-enhancing information differs from competitive information because the choice of what should be reported or disclosed, and therefore what dimensions of safety should be improved, is made through consensus regulation ideally based on overall benefit to society (including public health) rather than individual marketplace decisions. It converges with competition, a relational phenomenon, insofar as a greater supply of safe medical care leads medical consumers to demand safety more frequently. "Pay for performance" initiatives currently gaining favor among government and private insurers offer a market justification for greater internal generation and use of comparative performance information.³¹

For regulation to improve performance, past failures reported to or detected by government must be susceptible to interpretation in a fashion that accurately predicts future risk and prompts an effective public or professional response, such as loss of license, disciplinary monitoring, the adoption of ethical standards, or the imposition of new safety regulations. Unlike the private market processes that benefit

29. See Rainu Kaushal et al., *The Costs of a National Health Information Network*, 143 ANNALS INTERNAL MED. 165, 165 (2005) (estimating that achieving information reform would cost \$156 billion in capital investment over five years and \$48 billion in annual operating costs).

30. See generally INSTITUTE OF MEDICINE, *supra* note 8 (asserting that even apparently individual errors are usually attributable to multiple factors and that blaming individuals will not reduce the likelihood that the same error will recur).

31. See William M. Sage, *Pay for Performance: Will It Work in Theory?*, 3 IND. HEALTH L. REV. 305 (2006). However, physicians may have stronger motives for improvement than marginal additions to consumer satisfaction or financial reward, such as maintaining their standing within their profession and securing credentials that allow them continued access to patients and the facilities and equipment needed to treat patients. These reputational costs to physicians of safety lapses are not insurable; by contrast, the direct cost of compensating injured patients is generally paid by liability coverage that is not individually experience-rated.

from competitive information, however, performance regulation constitutes state action and must not be used to deprive health care providers of practice privileges without due process.

Laws requiring direct disclosure to the public can also further performance improvement if they lead providers to invest in measurement systems and engage in self-critical analysis that would not be profitable absent a universal regulatory requirement (e.g., because a “first discloser’s” performance would be misinterpreted by consumers or because learning gleaned from measurement could not be protected from competitors). This pathway to improvement depends on the right information being required of the right health care providers. For example, information drawn from individual professionals may not be performance-enhancing if, in fact, outcomes depend on processes mainly under the control of health systems.

E. Democracy

A final justification for information exchange involving malpractice is to safeguard democratic processes of government. A longstanding defense of litigation, and criticism of confidential settlement, invokes the courts as guarantors of corrective justice because of their transparency, which assures public airing of grievances and public vindication of accused wrongdoers or erstwhile victims.³² Sharing information about facts underlying individual malpractice cases, including medical errors that do not give rise to claims, furthers this objective.³³

32. See generally Minna Kotkin, *Invisible Settlement, Invisible Discrimination* (Brooklyn Law Sch. Legal Studies Research Paper. No. 39, Aug. 2005) (arguing against invisible settlements of employment discrimination litigation). According to Kotkin, initial legal academic reaction to media concern over invisibility of hazardous product and environmental litigation emphasized the private interests of the litigants, *id.* at 26, while subsequent commentary has focused on public interests in judicial oversight and deterrence of dangerous activity. Compare Wayne D. Brazil, *Protecting the Confidentiality of Settlement Negotiations*, 39 HASTINGS L.J. 955 (1988) (discussing confidentiality within the context of settlement negotiations), and Arthur R. Miller, *Confidentiality, Protective Orders, and Public Access to the Courts*, 105 HARV. L. REV. 427 (1991) (arguing against increased public access to information during litigation), and Wayne D. Brazil, *Protecting the Confidentiality of Settlement Negotiations*, 39 HASTINGS L.J. 955 (1988), with Laurie Kratky Dore, *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, 74 NOTRE DAME L. REV. 283 (1999) (stating that public access in some cases outweighs party confidentiality), and Richard A. Zitrin, *Legal Ethics: The Case Against Secret Settlements (Or, What You Don't Know Can Hurt You)*, 2 J. INST. STUD. LEGAL ETHICS 115 (1999) (stating that settlements that benefit the client can potentially harm the public interest).

33. In Pennsylvania, for example, the standard practice of the state's publicly administered and subsidized supplemental malpractice insurance fund (currently called the MCARE Fund) has been to include confidentiality provisions in settlement agreements. Letter from Michael J. Foley (Sept. 11, 2003) (on file with author) (enclosing redacted correspondence from MCARE Fund claims examiner stating that a “no publicity clause” is required in all MCARE Fund

Collection and dissemination of information about the aggregate achievements of the malpractice dispute resolution process serve to reassure members of the public that airing and vindication will be available to them if needed. Conversely, information about the litigation system's failings, its high administrative cost, or its over—or under—inclusiveness at converting medical errors into compensable claims, helps citizens assess the arguments for reform. Similarly, information about malpractice insurance markets can help the voting public understand that critical component of overall medical liability policy (and, in performance terms, can help government regulate liability insurance more effectively).

The democratic rationale for information exchange is regulatory; it operates primarily through collective deliberation rather than by furthering the interests of individual users of health care. In essence, the subject of the information exchanged is government itself in its role as public agent for its citizens. For example, information about underlying medical error rates helps educate voters about the cost-effectiveness of America's colossal investment of public funds in health care.

The source of information used for democratic purposes presents a challenge. Whereas other uses of information allow government to act as a neutral broker or public-spirited enforcer, democratic information must be produced and shared free of governmental control or interference lest the information be manipulated to cast the government—or particular interest groups that seek to influence it—in an unduly favorable light. Accurate, unbiased information about the functioning of the malpractice system can help counter exaggerations or misrepresentations by political stakeholders, and can educate the public as to the spillover effects of changes in medical liability on other legal-political arenas, such as product liability.

III. USERS AND SOURCES OF INFORMATION

Elected officials seeking to address areas of public angst regarding health care commonly turn to information as a seemingly less intrusive form of accountability, while avoiding direct government regulation of medical care that conflicts with longstanding norms of

releases). In one recent case, a state judge refused the settling defendants' customary request to seal the terms of the settlement, citing the public's right to know how its tax dollars are being used. *Korczakowski v. Hwan*, 68 Pa. D. & C.4th 129, 139 (2004) (denying motion).

professional control.³⁴ By appealing broadly to notions of liberty and autonomy, information reporting and disclosure laws also successfully bridge the gulf separating right from left in American political ideology.³⁵ For these reasons, information-based regulation was a principal response to managed care in the 1990s.³⁶

Expanding consumer and patient access to information is also a popular legislative accommodation to the newly recognized epidemic of medical error. Because rising fears of error happen to coincide with a “crisis” period in medical malpractice insurance, information is sometimes offered as a quid pro quo for tort reform.³⁷ Medical error reporting or disclosure obligations now exist under federal law, state law, and private (e.g., JCAHO) accreditation standards, but with wide variation in definitions of reportable events and in physician and hospital compliance. This Part surveys the potential users of this information and offers a summary and examples of the range of existing legal requirements.³⁸

A. Information Users

Patients. Transactions between patients and physicians are relatively straightforward to analyze. Patients requiring medical attention want safe and competent care from physicians. The information available to patients for determining a doctor’s competency includes word of mouth, public records of various sorts, information distributed by consumer groups, and less measurable messages disseminated through the media. As noted above, patients’ ability to gain access to reliable information and to process it accurately is often limited. Thus most patients apply the simple heuristic that past behavior is a good predictor of future behavior, and tend to avoid physicians whose records are tarnished.

Physicians. Information about a physician’s safety record may be of concern to other physicians. The extent of peer criticism depends on the degree to which association with a “bad doctor” transfers to other physicians. If referral networks and membership in physician

34. See generally Sage, *supra* note 6 (analyzing information disclosure as a response to public concern about managed care).

35. *Id.* at 1825–26.

36. *Id.* at 1713–20.

37. Medical Care Availability and Reduction of Error (MCARE) Act, 2002 Pa. Laws. 154 (also referred to as “Act 13 of 2002”).

38. A comprehensive compilation is beyond the scope of this Article. For an excellent review of medical error reporting, see Maxine M. Harrington, *Revisiting Medical Error: Five Years After the IOM Report, Have Reporting Systems Made a Measurable Difference?*, 15 HEALTH MATRIX 329 (2005).

practice groups represent important sources of financial and professional advancement, physicians can feel substantial pressure to preserve their own safety records and monitor those of others. Referring a patient to a bad doctor reflects poorly on the doctor who issued the referral. One sloppy physician within a group practice can tarnish the entire practice's reputation, as well as increase its liability insurance costs. It seems reasonable to assume that vicarious reputation is strongest among physicians with a tightly structured relationship. Thus, monitoring the behavior of other physicians will tend to be more important within small practices than for referrals generally. Peer approval is also important to feelings of professional self-worth apart from its effects on current earnings or future prospects.

Hospitals. Hospitals, whether viewed as corporate employers or as "workshops" for independent professionals, have an intimate relationship with physicians.³⁹ Physicians are sometimes direct employees of hospitals, but more typically are linked to hospitals by the granting and oversight of admitting and treatment privileges by the hospital's self-governing medical staff. Hospitals' peer-based governance makes them an important setting in which physicians' opinions of one another's records can affect earnings and career opportunities. A physician's safety record is also important to hospitals. The quality of a hospital's physicians helps it build its reputation and sell its services. More concretely, hospitals are concerned about errors committed by their physicians because they are frequently named as co-defendants in lawsuits. Unlike physicians, moreover, hospitals generally pay higher or lower premiums according to their past history of malpractice exposure.⁴⁰

Health insurers. Health insurers, as third-party payers of medical bills, are another group that may be concerned with a physician's safety record. Insurers differ from the previously discussed stakeholders because they face tradeoffs between quality and price. Managed care companies selectively contract with particular physicians to form preferred provider organizations ("PPOs") or health maintenance organizations ("HMOs"). A payer that is unhappy with a particular physician's behavior can threaten to terminate his or her contract.

39. See, e.g., Mark Pauly & Michael Redisch, *The Not-For-Profit Hospital as a Physicians' Cooperative*, 63 AM. ECON. REV. 87 (1973) (proposing a structure in which nonprofit hospitals are operated to maximize the net income of physicians).

40. Kenneth S. Abraham & Paul C. Weiler, *Enterprise Medical Liability and the Evolution of the American Health Care System*, 108 HARV. L. REV. 381, 409-10 (1994).

The quality of physicians under contract is a distinction worthy of aggressive marketing to consumers. A physician's questionable safety record, therefore, is usually a negative signal to payers.⁴¹ Payers also may be held vicariously liable for inappropriate care delivered by their affiliated physicians (unless protected by the federal ERISA statute), especially if the insurer advertised the quality of its care to consumers.⁴² Finally, if physicians who have been sued previously are more likely to practice defensive medicine, the provision of costly care of minimal benefit to the patient is undesirable from the payer's perspective.⁴³ On the other hand, physicians with very clean safety records may already engage in costly and time-consuming patterns of practice that stray from a health insurer's ideal of cost-effective care.

Plaintiffs' lawyers. Many physicians' greatest concern about information transparency is that plaintiffs' lawyers will search medical records selectively or take details out of context in order to build a case against them. Researchers point to a resultant "chilling effect" on quality control and peer review efforts, absent malpractice reform.⁴⁴ Signals about physician quality conveyed by malpractice records indeed affect lawyers' decisions about whether to file (and how strenuously to pursue) a complaint.⁴⁵ Physicians with a record of malpractice claims will presumably be more likely targets of future legal action, all else equal.

Malpractice insurers. Liability insurers should use physician safety information to guide their underwriting and premium pricing decisions. However, physician malpractice coverage is not experience rated, and malpractice carriers typically accept essentially all physician applicants except during sharp downturns in the

41. See, e.g., *Potvin v. Metro. Life Ins. Co.*, 997 P.2d 1153, 1161–62 (Cal. 2000) (according physician due process rights after "deselection" by health plan for excessive malpractice suits).

42. E.g., *Aetna Health Inc. v. Davila*, 542 U.S. 200, 212–13 (2004); *Dukes v. U.S. Healthcare*, 57 F.3d 350, 358–59 (3d Cir. 1995).

43. The assumption is widely made, but lacks empirical support. See Peter A. Glassman et al., *Physicians' Personal Malpractice Experiences Are Not Related to Defensive Clinical Practices*, 21 J. HEALTH POL. POL'Y L. 219, 233–34 (1996) ("[D]efensive practices, to the extent that they exist, are not primarily due to individual physicians' malpractice experience."). For more detailed models of selective contracting on "productive" risk taking, see Seth Angus Seabury, *Three Essays on Workers' Compensation* (2002) (unpublished Ph.D. dissertation, Columbia University).

44. Ronald G. Spaeth, Kelly C. Pickering & Shannon M. Webb, *Quality Assurance and Hospital Structure: How the Physician-Hospital Relationship Affects Quality Measures*, 12 ANNALS HEALTH L. 235 (2003).

45. Plaintiffs' lawyers may take advantage of other sources of information to further their clients' interests. In Pennsylvania, for example, one of us has heard anecdotes that plaintiffs' lawyers are piggybacking lawsuits onto investigations by state health care regulators of newly mandated error reports.

underwriting cycle (i.e., malpractice crises).⁴⁶ Externally available information may still be valuable to liability insurers for predicting aggregate exposure and setting specialty-specific premiums.

Others. Government officials and political actors constitute additional audiences for physician safety information, including legislators, regulators, and professional and trade associations. Other groups interested in malpractice and safety include the media, investment analysts, and academic researchers.

B. Reporting and Disclosure Mandates

1. Helping Individual Patients

Federal Policy. No federal law currently requires that patients be told about medical errors, either as a direct regulation or as a condition of participation in the Medicare or Medicaid programs. However, the Veterans Health Administration has been a pioneer in clinical error disclosure. After studies of error disclosure and compensation for injury at the Veteran's Administration hospital in Lexington, Kentucky, showed promise at reducing malpractice litigation,⁴⁷ the Department of Veterans Affairs adopted a policy stating that "VHA facilities and individual VHA providers have an obligation to disclose adverse events to patients who have been harmed in the course of their care, including cases where the harm may not be obvious or severe, or where the harm may only be evident in the future."⁴⁸

State Law. Disclosure of medical errors and unanticipated outcomes of care has recently become law in four states: Florida,⁴⁹ Nevada,⁵⁰ New Jersey,⁵¹ and Pennsylvania.⁵² In Pennsylvania, the

46. See Mark Geistfeld, *Malpractice Insurance and the (Il)Legitimate Interests of the Medical Profession in Tort Reform*, 54 DEPAUL L. REV. 439, 452-58 (2005) (discussing the reasons why medical malpractice insurance premiums are not experience rated). See generally Tom Baker, *Medical Malpractice and the Insurance Underwriting Cycle*, 54 DEPAUL L. REV. 393 (2005) (discussing how medical malpractice insurance underwriting works).

47. Jonathan R. Cohen, *Apology and Organizations: Exploring an Example from Medical Practice*, 27 FORDHAM URB. L.J. 1447, 1454 (2000).

48. Dept. of Veterans Affairs, *Disclosure of Adverse Events to Patients*, VHA Directive 2005-049, (Oct. 27, 2005).

49. FLA. STAT. ANN. § 395.1051 (West Supp. 2006) (requiring hospitals to notify patients in person about adverse incidents that result in serious harm).

50. NEV. REV. STAT. § 439.855 (2006) (requiring hospitals to notify patients of sentinel events).

first state to require error communication, disclosure by hospitals of “serious events” is mandatory and must be made to both a new Patient Safety Authority (“PSA”) and the affected parties. The law defines a serious event as one that either causes the patient’s death or compromises patient safety and results in unanticipated injury requiring the delivery of additional health care services to the patient. The PSA must be notified about such events within 24 hours of discovery, and patients or their families must be notified within one week.

Private Requirements. Self-regulatory pronouncements regarding discussions between health care providers and patients are typically hortatory rather than mandatory. The American Medical Association, for example, imposes on physicians an ethical duty of honesty with patients when medical errors occur,⁵³ and JCAHO accreditation standards similarly urge hospitals to be forthcoming with information in such situations.⁵⁴ In addition, various individual medical institutions have adopted policies favoring error disclosure and apology.⁵⁵

2. Improving Patient Safety

Federal Data. The National Practitioner Data Bank (“NPDB”), which was chartered in 1986 as part of the Health Care Quality Improvement Act, is the best-known repository for information about quality lapses involving individual physicians.⁵⁶ The NPDB was constructed as a disciplinary tool for the express use of medical institutions, professional societies, and regulatory bodies. Disclosure

51. N.J. STAT. ANN. § 26:2H-12.25 (West Supp. 2006) (requiring patients to be informed, with exceptions, about serious preventable adverse events and adverse events related to allergic reactions).

52. 40 PA. CONS. STAT. ANN. § 1303.308 (West Supp. 2006) (requiring hospitals to notify patients in writing of serious events).

53. The AMA’s ethical guidance states: “Situations occasionally occur in which a patient suffers significant medical complications that may have resulted from the physician’s mistake or judgment. In these situations, the physician is ethically required to inform the patient of all the facts necessary to ensure understanding of what has occurred.” AMA Council on Ethical and Judicial Affairs, Code of Medical Ethics: Annotated Current Opinions, Policy E-8.12, available at <http://www.ama-assn.org/ama/pub/category/2712.html>.

54. JOINT COMMISSION ON ACCREDITATION OF HEALTHCARE ORGANIZATIONS, COMPREHENSIVE ACCREDITATION MANUAL FOR HOSPITALS: THE OFFICIAL HANDBOOK, PATIENT RIGHTS STANDARD RI.2.90, RI-12 (2003).

55. See Liz Kowalczyk, *Hospitals Study When to Apologize to Patients*, BOSTON GLOBE, July 24, 2005.

56. Health Care Quality Improvement Act, Pub. L. No. 99-660, title IV, 100 Stat. 3784 (1986) (codified as amended at 42 U.S.C. §§ 11101–11152 (2006)).

of NPDB data is strictly limited; the general public is not permitted access.

The NPDB contains physician malpractice histories along with other compulsorily reportable actions such as licensure revocation or suspension, medical staff discipline, and the exclusion of a practitioner from Medicare or Medicaid reimbursement. Its creation was intended "to improve the quality of health care by encouraging State licensing boards, hospitals and other health care entities, and professional societies to identify and discipline those who engage in unprofessional behavior; and to restrict the ability of incompetent physicians, dentists, and other health care practitioners to move from State to State without disclosure or discovery of previous medical malpractice payment and adverse action history."⁵⁷ In addition to having mandatory reporting obligations, hospitals participating in those government insurance programs must query the NPDB about physicians seeking medical staff appointments or clinical practice privileges, and licensing bodies use the NPDB to verify the applications of physicians who may have gotten into trouble elsewhere.⁵⁸

No similar mechanism exists to comprehensively record information about hospitals or other institutional providers, although the Medicare and Medicaid programs have several initiatives ongoing to make consumer information publicly available on the Internet. The most developed of these projects allows any user of the CMS website to review "survey and certification" information about nursing homes, such as violations and deficiencies found during inspections or as the result of resident complaints.⁵⁹ Notwithstanding convincing literature on system-based medical error, malpractice cases involving institutions have never been regarded as sufficiently predictive of quality to include in these reporting and disclosure programs.

Limited information about physician error may become public from another federal data source: Medicare peer review organization investigations. The Medicare program has struggled for decades with the problem of identifying substandard physician care. Medicare beneficiaries have long been empowered to request investigations by

57. National Practitioner Data Bank, <http://www.npdb-hipdb.com/npdb.html> (last visited May 31, 2006).

58. *Id.* See also U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, NATIONAL PRACTITIONER DATA BANK: 2000 ANNUAL REPORT, available at <http://www.npdb-hipdb.com/annualrpt.html> (2000).

59. See Centers for Medicare and Medicaid Services, Nursing Home Compare, <http://www.medicare.gov/NHCompare/Home.asp> (last visited May 31, 2006) (listing quality measures, specific deficiencies, and staffing statistics).

“peer review organizations,” but it was not until recently that a federal court compelled the government to give complaining beneficiaries the results of those investigations.⁶⁰

Additional medical error reporting systems not tied to malpractice per se exist under federal food and drug law (post-marketing surveillance of drugs and medical devices), through the Centers for Disease Control for hospital-acquired infections, and by the Veterans Administration with respect to care delivered by VA hospitals.⁶¹ These systems vary in their accessibility to the public.

The patient safety movement has expanded the federal role in encouraging reporting and analysis of safety-related information apart from direct governmental collection. In the late 1990s, JCAHO proposed a Sentinel Events Policy to encourage the self-reporting of “an unexpected occurrence involving death or severe physical or psychological injury, or the risk thereof.”⁶² Accredited hospitals were provisionally required to analyze the root causes of detected errors, and to create an action plan to prevent recurrences. Concern that such information could be legally discoverable, thereby increasing practitioner and hospital liability, led to protests from the American Hospital Association and others.⁶³ As a result, the reporting of sentinel events to JCAHO was made voluntary, considerably undermining the original goals of the policy.

The Institute of Medicine (“IOM”), in its landmark report on patient safety, subsequently advocated an expansion of safety-related reporting to include a mandatory serious event reporting system accompanied by a voluntary near-miss reporting system.⁶⁴ Serious events would be disclosed to the public, while near-miss data would be protected from legal discovery. The IOM recommendation steers a middle course between the two informational camps of improvement

60. See *Pub. Citizen, Inc. v. Dep't of Health and Human Servs.*, 332 F.3d 654, 663 (2003) (holding that the statutory requirement of notification “of the final disposition” included the substance of that disposition, though not necessarily the underlying records); see also Michael L. Silhol, *Controversies Over Confidentiality: Public Citizen Sets Peer Review Records Free*, HEALTH LAW NEWS, Aug. 2003, at 38 (approving the court’s reasoning).

61. Harrington, *supra* note 38, at 357–59.

62. JCAHO, *Sentinel Event Policy and Procedures*, <http://www.jcaho.org> (last visited May 31, 2006). JCAHO standards, though nominally voluntary, are de facto regulations for American hospitals because hospitals that receive JCAHO accreditation are deemed to be in compliance with Medicare’s conditions of participation. BARRY R. FURROW ET AL., *HEALTH LAW: CASES, MATERIALS AND PROBLEMS* 182 (5th ed. 2004).

63. Bryan A. Liang, *Risks of Reporting Sentinel Events*, HEALTH AFF., Sept./Oct. 2000, at 112. See generally Brian A. Liang & Kristopher Storti, *Creating Problems as Part of the “Solution”*: *The JCAHO Sentinel Event Policy, Legal Issues, and Patient Safety*, 33 J. HEALTH LAW 263 (2000).

64. INSTITUTE OF MEDICINE, *supra* note 7.

and accountability. Market forces would incentivize care through the public disclosure of harmful errors. Meanwhile, protection of near-miss data would encourage providers to report information that could provide a substantial base from which safety improvements could be designed by regulatory or self-regulatory bodies.

After years of political gridlock, Congress adopted much of the IOM's reasoning in the Patient Safety and Quality Improvement Act of 2005.⁶⁵ The purpose of the Act is to allow health care providers to share and analyze data about medical quality without exposing themselves to publicity and potential malpractice liability. The Act establishes federal confidentiality and privilege protections for information reported voluntarily to "patient safety organizations," with further disclosure to government (and the public) limited to aggregate, de-identified data.⁶⁶

State Data. According to the National Academy for State Health Policy, as of 2003, 21 states required reporting by physicians or hospitals of information regarding medical errors, including malpractice judgments and settlements.⁶⁷ Most state reporting systems have features designed to allay physicians' fears that information about adverse events will increase malpractice litigation. Several states exempt reported information from freedom of information laws or include in their reporting statutes specific protections against discovery in litigation or admissibility in legal proceedings.⁶⁸ Occasionally, states allow anonymous reporting or de-identify and aggregate the data they receive. In nine states, however, reported data are unprotected or subject only to general peer review protections.⁶⁹

States continue to adopt and expand these systems, which usually allow public disclosure, in order to enhance patient safety, improve health care quality, or monitor cost containment.⁷⁰ In

65. Pub. L. No. 109-41, 119 Stat. 424 (2005) (codified at 42 U.S.C. §§ 299b-1 to 299c-6 (2006)).

66. *Id.* See also Deborah A. Datte, Kathleen Chanler & Paula Sanders, *National Peer Review Protection?: Understanding the New Patient Safety and Quality Improvement Act of 2005*, HEALTH LAW NEWS, Nov. 2005, at 28 (discussing the new confidentiality privileges in the context of peer-reporting).

67. MIMI MARCHEV, NATIONAL ACADEMY FOR STATE HEALTH POLICY, MEDICAL MALPRACTICE AND MEDICAL ERROR DISCLOSURE: BALANCING FACTS AND FEARS 5 (2003), available at http://www.nashp.org/Files/Medical_Malpractice_and_Medical_Error_disclosure.pdf.

68. *Id.* at 4-7.

69. *Id.* at 7.

70. Illinois, for example, recently enacted the Illinois Adverse Health Care Events Reporting Law of 2005, 410 ILL. COMP. STAT. ANN. 522/10-1 to 10-50 (West 2006). The Illinois act, which states its intent to be non-punitive, requires de-identified reporting by health care facilities to the state Department of Public Health for analysis, feedback, and annual public

Pennsylvania, for example, both mandatory and voluntary reporting involves a state patient safety authority specifically chartered to take a non-punitive approach to quality improvement that emphasizes education of health care providers and the public.⁷¹

Some states have compiled their own publicly available practitioner databases. According to a recent review, thirty-two states post physician profiles on the Internet for use by consumers.⁷² While most sites contain discipline and license data, many states also include physician-specific information on medical malpractice judgments, with a handful disclosing malpractice settlements as well. Rhode Island and Florida have online report card systems that exclude liability suit information.⁷³ Massachusetts and New York have systems that include a summary of doctors' liability histories, including selected information on malpractice settlements.⁷⁴ California recently approved the creation of a system that would disclose settlement information for repeat offenders.⁷⁵

Concern that judgment and settlement information might mislead consumers or unfairly blemish providers has led some states to add disclaimers to their websites. For example, Virginia recently modified its site to include a statement that paid claims vary by specialty and that there is little evidence correlating a doctor's lawsuit history with his or her competence.⁷⁶ Publicly disclosing settlements is particularly contentious because many malpractice insurance policies allow the insurer to settle without the physician's permission. On the other hand, excluding settlements from disclosed information allows physicians to evade reporting by settling suits confidentially.

Private Data. Health insurers constitute an important source of public information about physician involvement in adverse medical outcomes. However, studies suggest that online physician directories compiled by health plans are often flawed, particularly with respect to

reports of surgical events, product or device events, patient protection events, care management events, environmental events, and physical security events. The Illinois act does not require direct disclosure to patients of these events.

71. See COMMONWEALTH OF PENNSYLVANIA PATIENT SAFETY AUTHORITY, 2004 ANNUAL REPORT (2005), available at <http://www.psa.state.pa.us>.

72. Damon Adams, *Pennsylvania, Virginia Latest States to Offer Physician Data Online*, AM. MED. NEWS, Aug. 13, 2001.

73. *Id.*

74. *Id.*

75. *Id.*

76. Damon Adams, *Doctors Resigned to Public Web Profiles*, AM. MED. NEWS, May 5, 2003.

information about physician quality.⁷⁷ A consensus panel convened by the National Committee on Quality Assurance, the primary accrediting body for health plans, recently issued recommendations for standardized information, including accurate, contextualized presentations of disciplinary actions and malpractice history and performance measures of quality.⁷⁸

Most provider-based efforts have focused on quality improvement through voluntary, confidential self-reporting. Physicians, nurses, and other health professionals are ideal reporters, as their presence during care delivery places them in the best position to comment upon what transpired. Limited experience suggests that assuring confidentiality for medical error reporting can dramatically influence participation.⁷⁹ Indeed, one study found that the implementation of a non-punitive reporting system led to a tenfold increase in the number of reports.⁸⁰

The most extensive of these applications has been developed in the area of blood safety and is known as the Medical Event Reporting System in Transfusion Medicine ("MERS-TM"). MERS-TM is employed by more than 30 hospitals in the United States, Canada, and several European countries, and is designed to collect, classify, and analyze data on events that could threaten the safety of transfused blood.⁸¹ Experience rolling out the system suggests that the no-fault nature of reporting has been crucial to participation.⁸²

77. ELLIOT M. STONE, JERILYN W. HEINOLD & LYDIA M. EWING, COMMONWEALTH FUND, ACCESSING PHYSICIAN INFORMATION ON THE INTERNET (2002), available at http://www.cmfw.org/publications/publications_show.htm?doc_id=221298.

78. LINDA SHELTON, LAURA AIUPPA & PHYLLIS TORDA, COMMONWEALTH FUND, RECOMMENDATIONS FOR IMPROVING THE QUALITY OF PHYSICIAN DIRECTORY INFORMATION ON THE INTERNET (2004), available at http://www.cmfw.org/publications/publications_show.htm?doc_id=234619.

79. See, e.g., Anne C. O'Neil et al., *Physician Reporting Compared with Medical-Record Review to Identify Adverse Medical Events*, 119 ANN INTERN MED 370, 374 (1993) (noting that 124 case-patient reports were filed under the confidential system versus 85 via medical record review); C.E. Shea, *The Organization of Work in a Complex and Dynamic Environment: The Accident and Emergency Department* (1996) (unpublished Ph.D. dissertation, University of Manchester, UK).

80. Harold S. Kaplan et al., *Identification and Classification of the Causes of Events in Transfusion Medicine*, 38 TRANSFUSION 1071, 1073 (1998).

81. Letter from Barbara Rabin Fastman, Project Director, Medical Event Reporting System (MERS) (Sept. 2003) (on file with authors). MERS-TM employs a six-step process: 1) Identify, disclose, and document the event; 2) Determine the extent of investigation needed; 3) Investigate and conduct a root cause analysis, if appropriate; 4) Classify the event using standardized codes; 5) Analyze the aggregate data to identify systematic patterns and trends; and 6) Use the results to determine appropriate responses. James B. Battles et al., *The Attributes of Medical Event-Reporting Systems: Experience with a Prototype Medical Event-Reporting System for Transfusion Medicine*, 122 ARCHIVES OF PATHOLOGY & LABORATORY MED. 231-38 (1998).

82. E.g., Kaplan, *supra* note 80.

With respect to the impact of reporting on safety, however, experience at one Canadian hospital was mixed: educational sessions were ineffective, but the adoption of computerized labeling and printing devices for use at the bedside appeared moderately successful.⁸³

3. Evaluating the Medical Liability System

No comprehensive source of information with which to evaluate the overall performance of the medical liability system currently exists. Rather, data tend to be gathered separately by agencies of government involved in three activities that have historically been considered distinct: patient safety (considered above), liability insurance, and civil litigation.

Insurance. Insurance regulators in 27 states currently require reporting of medical liability insurance information.⁸⁴ Of these, eight states maintain large databases of closed claims reports, but only Texas and Florida allow public access.⁸⁵ Malpractice insurance reporting in some states relates to general ratemaking or rate review under state insurance law; other states have adopted reporting programs during malpractice crises to provide specific information on medical liability.

The Texas Closed Claim Database ("TCCD"), for example, has received over 150,000 reports since 1988 involving payments for bodily injury under medical professional liability policies and four non-medical lines of liability insurance. The TCCD contains individual reports of claims involving payouts of more than \$10,000, and aggregate reports of smaller claims.

In addition to individual insurance databases, the National Association of Insurance Commissioners ("NAIC") surveys states quarterly, and reports aggregate, company-specific information about claims. The Insurance Services Office, a private organization that advises state regulators as well as private insurers, surveys many markets and reports on changes in insurance premiums and losses.

Litigation. In addition to tracking federal court statistics, the U.S. Bureau of Justice Statistics ("BJS") civil justice survey of state courts examined general civil cases (including medical malpractice)

83. See generally Jeannie L. Callum, et al., *Reporting of Near-Miss Events for Transfusion Medicine: Improving Transfusion Safety*, 41 TRANSFUSION 1204 (2001).

84. NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS, STATISTICAL INFORMATION TASK FORCE, MEDICAL MALPRACTICE SURVEY RESULTS (Feb. 2006) (on file with authors).

85. Bernard Black et al., *Stability, Not Crisis: Medical Malpractice Claim Outcomes in Texas, 1988-2002*, 2 J. EMPIRICAL LEGAL STUD. 207, 211 (2005). The states are Florida, Illinois, Missouri, Minnesota, Massachusetts, Nevada, Texas, and Washington.

concluded by bench or jury trial in a sample of the nation's 75 most populous counties in 2001. BJS data includes type of case, nature of plaintiffs and defendants, trial outcomes, total damages, punitive damages, and case processing time.⁸⁶

In a handful of states, either local judges and courts or the state judicial system as a whole collects information about filing and disposition of medical malpractice lawsuits. In Pennsylvania, for example, tracking of filings and court outcomes was incorporated into the state's response to the current liability crisis.⁸⁷

IV. TENSIONS AND AMBIGUITIES

A seamless information policy for patient safety and malpractice is unlikely when one considers the coordination that would be required among the various producers of mandated information, production mandates, and potential users and uses. The goal of this Part is to help readers distinguish practical from impractical information requirements, so that they can better predict whether desired or unintended effects of a particular legal mandate are likely to dominate in practice. Three major cross-cutting tensions affect the meaning of information about harm or potential harm to patients. These are the relative contributions to patient safety of individual professional behavior and health system design, the complex role reputation plays in professional and corporate responses to safety information, and the relationship between "safety" and "quality" information in health policy debate.

A. Individuals, Systems, and the Aggregation Problem

A central question for information policy is whether individual physicians, medical groups, hospitals, or health insurers should constitute the reporting unit (i.e., be charged with the obligation to disclose information) or the reportable unit (i.e., be identified as subject to performance measurement). Many patients expect that the revelation of error will distinguish heroes from villains within the physician community. Patient safety experts tend to disagree with this approach, contending instead that most errors in health care delivery, while human in proximate cause, ultimately flow from faulty

86. Catherine M. Sharkey, *Unintended Consequences of Medical Malpractice Damage Caps*, 80 N.Y.U. L. REV. 391, 447 (2005).

87. See generally ADVISORY COMMITTEE ON MEDICAL PROFESSIONAL LIABILITY, MEDICAL PROFESSIONAL LIABILITY REFORM FOR THE 21ST CENTURY: A REVIEW OF POLICY OPTIONS (Mar. 2005), available at <http://jsg.legis.state.pa.us/Med%20Mal.PDF>.

institutional processes. This confluence of mistakes—both latent system errors and active human errors—demands careful analysis by the relevant health care organization in order to determine the cause and identify a remedy that can help prevent future occurrences.⁸⁸

The optimal unit for producing information should be the unit most capable of analyzing that information and acting on it to reduce medical errors. The patient safety movement—which emerged as an evidence-based alternative to professional complacency about error but which continues the medical profession's longstanding preference for self-regulation over outside review—has consistently focused on hospitals. Hospitals are the locus of most serious injuries; they have in place mechanisms for collegial consultation (peer review) through their self-governing medical staffs; and they possess the financial wherewithal to invest in safety. Hospitals tend to be more efficient bearers of financial risk and more effective purchasers of liability insurance than individual physicians, and tend to be easier to track and monitor as well. Unlike physicians, hospitals self-insure liability exposure or purchase experience-rated coverage, giving them a clearer financial stake in safety. And hospitals cannot relocate to escape a tarnished reputation. Hospitals also may compete explicitly on safety in order to attract patients and managed care contracts.

This is all likely correct as far as it goes, but the problem of optimal data aggregation is a general challenge for information reporting and disclosure. Patient safety information falls along a spectrum from rare events of great apparent impact, such as patient deaths and multi-million dollar malpractice judgments, to more frequent but mundane occurrences such as patient complaints and “incident reports.” Jury verdicts in malpractice cases make news, but the vast majority of claims are dropped or settled out of court.⁸⁹ Among those cases that are actually brought to verdict, most of them result in a judgment in favor of the defense. In a recent study of suits in Florida, approximately 93 percent of all claims were settled, and

88. For an overview of “human factors engineering,” see JAMES REASON, *HUMAN ERROR* (1990).

89. See, e.g., Henry S. Farber & Michelle J. White, *Medical Malpractice: An Empirical Examination of the Litigation Process*, 22 *RAND J. ECON.* 199, 204 (1991) (referencing an empirical study that demonstrates only five percent of malpractice suits reach a trial outcome); Patricia M. Danzon, *Liability for Medical Malpractice*, in *HANDBOOK OF HEALTH ECONOMICS* 1339 (Anthony J. Culyer & Joseph P. Newhouse eds., 2000). Moreover, jury verdicts themselves often exaggerate the financial implications of error. A recent study comparing jury verdicts in Texas to actual payments found that few very large verdicts were paid in full, and the median reduction was substantial. See David A. Hyman et al., *Do Defendants Pay What Juries Award?: Post-Verdict Haircuts in Texas Medical Malpractice Cases, 1988-2003* (working paper on file with author).

only 2 percent resulted in a verdict for the plaintiff.⁹⁰ Probations and license suspension are also rare, with only a few episodes of incompetent care resulting in disciplinary action within the profession.⁹¹

Error reporting systems often focus on “near misses”: mistakes that did not lead to significant harm. Because no injury resulted, reporters are less likely to fear the repercussions of disclosing near misses to their employers or colleagues. The near-miss reporting movement is also predicated on the iceberg principle, which asserts that realized harm is only a small fraction of the threats that lurk beneath the surface. Near misses provide more data to help identify the underlying causes of errors and the steps necessary to prevent them from recurring. The relationship between near misses and actual injuries resembles a pyramid. The peak is the most visible but represents a small fraction of the total events. For example, one study reported that for every transfusion-related death in New York there were 47 ABO-incompatible transfusions and 128 incorrect units of blood transfused.⁹²

Which events should be reported and disclosed, and by whom? It depends on the purpose of reporting or disclosure. Disclosure to help individual patients or families deal with events unfolding in real time lacks the statistical dimension that makes data aggregation necessary for improving patient safety or evaluating the malpractice system as a whole. In the individual circumstance, relevant considerations include the closeness of the personal relationship between the discloser and the patient or family, the degree of knowledge the discloser possesses about the error’s cause and implications, and the resources at the discloser’s disposal to mitigate the harm resulting from the error.

Disclosure to improve general patient safety, by contrast, invokes different priorities. If improvement is most likely to result from market competitive processes, the competitor (e.g., an entire hospital or health plan) is the logical unit of reporting. If, however, the greatest performance gains are likely to emerge from professional

90. Holger Sieg, *Estimating a Bargaining Model with Asymmetric Information: Evidence from Medical Malpractice Disputes*, 108 J. POL. ECON. 1006, 1009 (2000).

91. According to Public Citizen, there were 3,296 serious disciplinary actions taken by states against physicians in 2004. Citizen.org, *Ranking of the Rate of State Medical Boards’ Serious Disciplinary Actions: 2002-2004*, <http://www.citizen.org/publications/release.cfm?ID=7380> (last visited May 31, 2006).

92. Jeanne V. Linden et al., *Transfusion Errors in New York State: an Analysis of 10 Years’ Experience*, 40 TRANSFUSION 1207, 1209 (2000).

self-regulation, the optimal reporting unit might be a hospital department or other team setting.

Evaluating the overall malpractice compensation and dispute resolution system raises still other concerns. The reportable units in this context will be individuals or organizations that bear certain key responsibilities, such as purchasing liability insurance, taking claims to court, and paying compensation. A complete picture may be easiest to generate if the reporting units collectively represent the universe of desired information and can be easily monitored for compliance. For example, reporting by liability insurers alone is likely insufficient because many hospitals currently self-insure malpractice risk.

Aggregating events into useful data has several dimensions. One part of the aggregation problem is statistical. For any level of correlation between available signals and underlying quality, more observations provide greater confidence and allow more reliable decisionmaking. Whether the goal is to compare one health care provider to another or to create benchmarks for normal or optimal performance, it is mathematically desirable to pool as many similar events as possible. Two health care providers experiencing 400 and 100 events respectively in a given year are more likely truly to differ with respect to safety performance than two health care providers experiencing four and one events in that year.

Another part of the aggregation problem is causal. To be useful, reported events must predict the differences that matter to patients or policymakers. Studying near misses is only instructive if it facilitates the prevention of actual harm. Allowing 400 rather than 100 prescriptions for incorrect dosages of insulin to be sent by nursing units to a hospital pharmacy, for example, is a meaningful difference if detection of incorrect prescriptions at the pharmacy, or of incorrect dosages sent back to the units by the pharmacist, is imperfect or more expensive. Its significance depends as well on the reliability and cost of procedures for treating patients who receive incorrect dosages. If one hospital has an outstanding insulin administration team that another hospital lacks, the fact that the first hospital had four patient deaths from insulin error and the second hospital only one death might be a more important piece of information.

The real value of near-miss reporting depends upon the degree to which near misses and harm-causing errors share underlying root causes. Are the precursor events to near misses similar to those associated with harm? Evidence from years of near-miss data reporting in the commercial aviation setting suggests that the answer

is an affirmative answer.⁹³ Moreover, a comparison of causal events in medicine and other industries seems to suggest a pattern that is independent of domain, offering hope that the success of near-miss reporting in those industries can be repeated in medicine. In hospitals, for example, research on transfusion medicine confirms that, at least for near misses with the highest potential for harm, the distribution of causal factors between actual events and near misses is not significantly different.⁹⁴

In some situations, individual physicians or pockets of professional organization such as hospital departments may have greater influence over safety performance than umbrella corporate entities such as entire hospitals or health plans. Insufficient sample size may make it impossible (or at least impractical given collection costs) to say anything reliable about smaller groups even if in causal terms it would be valuable to quantify their experience.

Because information processing requires interpretation, optimal aggregation also depends in part on audience. Individuals often respond to information about risks such as medical error in predictable ways, based on well-established cognitive biases.⁹⁵ Who discloses and what they report will influence the importance individuals ascribe to disclosure, even if the statistical significance and objective value of the information at predicting ultimate harm are unaffected. Salient events such as sudden surgical deaths or large jury awards in malpractice cases might arouse particularly strong emotions in individual recipients of information, as might events involving celebrity physicians or well-known academic medical centers. If disclosed to fellow physicians, the same information might have less significance as marking serious safety problems—probably far less for jury verdicts, which physicians consider unreliable indicators of actual negligence. However, “correcting” for bias is technically difficult and may not be normatively justifiable. For example, a jury verdict against a physician in a malpractice suit may strike patients as more damning than a settlement simply because it is more visible—a framing error that information policymakers might want to correct. Alternatively, patients may view a verdict as more damaging because a finding in open court suggests that the jury perceived the physician to be untrustworthy, which is a matter of

93. See HUMAN FACTORS IN AVIATION (Earl L. Wiener & David C. Nagel eds., 1988).

94. See Callum, *supra* note 83, at 1204–05 (noting that the aviation industry has used near-miss data to improve safety).

95. See generally Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 SCIENCE 453 (1981) (concluding that a decisionmaker's frame of reference can influence or dictate choices).

subjective valuation that information policymakers might decide to respect.

In sum, whether individual physicians or health systems (such as hospitals) should provide information about malpractice and medical error is not a binary choice. The inevitability of structural and scientific evolution in health care delivery argues for a flexible approach. Managed care offers a cautionary tale for information regulators. In the early 1990s, managed care organizations seemed the natural unit for both reporting and reportability. They aggregated large numbers of "covered lives," asserted plenipotentary authority over health care delivery, invoked an ethic of "population health" instead of relational obligation, and professed the virtues of data (e.g., practice guidelines, provider profiling) over habit and anecdote.

However, the source of managed care's relative freedom from professional customs and constraints was the profit motive. This created an additional argument for stricter regulation, including information disclosure, and regulation in turn both weakened managed care and made it less attractive to health care purchasers—as proponents of regulation indeed hoped it would. The consequence for public policy was to produce more information but with less utility. Historical data for a particular health plan was hardly useful when the hospitals and physicians affiliated with that plan changed annually, and comparative statistics meant little after both utilization review and selective physician contracting fell from favor.⁹⁶ Reporting and disclosure by managed care organizations remain valuable for overall assessment of health system performance—and for comparative dimensions that are still under health plan control, such as preventive care or disease management—but not for malpractice or patient safety.

B. Reputation

The medical profession often presents external accountability for medical error and internal improvement of patient safety as mutually exclusive approaches to information-based regulation. There is undoubtedly tension between the two goals, as discussed in preceding Parts, because physicians who know their mistakes will be aired publicly if detected may prefer to conceal them. What is surprising, however, is the depth of feeling behind physicians' assertions of tension, and the lack of natural correctives. In part,

96. For an account of the divergence of managed care from its expected path of development, see William M. Sage, *Enterprise Liability and the Emerging Managed Health Care System*, 60 LAW & CONTEMP. PROBS. 159, 191–95 (1997).

physicians are adamant about the adverse consequences of error disclosure because they regard external accountability as synonymous with much-despised malpractice litigation. This oversimplification delights tort reformers, who rush to insert it into political debate. Furthermore, markets for health care are deeply flawed, so that physicians seldom need engage in active safety improvement to satisfy consumer demand.

Why does malpractice liability provoke such strong emotions, and why are malpractice and information so closely entwined in physicians' minds? Answering these questions requires exploring the complex sociology of reputation in professional medical practice. Doctors' resistance to public disclosure of their mistakes extends beyond a fear of courts, which are rarely involved in malpractice suits, and the cost of settlements, which are typically paid by insurance. Reputation has traditionally been at the center of medical professionalism, affecting self-image, collegial relationships, and the economics of access to patients.⁹⁷ A hundred years ago, lawyers threatened individual physicians' stature in small communities simply by cross-examining them in open court.⁹⁸ Professional reputations remain fragile because medicine is still both personal and uncertain, with uncertainty heightened by rapid scientific progress and ballooning government regulation.⁹⁹ For example government fee schedules, managed care, and direct-to-consumer drug advertising influence physicians' feeling of control (or loss thereof) over their work environments.

Because of shame and guilt, whether deserved or not, physicians (and nurses or other health professionals) are potential victims of medical error as well as contributors to it. Handled well,

97. William M. Sage., *Reputation, Malpractice Liability, and Medical Error*, in ACCOUNTABILITY: PATIENT SAFETY AND POLICY REFORM 159 (Virginia A. Sharpe ed., 2004).

98. See JAMES C. MOHR, DOCTORS AND THE LAW: MEDICAL JURISPRUDENCE IN NINETEENTH-CENTURY AMERICA 198 (1993) ("A lapse at any point in the process, an emotional outburst during cross-examination, much less an actual mistake, could all ruin a promising career almost instantly.").

99. Concern for reputation arises explicitly from time to time in laws and judicial decisions involving information about medical errors. Allegations of physician misconduct that prompt investigations by state medical licensing boards for potential disciplinary action are typically kept confidential. Courts may be called on to reconcile these provisions with newer medical error reporting and disclosure laws. See, e.g., *Anonymous v. Bureau of Prof'l Med. Conduct*, 2 N.Y.3d 663 (2004) (affirming appellate division holding that a physician reprimanded on a single disciplinary charge and exonerated on others was entitled to confidentiality for reputational reasons notwithstanding an amendment to New York law requiring public disclosure of findings that result in annulment, suspension or revocation of license); see also *Johnson Newspaper Corp. v. Melino*, 77 N.Y.2d 10, 11 (1990) ("[Confidentiality] also evinces a sensibility to the possibility of irreparable harm to a professional's reputation resulting from unfounded accusations.").

the experience of error can awaken physicians to both the scientific and emotional motivations for their clinical decisions, inspire self-reflection and collective, evidence-based improvement, and reaffirm their ethical obligations to patients. Handled poorly, error can alienate physicians and inure rather than sensitize them to failure, perpetuate denial among their equally fallible but as yet unblemished colleagues, and provoke waves of superstitious avoidance that masquerade as defensive medicine but that often diminish quality and increase risk of harm.¹⁰⁰

Reputation is fundamentally formed by information, ranging from local gossip to more formal metrics such as mandatory performance disclosure. Individual reputation is a function of public perception; once achieved, reputations tend to be stable unless new information appears that radically contradicts expectations. Individual reputation also exists within definable communities of social peers, with the subject of judgment attempting to maintain strict separation between private facts and public image.

Malpractice suits possess many qualities physicians find threatening to reputation. They are challenges from outside the professional fold and therefore presumptively illegitimate. They represent the pursuit of financial self-interest (by lawyers), and they suggest personal betrayal (by patients). For these reasons, a vigorous malpractice defense is tantamount to a defamation claim against a false accuser, although opportunities for physicians to gain actual vindication are few and far between. This insight helps explain why physicians resist allowing liability insurers, who bear risk of financial loss but not loss of reputation, to settle cases without their consent even though doing so can be expected to reduce physicians' premium payments. An exception, of course, is when settlement comes with an iron-clad assurance of confidentiality.

Feelings about malpractice suits carry over to other sources of information about patient safety and medical error. Even if data are used appropriately, mandatory information disclosure creates incentives that affect the type and amount of information that is collected. Specifically, any form of conditional reporting will create a selective data set by inducing health care providers to avoid the

100. See David M. Studdert et al., *Defensive Medicine Among High-Risk Specialist Physicians During a Malpractice Crisis in a Volatile Malpractice Environment*, 293 JAMA 2609, 2616 (2005) (explaining the negative effects of defensive medical practice); Peter P. Budetti, *Tort Reform and the Patient Safety Movement: Seeking Common Ground*, 293 JAMA 2660, 2660-61 (2005) (reflecting on Studdert's study).

conditions that trigger a duty to report.¹⁰¹ Individual professionals' exquisite sensitivity to reputational harm magnifies these effects.

The National Practitioner Data Bank exemplifies the interactions between safety information and physicians' reputational priorities. The NPDB has bred physician resistance and resentment ever since its enactment as a quid pro quo for broadening physicians' peer review immunities in the Health Care Quality Improvement Act of 1986.¹⁰² As described above, the NPDB collects reports of state disciplinary actions and hospital privileging decisions against physicians, and makes that information available to licensing and credentialing bodies nationally. Payments in malpractice cases must also be reported.

Physicians' unease over the existence and contents of this "permanent record" of malpractice outcomes in the hands of the federal government has been profound, even though the NPDB is not publicly accessible. Physicians often refuse to settle arguably meritorious claims because they fear NPDB reporting, and hospitals routinely procure dismissals of individual physicians as named defendants in order to circumvent their reporting obligations. Perhaps most discouragingly, the Data Bank is plagued by substantial underreporting of settlements for which a reporting duty clearly exists. Many providers simply refuse to participate, highlighting the voluntary nature of even mandatory systems. According to the Department of Health and Human Services, a majority of hospitals in 31 states failed to file a single data bank report in the NPDB's first decade of operation.¹⁰³ Similar concerns have been raised in other patient safety contexts, such as the possibly paradoxical effects on access and quality of instituting cardiac surgery report cards.¹⁰⁴

101. See William M. Sage, *Regulating Through Information: Disclosure Laws and American Health Care*, 99 COLUM. L. REV. 1701, 1781-82 (1999) (discussing selective performance improvement in response to disclosure requirements).

102. Health Care Quality Improvement Act, (HCQIA), 42 U.S.C. §§ 11101-11152 (2006). HCQIA responded in large part to the threat of treble damages in antitrust litigation against physicians whose peer review activities denied hospital privileges to a competitor. See Patrick v. Burget, 486 U.S. 94, 98-99 (1988) (upholding a \$1.95 million judgment against physicians in a small town in Oregon).

103. Damon Adams, *Study Charges Underreporting in National Practitioner Data Bank*, AM. MED. NEWS, June 18, 2001.

104. See, e.g., Rachel M. Werner & David A. Asch, *The Unintended Consequences of Publicly Reporting Quality Information*, 293 JAMA 1239 (2005) (suggesting ways in which disclosure may distort physician practice and harm patients); David Dranove et al., *Is More Information Better? The Effects of "Report Cards" on Health Care Providers*, 111 J. POL. ECON. 555, 555-56 (2003) (providing empirical evidence that cardiac surgery report cards in New York and Pennsylvania led providers to avoid risky cases).

These reactions not only undercut the accuracy of the data, but also contort medical practice in unpredictable ways that may harm patients. In the heyday of managed care, for example, physicians found themselves being casually “deselected” from insurance networks, to the detriment of continuity of care. This practice was contractually permissible in part because physicians’ own lawyers had refused to limit termination to enumerated causes that would trigger mandatory NPDB reporting. Occasionally, NPDB leverage can induce physicians to cooperate in activities that are progressive from a patient safety perspective. In Colorado, the largest malpractice insurer operates an early disclosure and compensation program for minor injuries that allows physicians to escape NPDB reporting because payment is offered voluntarily before a lawyer is engaged or a claim is filed, and is not conditioned on release of liability.¹⁰⁵ Overall, however, it is likely that patients would be better off if the malpractice reporting provisions of the NPDB were repealed,¹⁰⁶ not least because NPDB information appears to be of limited utility for purposes of rating physician quality.¹⁰⁷

One possible resolution of this tension would be to create incentives for reporting despite the existence of liability by reducing penalties if reporting is diligent.¹⁰⁸ This type of approach is common in situations in which fraud is being committed against the government. Unless such financial incentives were embedded in an administrative compensation system for patient injury based on error reporting and analysis, however, it is less intuitive for the law to grant relief from private liability in return for public reporting, which would be the case for medical malpractice, than for the government to reduce its own recovery when misdeeds are self-reported, as might be the case for Medicare fraud enforcement.

105. See COPIC’S 3RS PROGRAM NEWSLETTER (Mar. 2004), available at http://www.callico.com/publications/3rs/vol_1_issue_1_mar_2004.pdf (last visited May 31, 2006).

106. See generally William M. Sage, *Medical Liability and Patient Safety*, HEALTH AFF., July-/Aug. 2003, at 26, 30–31 (describing the need to balance accountability with encouragement of error reporting); see also Martin J. Hatlie & Susan E. Sheridan, *Perspective: The Medical Liability Crisis Of 2003: Must We Squander The Chance To Put Patients First?*, HEALTH AFF., July-/Aug. 2003, at 37, 39 (urging that the NPDB “be replaced with a requirement that every medical liability claim filed trigger a report to and at least a cursory investigation by the agencies with responsibility for licensing the organization and the defendants named in the claim”).

107. See generally Lawrence E. Smarr, *Comparative Assessment of the PIAA Data Sharing Project and the National Practitioner Data Bank: Policy, Purpose, and Application*, LAW & CONTEMP. PROBS., Winter 1997, at 59, 67–70 (detailing the problems with the NPDB).

108. See Joshua Graff Zivin & Alexander S.P. Pfaff, *To Err on Humans is Not Benign: Incentives for Adoption of Medical Error Reporting Systems*, 23 J. HEALTH ECON. 935, 945–46 (2004) (advocating a system with such incentives).

All in all, reputation militates against individual physician reporting of medical errors to aggregate data repositories, as contrasted with disclosing events privately to patients. However, maintaining or expanding reporting obligations for hospitals, HMOs, or other organized health care providers might create net public policy benefits. Corporate reputation is significantly more straightforward than individual reputation, though just as jealously guarded. Unlike individual professionals, corporate providers rarely fear complete loss of livelihood as the result of individual events becoming public, have less emotion invested in their day-to-day activities, maintain communications and marketing departments to reduce unwarranted harm to reputation, and regard government regulation as an unavoidable cost of doing business. This is particularly true for high-profile academic medical centers, which tend to be regarded as responsible for the quality of care within their walls to a greater degree than the average community hospital.¹⁰⁹ These characteristics, combined with the consensus described above regarding the systemic origin of most medical errors, might generate a productive response from hospital reporting and disclosure mandates. However, public oversight would be necessary to root out sophisticated evasions and to ensure that hospitals did not merely scapegoat individual health professionals.

C. Quality and Safety

Sound information policy requires thinking more carefully about the relationship between “quality” and “safety.” Both health policy experts and the public tend to use the terms as loose synonyms for desirable attributes of health care. Sometimes, safety is referred to as a subset of quality, with the rhetorical goal of preventing complacency and keeping funds flowing to “quality improvement” after a handful of changes to the safety environment have been implemented and interest in a high-profile case of medical error has faded. However, eliding the distinction between quality and safety in this fashion conceals deeper questions.

One appeal of “safety” is that it reinforces public perceptions of health care as lifesaving—perceptions that have been carefully cultivated by the medical profession. Health care is such a challenge for public policy in part because the familiar relational image of physician and patient suggests that identified rather than statistical

109. *E.g.*, William M. Sage, *Malpractice, Patient Safety, and the Personification of Medical Injury: Opportunities for Academic Medicine*, 81 *ACAD. MED.* 823 (2006).

lives are at stake, making it seem immoral to apply a cost criterion to many treatment decisions. Investments in something as tangible as “safety,” as opposed to amorphous “quality,” strike the public as modal not marginal, offering seemingly large payoffs in the preservation of identified lives.¹¹⁰ Hence the political significance of the controversy over the exact mortality implications of medical errors: 98,000 avoidable deaths per year, or some lower number because the remainder would have died anyway within a short time.¹¹¹

A second reason why politicians, and health care scholars who embrace paradigms other than market competition, focus on safety is that it seems to obviate considerations of cost irrespective of whether identified or statistical lives are at stake. Safety gains, somewhat misleadingly, have been portrayed as low-hanging fruit—improvements that no rational human would refuse. This allows safety advocates to sidestep differences between professionally determined (sometimes deemed “scientific” or “medicalist”) standards for how, and how much, society should invest in health care, and “marketist” standards that attempt to honor consumer preferences for allocating scarce funds among a variety of costly goods and services.¹¹²

Neither of these arguments is conclusive, and both distort information policy for malpractice and medical error. Safety problems may be more visible than quality problems, but may also be less meaningful to procuring long-term gains in the effectiveness (and cost-effectiveness) of health care.¹¹³

One set of caveats affects individual users of reported or disclosed information. Identified deaths from avoidable medical errors are very salient, especially when they unexpectedly befall young people such as Libby Zion or Jesica Santillan.¹¹⁴ But consumers and

110. See David C. Hadorn, *Setting Health Care Priorities in Oregon: Cost-Effectiveness Meets the Rule of Rescue*, 265 JAMA 2218, 2219 (1991) (criticizing Oregon's Medicaid rationing plan for ignoring identified lives). But see Lisa Heinzerling, Note, *The Rights of Statistical People*, 24 HARV. ENVTL. L. REV. 189 (2000) (rejecting the distinction between identified and statistical lives).

111. Troyen A. Brennan et al., *Accidental Deaths, Saved Lives, and Improved Quality*, 353 NEW ENG. J. MED. 1405, 1405 (2005). For criticism and debate of the IOM report, see Lucian L. Leape, *Institute of Medicine Medical Error Figures are Not Exaggerated*, 284 JAMA 95 (2000); Clement J. McDonald et al., *Deaths Due to Medical Errors are Exaggerated in Institute of Medicine Report* 284 JAMA 93 (2000); Brennan, *supra* note 20; Christopher M. Hughes et al., Letter to the Editor, *How Many Deaths Due to Medical Error?*, 284 JAMA 2187 (2000); Clement J. McDonald et al., Reply, 284 JAMA 2188 (2000).

112. See SHERRY GLIED, CHRONIC CONDITION: WHY HEALTH REFORM FAILS 17–35 (1997) (distinguishing marketist and medicalist perspectives).

113. See generally Troyen A. Brennan, *supra* note 111 (advocating focus on quality improvement measures, rather than safety measures).

114. Libby Zion's death at New York Hospital in 1984 as the result of an unrecognized drug interaction eventually led to the adoption of limits on hours worked by physicians in training.

patients may mistake salience for frequency or apply other heuristics that derive oversimplified and incorrect lessons about the dangers of medical care and how to protect themselves.

Another set of caveats affects regulators and professional self-regulatory bodies. The salience of avoidable deaths from error makes them seem more closely linked to moral failures than do overall limitations on the medical profession's ability to prevent or treat disease, and therefore more important to address. However, teasing out root causes of high-profile mishaps and imposing process modifications in the emotional, contentious domain of medical malpractice may be more difficult and costly than implementing routine quality improvements. Exposure of safety lapses presents a starker tradeoff between serving public values and causing providers embarrassment and reputational harm, which in turn can reduce their willingness to reveal their own errors while, through cognitive dissonance, making them less receptive to lessons from others' experiences. An example is "sign your site" campaigns to prevent wrong-side surgery. Despite a series of high-profile cases and attempts at process re-engineering, many surgeons still refuse to participate on the grounds that they would never make such a glaring mistake.¹¹⁵

Physician and hospital report cards disclosing mortality statistics for cardiac surgery are another example. Report card initiatives tend to be popular in states (e.g., New York and Pennsylvania) with strong "health planning" traditions, such as certificate-of-need requirements for hospitals. At first glance, this seems surprising, because comparative mortality statistics are usually promoted as consumer aids, a strategy that should be most compatible with a competition-oriented philosophy of government. However, surgical report cards have seldom been shown to matter competitively.¹¹⁶ Rather, following a "performance rationale" for

See generally David A. Asche & Ruth M. Parker, *The Libby Zion Case: One Step Forward or Two Steps Backward?*, 318 NEW ENG. J. MED. 771, 773-75 (1988) (describing the circumstances of the Zion case and the social pressures for working long hours). Jessica Santillan's death at Duke Medical Center in 2004 after transplantation of an incompatible organ focused attention on error disclosure and apology. See Randal C. Archibold, *Girl in Transplant Mix-Up Dies After Two Weeks*, N.Y. TIMES, Feb. 23, 2003, at A18 (describing the Santillan case).

115. Sandra G. Boodman, *To Reduce Errors, Cut Here: New Rules Require Doctors to ID Patients, Take "Time Outs" and Sign Their Work*, WASH. POST, July 6, 2004, at F1; Sandra G. Boodman, *No End to Errors*, WASH. POST, Dec. 3, 2002, at F1.

116. See Eric C. Schneider & Arnold M. Epstein, *Use of Public Performance Reports: A Survey of Patients Undergoing Cardiac Surgery*, 279 JAMA 1638, 1638 (1998) (finding that fewer than one percent of patients knew their physician's report card score and said that it had a moderate or major impact on their choice of doctor); Eric C. Schneider & Arnold M. Epstein, *Influence of Cardiac-Surgery Performance Reports on Referral Practices and Access to Care: A*

disclosure, they seem to stimulate professional programs of self-improvement and help justify decisions by regulators to subject underperforming programs to intensive oversight and possible closure.¹¹⁷ The consumerist overlay of report cards is partly accidental—New York only grudgingly revealed physician-specific data after a newspaper filed suit under the state's freedom of information act—but partly represents a Faustian bargain. When states dressed up workaday quality-related regulatory activities as life-or-death safety disclosure for patients, the programs became more popular politically. However, doing so also may have led physicians to refuse more difficult cases and otherwise “game” the report card system because such dramatic statistics presented in a public forum were threatening to their reputations.¹¹⁸

At bottom, both quality and safety improvements in health care save statistical lives, not identified lives, and cost is always at issue. One source of confusion is that safety risks in most other areas (e.g., environmental exposure from manufacturing or freeway deaths from automobile design and operation) are secondary aspects of the activity being conducted (making products or traveling from place to place, respectively). By contrast, prevention and treatment of physical harm is the primary purpose of health care, so physical safety is perceived as integral, not tangential, to the medical enterprise. Safety prevention therefore falls into the same quasi-identified-life trap as overall health policy: acute care takes precedence over public health, which in turn takes precedence over health-improving investments such as shelter or education that are not within the work domain of traditional health professionals. With respect to cost, quality and safety draw from the same pool of dollars—the funds society allocates to health care services—and there is no reason to believe, a priori, that safety represents the most cost-effective investment. The principal lesson for information policy is that both competitive and performance-enhancing uses of data reporting or disclosure might

Survey of Cardiovascular Specialists, 335 *NEW ENG. J. MED.* 251, 251 (1996) (finding that report cards have minimal impact on physicians' referral recommendations).

117. See Mark R. Chassin, *Achieving and Sustaining Improved Quality: Lessons from New York State and Cardiac Surgery*, *HEALTH AFF.*, July/Aug. 2002, at 40,42 (finding that hospitals identified in public reports as outliers for high mortality rates attracted attention from the media and the health department); Mark R. Chassin et al., *Benefits and Hazards of Reporting Medical Outcomes Publicly*, 334 *NEW ENG. J. MED.* 394, 397–98 (1996) (asserting that hospitals changed practices in response to disclosure by, using the data to identify specific processes and programs to improve).

118. See generally Dranove et al., *supra* note 104 (finding that cardiac surgery report cards increase cost and worsen outcomes by delaying care as many providers attempt to select patients by severity of illness, channeling healthier patients into unnecessary bypass surgery, and denying surgery to sicker patients).

benefit from focusing on overall quality measures, such as evidence-based medical practice or consumer satisfaction, rather than malpractice and medical error, if it can be shown that the former category of behavior will be easier and cheaper to change.

V. SOME RECOMMENDATIONS

The third medical malpractice crisis in the past thirty years appears to be coming to an end, with the insurance cycle seeming to turn once again toward lower premiums and greater availability of coverage.¹¹⁹ Neither can the political process sustain a crisis mentality forever. Yet problems of excessive medical error, inadequate patient compensation, potential future insurance volatility, and poor communications remain.

Among possible reforms, information-based regulation of medical liability is likely to outlive the current crisis, in large part because—as a result of attention paid to patient safety in the 1990s—it also predates it. Information-based regulation is also a consensus approach that is less vulnerable to political gridlock than more polarized proposals like caps on malpractice damages. Similarly, the fact that information-based regulation can be customized to the medical context makes it less threatening than generic tort reform to defenders of the litigation status quo.

Harnessing the power of information within the health care system as well as from without requires careful consideration of the effects created by any disclosure policy.¹²⁰ Although all the principal players in health care—patients, doctors, hospitals, insurers, government—prefer to avoid errors, they do so for different reasons. Health care providers desire information so that they can identify appropriate changes to the care delivery system. Consumers desire it so that they can make informed decisions and, in turn, provide practitioners with incentives to deliver quality care. Physicians' fears of public market-driven or bureaucratic responses compromise private self-regulatory ones, potentially stifling internal improvement efforts in order to ensure that damaging information does not end up in external hands. Indeed, the Institute of Medicine's recommendation of a mandatory event reporting system for actual injuries accompanied by a voluntary and confidential one for near misses should be viewed

119. TOM BAKER, *THE MEDICAL MALPRACTICE MYTH* 62–63 (2005) (arguing that medical malpractice insurance premiums are not too high).

120. See generally Charles Vincent, *Understanding and Responding to Adverse Events*, 348 *NEW ENG. J. MED.* 1051 (2003) (describing effects of errors and error investigations on patients, families, and staff).

as an earnest effort to negotiate some space between the two approaches.

Unfortunately, conventional wisdom has come to regard any effort to augment malpractice claiming and compensation by making information accessible to the legal system as correspondingly reducing information available to physicians to help curtail medical errors. This reasoning has acquired iconic status among physicians in the five years since *To Err Is Human* posited a tension between external accountability and internal safety improvement. And, like most conventional wisdom, it does have some truth. If one wants reports of errors that people can learn from, one has to make it safe for people to generate those reports.

However, the traditional tort reform community—physicians, liability insurers, and general business interests—was unable to leverage the logic of the IOM's internal improvement message into support for damage caps and other established tort reforms. The public drew a sharply different lesson from the IOM's report than was drawn by the medical profession. To the public, the IOM report confirmed that a lot was going wrong in medicine, making it more important for patients to learn the facts so that providers who are responsible could be avoided or held to account.

It is therefore important to find informational messages that appeal to audiences both inside and outside of medicine. This Article argues for a pragmatic policy based on distinguishing regulatory from relational uses of information. This approach divides the universe of information about medical liability and patient safety into three definable, manageable areas.

One category encompasses information that helps individual patients make the experience of receiving medical care as good as possible even if a less than ideal clinical outcome ensues. As a general matter, the Article supports legal and ethical requirements that obligate health care providers to tell patients about medical errors or unexpected events that affect them. The second category is information about improving aggregate patient safety. Here, the Article finds a closer question. Information that enables critical analysis of error can be very powerful, but usually not in competitive, marketplace terms. Instead, it is likely most valuable in facilitating direct government regulation or professional self-regulation of safety, primarily at the institutional (hospital) level. In other words, this information has substantial collective value but limited private utility in individual transactions. A third category of information captures how cost-effectively the malpractice system promotes social goals such as deterrence, compensation, and justice, and represents a form of

democratic accountability for courts and insurance regulators rather than an oversight mechanism for individual provider entities.

Specific recommendations emerge from the Article's analysis. First, because of physicians' reputational sensitivities, statistical aggregation issues, and the greater potential of systems-based efforts to stimulate improvement, information aimed at heightening patient safety should be reported publicly for institutions but not for individual professionals. Public information available about physicians should be limited to results of formal disciplinary processes, despite the political challenge of separating systems improvement from culling of individual "bad apples." A corollary is that the malpractice reporting portion of the NPDB should be repealed. As currently constituted, NPDB reporting discourages settlements of claims, impairs openness, prompts defensive medicine, and tempts hospitals to help physicians evade reporting—all without providing useful aggregate data that furthers performance improvement. At the same time, however, institutions need strong incentives to monitor professionals practicing within their walls.

Second, voluntary mechanisms can be leveraged to identify the proper unit of clinical organization for information reporting and disclosure. In 2002, the Institute of Medicine proposed federal funding for state-based demonstrations of comprehensive malpractice reform within medical institutions that have demonstrated capacity to protect patient safety and that choose to substitute administrative compensation for traditional litigation. Implementing legislation is currently before Congress.¹²¹ Opt-in opportunities of this sort are useful indicators of the optimal level of aggregation for data about patient safety. Hospitals or physician groups that elect to participate in demonstration projects become natural subjects for information reporting and disclosure, as well as test cases for various evaluation methods. Unlike opt-in reporting generally, which compromises findings because of selection bias, the assumption underlying these malpractice reform proposals is that the institutions that have the strongest potential for improvement will be the ones to respond to incentives for participation and accept increased accountability.

Third, data for overall assessment of the malpractice system need to be integrated, but in most instances the data can also be de-identified to reduce reputational and privacy risks to individual providers and patients. Existing "silos" of public information—

121. See generally INSTITUTE OF MEDICINE, FOSTERING RAPID ADVANCES IN HEALTH CARE, *supra* note 7, at 81–89 (discussing possible statewide demonstrations of comprehensive liability reform); Fair and Reliable Medical Justice Act, S. 1337, 109th Cong. (2005).

including clinical, judicial, and insurance repositories—should be linked in order to paint a complete picture of medical injury, dispute resolution, compensation, and financial responsibility. For example, current data on liability insurance claims often lack provider- and patient-related information essential to understanding how liability affects health care delivery and hence medical cost, access, and quality. Long delays between medical errors, legal claims (when they occur), and insurance payments also tend to limit the policy relevance of single-regulator data collections.

Fourth, individual patients suffering injuries should have maximum freedom to receive and convey information, including the ability to communicate their personal experiences to others. This includes mandatory disclosure of error to involved patients and families, as well as prohibitions on sealing court records and the use of confidentiality agreements in settlements to preclude release of information about circumstances of injury (as opposed to amount of payment). This conclusion recognizes a pragmatic tradeoff. A direct-to-patient disclosure mandate without a public reporting obligation raises search costs for other current and future patients seeking similar information. However, it also keeps information with high reputational sensitivity out of government's hands, and generates a reliable market price for that information by forcing private actors to surface it if they desire it.

Fifth, public subsidies will be necessary to induce the production and analysis of information for patient safety improvement.¹²² This information is a partial public good; its benefits extend beyond those who might pay to collect it. The value of aggregate patient safety information lies in its spillover social utility, not in its private usefulness to seller-providers and buyer-users of medical care in identifiable transactions. Consequently, competitive mechanisms for generating information are likely to prove insufficient, even if first-mover problems are overcome through disclosure mandates. For these reasons, federal health programs such as Medicare likely will have a major role to play in malpractice information policy as well as in malpractice reform generally.¹²³

122. See Zivin & Pfaff, *supra* note 108, at 937–38, 946 (discussing and recommending subsidies).

123. William M. Sage & Eleanor D. Kinney, *Medicare-Led Malpractice Reform*, in *MEDICAL MALPRACTICE AND THE U.S. HEALTH CARE SYSTEM* 318 (William M. Sage & Rogan Kersh eds., 2006).